

**THE DOMINION COVENANT:
GENESIS**

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THE DOMINION COVENANT: GENESIS

An Economic Commentary on the Bible
Volume 1

Gary North

Institute for Christian Economics
Tyler, Texas

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by Gary North

Second Printing, Revised, 1987

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Published in Tyler, Texas
by Institute for Christian Economics

Distributed by Dominion Press
7112 Burns Street, Fort Worth, Texas 76118

Typesetting by Thoburn Press, Tyler, Texas

Printed in the United States of America

ISBN 0-930464-03-6

This book is dedicated to

Henry M. Morris

John C. Whitcomb

two scholars who, as outsiders to the "guild," were willing to challenge the evolutionary presuppositions and conclusions of another academic discipline, geology. Without their pioneering work, I could not have written this book.

TABLE OF CONTENTS

General Introduction to <i>The Dominion Covenant</i>	ix
Introduction	xxix
1. Cosmic Personalism	1
2. Purpose, Order, and Sovereignty	12
3. The Dominion Covenant	27
4. Economic Value: Objective and Subjective	37
5. God's Week and Man's Week	66
6. The Value of Gold	78
7. Subordination and Fulfillment	84
8. The God-Designed Harmony of Interests	90
9. Costs, Choices, and Tests	100
10. Scarcity: Curse and Blessing	111
11. The Burden of Time	118
12. Primitive Nomads	132
13. To Keep a Brother	139
14. The Ecological Covenant	145
15. The World Trade Incentive	150
16. Investment and Character	156
17. The Growth of Human Capital	162
18. Competitive Bargaining	177
19. The Uses of Deception	184
20. Contingency Planning	198
21. The Law of Diminishing Returns	204
22. The Blessing of Responsibility	213
23. The Entrepreneurial Function	219
24. The Misapplication of Intrinsic Value	231
25. Conclusion	238
APPENDIX A—From Cosmic Purposelessness to Humanistic Sovereignty	245

APPENDIX B—The Evolutionists' Defense of the Market	323
APPENDIX C—Cosmologies in Conflict:	
Creation vs. Evolution	357
APPENDIX D—Basic Implications of the Six-Day Creation . .	425
APPENDIX E—Witnesses and Judges	455
BIBLIOGRAPHY	471
SCRIPTURE INDEX	477
GENERAL INDEX	485
WHAT IS THE ICE?	507

GENERAL INTRODUCTION TO THE DOMINION COVENANT

(1987)

The Dominion Covenant is a multi-volume economic commentary on the Bible. As I explain in the Introduction to Genesis (next section), the biblical covenant is structured into five sections. This covenant model is discussed at length by Ray R. Sutton in his pioneering book, *That You May Prosper: Dominion By Covenant* (1987).¹ The five points of the biblical covenant model are:

1. Transcendence/immanence
2. Authority/hierarchy
3. Ethics/dominion
4. Judgment/sanctions
5. Inheritance/continuity

The covenant establishes the judicial basis of the personal relationship between God and man. There can be no relationship between God and man apart from a covenant. This is why Genesis 1:26-28 is truly a covenant: it establishes the basis of the relationship between God and man. God the sovereign Creator (point one) creates man to serve as His representative over the creation (point two), commanding mankind to be fruitful and multiply (point five) and exercise dominion (point three). Man is actually defined by God in terms of this dominion covenant, or what is sometimes called the cultural mandate. This covenant governs all four God-mandated human governments: individual, family, church, and civil.

The five books of Moses (the Pentateuch) are themselves presented in the same order as the biblical covenant model. This is a very important piece of evidence in favor of the five-point biblical

1. Tyler, Texas: Institute for Christian Economics.

covenant model. Those who reject Sutton's thesis need to present an alternative model, one which fits the Pentateuch better, and one which also fits the Ten Commandments better, since they are also structured in terms of the five-point model: 1-5 and 6-10.² Critics need to understand that old political aphorism: "You can't beat something with nothing." It is not enough to mumble that "Sutton's book tries to prove too much" or "There are lots of different models in the Bible." There are indeed lots of biblical models, and *all of them are to be understood either in terms of the Trinity or the covenant model*. We begin and end all biblical studies with God and with the God-man relationship: Trinity and covenant. This is why Sutton's book is the most important single theological breakthrough since the early Christian creeds that formulated the orthodox doctrine of the Trinity. It will be regarded as a major turning point in the history of Christian doctrine. And the realization that an obscure pastor in East Texas made this historic breakthrough has sent his critics into a dither. They much prefer to deny its importance. After all, if it were really that important, each of them devoutly believes, *he* would have discovered it!

The Pentateuch's Five-Point Covenant Structure³

Genesis clearly is a book dealing with God's transcendence. Transcendence is point one of the biblical covenant model. Its opening words affirm God as Creator, testifying to God's absolute transcendence, the foundation of the Creator-creature distinction: "In the beginning God created the heaven and the earth" (Gen. 1:1). But true transcendence also involves immanence, the presence of God with His people. He speaks with Adam, and judges Adam and Eve when He returns to the garden. He speaks to Cain, Noah, and Abraham. He establishes a covenant with Abraham and promises to be with Abraham and Abraham's heirs forever (Gen. 17:7).

Exodus is clearly the book of the covenant itself. God establishes

2. Gary North, *The Sinai Strategy: Economics and the Ten Commandments* (Tyler, Texas: Institute for Christian Economics, 1986), Preface.

3. There are continuing rumors that certain faculty members of a particular Calvinist seminary have been discussing the five-point covenant structure of the Pentateuch for many years. But which five points? That is *the* question. Discussions in private are one thing; having the courage to go into print to defend a highly controversial, career-jeopardizing thesis is something else. Faint heart ne'er produced fair paradigm shift.

His authority over them by delivering them out of Egypt. He also establishes the hierarchical principle of representation. Hierarchy is point two of the biblical covenant model. The principle of representation is manifested with God's call to Moses out of the burning bush, telling him to go before Pharaoh as His representative. God delivers the Israelites from Egypt, and then He meets with Moses, their representative, at Sinai. In Exodus 18, Moses establishes a hierarchical appeals court system, whereupon God meets with Moses as Israel's representative and delivers His covenant law. The Book of Exodus is a book about rival kings and rival kingdoms, God vs. Pharaoh. Men must subordinate themselves either to God or Satan through their covenantal representatives.

The Book of Exodus is easily divided into five sections: the intervention of God into history to deliver His people; the establishment of Israel's judicial hierarchy; the giving of the law; the judgment of Israel after the golden calf incident; and the building of the tabernacle, which they would carry with them into Canaan.

Leviticus is the book that records the establishing of Israel's ritual and moral boundaries. It is therefore about dominion, for boundaries in the Bible are always associated with dominion. The third point of the biblical covenant deals with boundaries. The third commandment deals with the prohibition of obscenity, false oaths, and incantations (magical power), thereby affirming dominion through ethics,⁴ and the eighth commandment parallels the third. "Thou shalt not steal" is a command regarding ownership boundaries.⁵ The eighth commandment indicates that the concept of boundaries is basic to economic ethics, the third point of the covenant.⁶

Gordon Wenham comments on Leviticus' place in the Old Testament's covenant-treaty structure: "(3) The centerpiece of every treaty was the stipulations section. In collections of law, such as Hammurabi's, the laws formed the central section. The same holds for the biblical collections of law. In the treaties a basic stipulation of total fidelity to the suzerain may be distinguished from the more detailed stipulations covering specific problems. In this terminology 'Be holy' could be described as the basic stipulation of Leviticus. The other

4. *Ibid.*, ch. 3.

5. *Ibid.*, ch. 8.

6. Gary North, *Inherit the Earth: Biblical Blueprints for Economics* (Ft. Worth, Texas: Dominion Press, 1987), ch. 3.

laws explain what this means in different situations.”⁷

God *sets apart* His people and their worship. He makes them *holy* — set apart. He places ritual boundaries around them. “Leviticus centers around the concept of the holiness of God, and how an unholy people can acceptably approach Him and then remain in continued fellowship. The way to God is only through blood sacrifice, and the walk with God is only through obedience to His laws.”⁸ The issue is sanctification, and this requires boundaries: “The Israelites serve a holy God who requires them to be holy as well. To be holy means to be ‘set apart’ or ‘separated.’ They are to be separated *from* other nations *unto* God. In Leviticus the idea of holiness appears eighty-seven times, sometimes indicating ceremonial holiness (ritual requirements), and at other times moral holiness (purity of life).”⁹ As R. K. Harrison says, the first fifteen chapters deal with sacrificial principles and procedures relating to the removal of sin. “The last eleven chapters emphasize ethics, morality and holiness. The unifying theme of the book is the insistent emphasis upon God’s holiness, coupled with the demand that the Israelites shall exemplify this spiritual attribute in their own lives.”¹⁰ Holiness means *separation* from the heathen.¹¹ It means *boundaries*.

Numbers is the book of God’s judgment against Israel in the wilderness. Judgment is point four of the biblical covenant model. God judged them when they refused to accept the testimony of Joshua and Caleb regarding the vulnerability of Canaan to invasion (Num. 14). They rebelled against Him, and He punished them all by delaying their entry into Canaan until they were all dead, except Joshua and Caleb. “Numbers records the failure of Israel to believe in the promise of God and the resulting judgment of wandering in the wilderness for forty years.”¹²

Israel as a nation is in its infancy at the outset of this book, only thirteen months after the exodus from Egypt. In Numbers, the book of divine disci-

7. Gordon J. Wenham, *The Book of Leviticus* (Grand Rapids, Michigan: Eerdmans, 1979), p. 30.

8. *The Open Bible: Expanded Edition* (Nashville, Tennessee: Thomas Nelson, 1983), p. 95.

9. *Ibid.*, p. 96.

10. R. K. Harrison, *Leviticus: An Introduction and Commentary* (Downers Grove, Illinois: Inter-Varsity Press, 1980), p. 14.

11. Jacob Milgrom, “The Biblical Diet Laws As an Ethical System: Food and Faith,” *Interpretation*, XVII (1963), p. 295.

12. *Open Bible*, p. 127.

pline, it becomes necessary for the nation to go through the painful process of testing and maturation. God must teach His people the consequences of irresponsible decisions. The forty years of wilderness experience transforms them from a rabble of ex-slaves into a nation ready to take the Promised Land. Numbers begins with the old generation (1:1-10:10), moves through a tragic transitional period (10:11-25:18), and ends with the new generation (26-36) at the doorway to the land of Canaan.¹³

Deuteronomy is the book of the inheritance, point five of the biblical covenant model. "It is addressed to the new generation destined to possess the land of promise—those who survived the forty years of wilderness wandering."¹⁴ The children of the generation of the exodus renew their covenant with God and inherit Canaan on this basis. Moses blesses the tribes (Deut. 33), a traditional sign of inheritance in the Old Testament (Gen. 27; 49). Moses dies outside the land, but before he dies, God allows him to look from Mt. Nebo into the promised land (Deut. 34:4). He sees the inheritance. The book closes with the elevation of Joshua to leadership, the transitional event (Deut. 34:9-12).

Thus, the Pentateuch is itself revelatory of the structure of God's covenant. This economic commentary on the Pentateuch is therefore a commentary on a covenant. I call it the dominion covenant, for it is the God-given, God-required assignment to mankind to exercise dominion and subdue the earth that defines mankind's task as the only creature who images God the Creator.

Covenant theology is inescapably dominion theology. God has placed on His people the moral requirement of transforming the world through the preaching of the gospel. He has also given mankind the tools of dominion, His laws.¹⁵ This thought upsets all those Calvinist amillennialists who reject as impossible and utopian the postmillennial vision of the progressive manifestation of the kingdom of God on earth. Dominion theology is inescapably covenant theology. This thought upsets all those Arminian "positive confession" preachers who reject covenant theology and its call to comprehensive social transformation,¹⁶ and who prefer to limit the trans-

13. *Ibid.*, p. 128.

14. *Ibid.*, p. 171.

15. Gary North, *Tools of Dominion: The Case Laws of Exodus* (Tyler, Texas: Institute for Christian Reconstruction, 1987).

16. Gary North, *Is the World Running Down? Crisis in the Christian Worldview* (Tyler, Texas: Institute for Christian Economics, 1987), Appendix C: "Comprehensive Redemption: A Theology for Social Action."

forming power of the gospel to the individual soul and personal bank account. We cannot have Christian dominion without the biblical covenant, and we cannot have the biblical covenant without the requirement of Christian dominion. We also cannot have Christian economics without the dominion covenant.

Background to This Commentary

I was converted to Christ in the summer of 1959 at the age of seventeen. By the end of my freshman year in college a year later, I had decided that the academic field of economics should be studied in terms of the Bible. I was becoming aware of the fact that there was no explicitly Bible-based body of material available on the topic of Christian economics. I did not imagine then that I would have to write the intellectual foundations of this required body of material. I kept looking. By the age of twenty, I knew that I would have to write it. I did not know that I would also have to raise the funds to publish most of it. My adult life has been devoted to this task.

My first published book was *Marx's Religion of Revolution* (1968), a critical analysis of Marx's thought, including his economics. I understood early that the war for the minds of men in the twentieth century was primarily between Communism and Christianity, and that this war involves every area of life. It is a war now in progress. The book appeared four years before I finished my doctorate. My second book, *An Introduction to Christian Economics*, was published in the spring of 1973. It was a collection of essays, many of which were rewritten versions of essays that had appeared in *The Freeman* from 1967 onward. Both of these books are presently out of print.

At almost the precise time that *Introduction* appeared in print, I decided to begin a detailed commentary of the economic teachings of the Bible. It seemed foolish to attempt a textbook in biblical economics, let alone a treatise along the lines of Adam Smith's *Wealth of Nations*, without first laying the exegetical foundations that clearly establish exactly what the Bible says about economics. Christian scholars first need to know what the Bible says about all aspects of economics before anyone attempts to write a comprehensive scholarly treatise on Christian economics. The world does not need another half-baked defense of capitalism that is supported by a handful of disconnected Bible verses. Such books are too easy for Christian political liberals to dismiss. The standard rhetorical response of humanist-educated Christian political liberals to any

suggestion that capitalism necessarily is produced when the whole counsel of God is preached, believed, and obeyed by any society is this one: "Proof-texting! Proof-texting!" This is their code word for "this is getting too close for comfort ethically and politically." I therefore realized by age thirty-one that writing an economic commentary on the Bible would become my lifetime project, and that I would probably never write the Christian version of *Wealth of Nations*. I did not realize that it would take me fifteen years to reach the Book of Leviticus.

I completed the preliminary outline of my economic commentary on the Pentateuch in 1980, when I finished the last of my monthly columns on the Pentateuch in the Chalcedon Foundation's *Chalcedon Report*. I did not realize even then that the final version of Exodus would require the publication of three fat volumes. I did not realize that the necessary appendixes would become as long and as involved as they have become. (I regard Appendix A in *The Dominion Covenant: Genesis* as the most important single piece of academic scholarship of my career. It took me over a year—500+ hours—to research and write it, 1978-79.) These include the visible appendixes at the end of each volume, and also *Is the World Running Down?* (1987), a study of the physical science concept of entropy and its supposed importance in social theory, and *Dominion and Common Grace* (1987), a study of the relationship between biblical law and historical progress. Essay versions of both these books started out as appendixes to *Tools of Dominion*, my commentary on Exodus 21-23.

I decided in 1977 to devote ten hours per week, fifty weeks per year, until I reach age seventy, to writing and publishing this commentary. For ten years, I have stuck to this schedule. God willing, I will stick to it until I reach age seventy. Maybe I will even work for an additional decade, if mind, body, and economic resources permit. I do not expect to complete the commentary, however. The Bible has too much economic material to allow me to accomplish it in one lifetime of ten-hour work weeks. The Bible is filled with material that relates to economics in the broad sense, meaning political economy, as it was called in the nineteenth century, or moral philosophy, as it was called in the eighteenth century. Contrary to theological pietists and political liberals who deny that the Bible has much to say about economic theory and practice, it has so much material that I do not expect to discuss more than a fraction of it.

What I intend to do with this multi-volume commentary is to lay the intellectual foundations for a restructuring of social science.

Nothing less than this is acceptable to me as a lifetime goal. A comprehensive restructuring of every academic discipline is mandatory. The only model adequate for such a restructuring is the biblical covenant. Christian scholars must self-consciously adopt methodological covenantalism as their epistemological foundation. Neither philosophical nominalism, (individualism and subjectivism) nor realism (collectivism and objectivism¹⁷) can serve as consistent, reliable foundations of human thought, including economics. This economic commentary can serve as a model for how other academic disciplines can and should be restructured. We need similar commentaries in many other fields.

Obviously, if a comprehensive Christian revival does not take place in the future, this publishing project will be regarded by future historians as an expensive oddity produced by an eccentric, assuming that historians ever come across a relatively complete set of the documents produced by this eccentric. Without a worldwide revival, this commentary will become, at best, a set of primary source documents potentially useful to some doctoral candidate's dissertation at one of the world's less prestigious universities. I have better things to do with my life than to provide primary source materials, free of charge, to some myopic doctoral student in search of the quickest and easiest way to get out of graduate school and into the sheltered and unremunerative world of college teaching, assuming he can get a teaching job at all. I am laying the biblical-theological foundations for a restructuring of world civilization, not the foundations of a doctoral dissertation in history. I have confidence that I will succeed in my goal. I am confident because I am a Calvinistic postmillennialist who knows that God has foreordained the worldwide triumph of His gospel.

Eschatology and Personal Motivation

Postmillennialism is an important motivation to those scholars who are self-consciously dedicated to long-term Christian Reconstruction. People frequently ask me, "Does it really make much difference what eschatology a Christian holds?" And I answer: "It

17. By "objectivism," I am not referring to the peculiar atheist cult movement originated by the novelist Ayn Rand. For a critique of Randianism, see John Robins, *Answer to Ayn Rand* (Washington, D.C.: Mount Vernon Publishing, 1974). For an amusing autobiography of an ex-Randian, see Jerome Tuccille, *It Usually Begins With Ayn Rand: A Libertarian Odyssey* (New York: Stein & Day, 1972).

depends on what the particular Christian wants to do with his life." Eschatology unquestionably matters in the life of a scholar who regards his life's work as anything more important than a series of academically acceptable intellectual exercises. Anyone who holds a different eschatology is unlikely to sit down for ten hours or more per week, for thirty or forty years, to discover exactly what the Bible teaches about a real-world subject and how its principles might be applied by people in the New Testament era.

Anyone who believes that the world will inevitably drift into greater and greater sin, and that Christians will enjoy progressively less influence historically, is a highly unlikely candidate for a lifetime of study—and probably self-financed study—to discover how Bible principles could and should be applied in history in a specific academic field which is also a real-world field. (Anyone who believes in the *inevitable* defeat of the church in history has adopted a form of predestination, even if he insists that he believes in free will. If the defeat of the church is inevitable, then nothing that anyone can do will reverse it.) Anyone with such a view of the world's future would have to be a kind of masochist to drain away time and money on such a personal scale in order to produce a life's work of guaranteed antiquarianism. In a sense, such an effort would be immoral. It would be a misallocation of a Christian's resources. Consistent dispensationalist writer Peter Lalonde has accused Christians of near-immoral behavior for concentrating on such real-world solutions to real-world problems. Such efforts to transform the world are all futile, he says, and therefore they are a waste of God's gifts to Christians. "It's a question, 'Do you polish brass on a sinking ship?' And if they're working on setting up new institutions, instead of going out and winning the lost for Christ, then they're wasting the most valuable time on the planet of earth right now, and that is the serious problem. . . ." ¹⁸

In short, eschatology counts, especially in personal motivation. Eschatology leads to self-fulfilling prophecies. The pessimillennialist believes that the world is progressively controlled by Satan and those ethically covenanted to him. Thus, he is tempted to regard as historically futile the development of exclusively and explicitly biblical "blueprints" that should be used by Christians to replace the present

18. Peter Lalonde, "Dominion: A Dangerous New Theology," Tape One of *Dominion: The Word And New World Order* (Ontario, Canada: Omega-Letter, 1987), 3 tapes.

humanist social order.¹⁹ With so few pessimillennial authors devoting themselves to such detailed intellectual work, the intellectual leadership of such practical efforts necessarily and steadily falls by default to theonomic (God's law) postmillennialists. Simultaneously, postmillennialist scholars, because they *do* believe that such comprehensive social transformation is not only possible but inevitable, work hard to achieve dominion in history.

There is a secondary psychological motivation in all this. Because the premillennialist expects defeat in history, he does not want his name associated with some futile social project. He does not want to be publicly embarrassed retroactively for his naive efforts to build a successful long-term institution devoted to social transformation in history. Pessimillennialists expect either 1) nearly total progressive defeat for the church in history (amillennialism) or else 2) victory for Christians only on the basis of Christ's discontinuous, miraculous, physical intervention into history (premillennialism) to change the course of the church's futile efforts to transform society through preaching the gospel and obeying God's law. They have no confidence in the patient, day-by-day work of Christians to make this world a better place to live in. They have no confidence in the continuity of history and the continuity of God's covenant promises. They see the fulfillment of God's covenant promises only through the discontinuous overcoming of history, either when Christ returns in final judgment (amillennialism) or when He comes to set up a centralized, top-down, bureaucratic, one-world State (premillennialism). Thus, pessimillennialists do not expect Christians ever to be in positions of leadership in colleges and universities, nor do they expect future Christian historians to be in a position to write histories explaining how the efforts of earlier Christians led to the present triumph of the gospel.

Postmillennialists, on the other hand, believe that such efforts to transform society will eventually be successful, and they would like to be the people who personally lay the foundations for this future reconstruction of society. They want to leave a visible mark in history. They want to be footnoted as the key transitional figures in transformation of humanist civilization into Christian civilization. They want to be treated favorably in the history books of the future. They

19. See the multi-volume set, the Biblical Blueprints Series, published by Dominion Press, Ft. Worth, Texas, which began to appear in late 1986.

believe in the future, so they believe that someday there will be historians who will take them seriously and favorably retroactively. Their fear of possible public embarrassment for failed efforts is offset by their expectations that perhaps their particular efforts may turn out to be the efforts that bring new aspects of God's kingdom into history.

Pessimillennialists self-consciously preach the progressive failure of the gospel and the inability or unwillingness of the Holy Spirit to transform the world positively in terms of kingdom standards. Dave Hunt goes so far as to say that God Himself is incapable of establishing His kingdom on earth: "In fact, dominion — taking dominion and setting up the kingdom for Christ — is an *impossibility*, even for God. The millennial reign of Christ, far from being the kingdom, is actually the final proof of the incorrigible nature of the human heart, because Christ Himself can't do what these people say they are going to do. . . ."²⁰

This does not mean that non-postmillennialists will never produce works in the field of applied Christian theology. Dutch amillennialists have done so. Premillennialists have done so, especially in the field of natural science.²¹ Nevertheless, it is not an accident that as of 1987, all of the major academic works in the Christian Reconstruction movement have been written by postmillennialists. I am speaking here of books written from the perspective of a Christian theology of positive cultural transformation, in contrast to merely negative Christian academic criticism.²² I can say with considerable confidence that the fatter the Christian academic book, the more difficult the topic, the more oriented toward social and legal reform, and the more resources necessary to its completion and publication, the more likely that a postmillennialist has written it. There is a simple reason for this: postmillennialists do not regard the writing and publishing of such materials as a waste of scarce economic resources — "pointless projects by pointy-headed intellectuals," as Alabama's ex-Governor George Wallace might refer to them.

20. Dave Hunt, Tape Two, "Dominion and the Cross," in *Dominion: The Word And New World Order*.

21. Almost always, however, from the point of view of historic pessimism: an improper use of the second law of thermodynamics, or "entropy." See Gary North, *Is the World Running Down? Crisis in the Christian Worldview*.

22. I have in mind here the negative critical works of premillennialist Francis Schaeffer and Dutch tradition amillennialists Herman Dooyeweerd and Cornelius Van Til.

Winning by Default

Time is on my side, not the side of my many critics. I believe that Christians have plenty of time to work toward the transformation of the world. Pessimillennialists believe that Jesus is coming soon. I see hope in long-term scholarship; pessimillennialists see little hope in long-term anything. Time is also on my side in another sense. Because my economic commentaries have taken so long to get into print, and because so much still lies ahead to be written, by the time I am anywhere near finished, I will have an insurmountable lead over anyone who might attempt to write a socialist or Keynesian mixed economy version of the set. I doubt that such a project is theologically possible; in any case, I certainly doubt that anyone else in my lifetime will attempt it. If someone does, he or she will have a very difficult job just to catch up, let alone find a publisher. The farther ahead I get, the less likely it is that anyone will even make the attempt. I do not intend to stop. Furthermore, these commentaries are not financially profitable; they must be subsidized. This will make it doubly difficult for any rival to find a publisher. To put it bluntly, I have a mailing list, a non-profit foundation with some money in the bank, and at least a small market. My potential critics have none of the above. It took me a decade to get even this much institutional support. My critics have not yet begun. I am winning by default. Quite frankly, Christian Reconstruction in general is winning by default. Our critics have not done their academic homework. They are trying to beat something with nothing.

My Christian critics really do believe that they can fight something (a multi-volume economic commentary) with nothing (snide remarks, an occasional book review in some unread periodical, unpublished grumbling, and above all, the silent treatment: the academic blackout). They are incorrect. You cannot beat something with nothing. When the long-awaited Christian revival hits, my views will sweep the field, both academically and politically, simply because nobody else will be on the field. No one but a postmillennialist would even attempt to overtake me, because nobody but a postmillennialist believes there is any chance of gaining widespread public support for an explicitly Christian reconstruction of local, national, and international economies. This fact eliminates today's potential competition, since all the postmillennialists are in agreement with the bulk of my economic writings.

The Resurrection and the Holy Spirit: Victory or Defeat?

The pessimillennialism of premillennialists and amillennialists forces them to assume implicitly that somehow the central event of the death and resurrection of Jesus Christ has in fact reduced the extent of God's kingdom in history. The kingdom of God was visible in Old Testament Israel, they are ready to admit (Deut. 4:6-8). While they admit that the kingdom of God has been extended geographically by the church—Dave Hunt is an exception here—they also insist that the practical influence of the gospel is quite thin today, and will inevitably become progressively thinner. In short, while Christ's resurrection gave an invisible, spiritually mortal blow to Satan, it did not give him a visible, historically mortal blow, as Hal Lindsey says in his book's title, *Satan Is Alive and Well on Planet Earth* (1972). The resurrection's power is "spiritualized" away in history by these theologians; somehow the resurrection has not reduced Satan's influence in the seats of this world's power. This approach to eschatology is doubly ironic in the case of dispensational premillennialists. They promote themselves publicly as the only true defenders of Bible literalism, yet they spiritualize away the kingdom-expanding effects of the central event in human history, the resurrection of Christ.

Pessimillennial Christians seem psychologically incapable of asking (and then answering) this obvious question: "Why is Satan's post-Calvary covenantal authority in history greater than Christ's post-Calvary covenantal authority?" We are back to the inescapable concept of the covenant. It is never a question of covenant vs. no covenant. It is always a question of *which* covenant.

Empowering by the Holy Spirit

A continuing argument of the New Testament authors is that the advent of the Holy Spirit brought great power to Christians. This visibly launched the New Testament church. The Word of God and the Holy Spirit are the church's covenantal inheritance, the means of covenantal continuity. The destruction of the Temple in A.D. 70 was the final visible sign of the transition to this new era, the visible destruction of the Old Covenant's foundations.²³ The old sacrificial system was brought publicly to a close.

23. David Chilton, *The Days of Vengeance: An Exposition of the Book of Revelation* (Ft. Worth, Texas: Dominion Press, 1987).

Greg Bahnsen has emphasized the Holy Spirit's empowering of Christians to obey God's law as one of the key aspects of the transition from the Old Covenant to the New Covenant. He writes: "Although the Spirit worked in the lives of Old Covenant believers to help them obey the law of God, He did so in a way which was both limited and provisional—looking ahead to the great day of Pentecostal power. Paul in 2 Corinthians 3 notes that the Spirit is the agent of the writing done upon the New Covenant believer's heart (v. 3). The letter of the Old Covenant brought death, but the Spirit of the New Covenant communicates life and righteousness (vv. 6:8-9, 18). What was once external and accusing (the law written on tables of stone) is now internal and activating (the law written on tables of the heart). We are told that 'the law made nothing perfect' (Heb. 7:19), but the new and 'better covenant' has 'better promises'—in particular the *internalization of the law* by means of Christ's sacrificial and priestly work so that the law is kept (Heb. 8:6-10)."²⁴

You would think that modern Pentecostals and charismatics would respond positively to Bahnsen's explanation of the transition between Old and New Covenants. To some degree, this is taking place, though very slowly. We can also understand why traditional dispensationalists are outraged by Bahnsen's theology, for it emphasizes the continuing validity of biblical law so strongly. Dispensationalism rejects the idea that Old Testament law has any role to play in New Testament times until the millennial dispensation. By emphasizing the Holy Spirit's role in empowering Christians to obey God's law, Bahnsen has opened the door to Pentecostals and charismatics to rethink their doctrine of biblical ethics, and he has simultaneously slammed the door on dispensationalism. He has begun to drive a wedge between dispensationalism and the charismatic movement. As we shall see shortly, so has David Chilton's book on eschatology, *Paradise Restored* (1985).²⁵

Dispensationalism vs. Pentecostalism

It is understandable why traditional dispensationalists have always been openly hostile to the Pentecostal-charismatic movement, which lays great stress on the visible manifestations of the

24. Greg L. Bahnsen, *By This Standard: The Authority of God's Law Today* (Tyler, Texas: Institute for Christian Economics, 1985), pp. 160-61.

25. David Chilton, *Paradise Restored: A Biblical Theology of Dominion* (Ft. Worth, Texas: Dominion Press, 1985).

Holy Spirit. The argument of modern dispensationalism that the Temple must be rebuilt and the animal sacrifice system must be re-established in a future millennial dispensation is a direct attack on the doctrine of the Holy Spirit that is taught in the New Testament. Dispensational theology is implicitly built on the implicit assumption that *there is something missing in the work of the Holy Spirit today, so that He cannot transform people and institutions*. The dispensationalist explicitly calls for a millennial dispensation in which the Temple sacrifices will be restored. In other words, the Holy Spirit needs a new dispensation to enable Him to complete His work. Dispensationalism is also a rejection of the Epistle to the Hebrews, where Christ's sacrifice is said to be the culmination and annulment of the animal sacrifice system. *Dispensationalism is therefore an implicit attack on the doctrine of the transforming power of the Word of God and the Holy Spirit in history*.

What seems strange to Christian Reconstructionists is that the vast majority of Pentecostals and charismatics have adopted dispensationalism as their theology of preference. Why have almost all Pentecostals and charismatics been dispensationalists until very recently? Why have they clung to an eschatology that denies almost everything that they say about the Holy Spirit's ability to transform the lives of men and women in history? Why have they preached the power of the Holy Spirit to change individual lives miraculously in history, while also affirming the traditional premillennial argument that this transformation is limited to only a few human hearts in history? Why have they denied the transforming power that Christ's resurrection has given to redeemed men in history? Why have they continued to preach the power of Satan over this world, despite the fact that they also preach his initial defeat at Calvary and his visible defeat at the coming of the Holy Spirit at Pentecost?

I think I have a reasonable answer: they had not heard about postmillennialism until the early 1980's. It has only been in the 1980's that a growing minority of charismatics have abandoned traditional dispensationalism in favor of postmillennialism, which preaches the victory of Christians in history through the empowering of the Holy Spirit. Even today, many of the charismatic leaders will not admit publicly that they have made this transition. Why not? Probably because they fear losing contributions from financial supporters who have not yet made the transition.

The charismatic movement has begun to split over the question of eschatology. This split will widen and deepen. It is a fissure that

will not be closed. Traditional dispensational charismatics have begun to see the threat that dominion theology poses for their system and, therefore, for the familiar charismatic way of life. Their leadership is being threatened; their funds are being threatened; and their political and social complacency is being threatened. They have begun to sound the alarm against dominion theology, but it is way too late. The younger, brighter charismatic leaders have already begun to defect from pessimillennialism; so have many of the older leaders, such as Bob Mumford and Charles Simpson. The handwriting is on the wall.

The dispensational charismatic is clinging to an obviously schizophrenic theology: an eschatology that preaches the failure of the Holy Spirit in *social* transformation, and a soteriology (doctrine of salvation) that preaches the comprehensive *personal* transformation that the Holy Spirit produces. The appearance of David Chilton's *Paradise Restored* in 1985 has made this implicit schizophrenia obvious to a growing minority of articulate charismatic leaders. They now have a truly biblical way to abandon their former theological schizophrenia by adopting an eschatology of victory to match their Pneumatology of victory. The implicit schizophrenia of virtually all individual charismatics is ending; in its place is a growing division in the charismatic movement, with vocal defenders of postmillennialism challenging the traditional dispensationalists for intellectual leadership.

As a postmillennial optimist, I know which group will win.

Theological Schizophrenia

Most Bible-believing fundamentalists generally agree with the bulk of the economic conclusions in my writings. They may object to my theonomic postmillennial theology, but not my economics. Instinctively, they are favorable to economic freedom. They are philosophical nominalists and individualists,²⁶ so they tend to agree with a social philosophy that emphasizes decentralized institutional arrangements rather than State-imposed solutions to economic problems.

On the other hand, my economic conclusions receive considerable criticism from neo-evangelical and even Calvinistic theologians, whose secular graduate school training has left many of

26. See below, p. xliii.

them with unmistakable socialistic scars. These tenured scholars believe in State-supported higher education and State-supported everything else (except churches). They are not socialists or collectivists, they insist repeatedly,²⁷ but somehow they can always be found recommending additional government welfare spending and reduced defense appropriations. Ronald Sider's *Rich Christians in an Age of Hunger* (1977) is a best-selling example of this sort of thinking.²⁸ Douglas Vickers' *Economics and Man* (1976) is a worst-selling example. The more academically respectable the college or seminary, the more politically liberal (statist) its faculty tends to be.²⁹ The neo-evangelicals therefore disagree with both my theology and my economic conclusions.

At least these neo-evangelical defenders of the State perceive clearly that my free market economic conclusions flow directly and inescapably from my theonomic theology; they reject both my theology and my conclusions.³⁰ The fundamentalists are far less likely to acknowledge the consistency of my theology and my economics, since they desperately want to avoid having to follow my economic conclusions back to my theology. They imply (though never quite state) that my economic conclusions somehow are not an integral aspect of my theonomic theology, that there is some unstated and unexplained discontinuity between what I believe about biblical law and what I conclude about economics. Fundamentalists find nothing objectionable in this supposed dualism between my theology and my

27. Ian Hodge, *Baptized Inflation: A Critique of "Christian" Keynesianism* (Tyler, Texas: Institute for Christian Economics, 1986), ch. 2: "Neither Capitalism Nor Socialism (Maybe)."

28. Ronald J. Sider, *Rich Christians in an Age of Hunger: A Biblical Study* (Downers Grove, Illinois: InterVarsity Press, 1977); Cf. David Chilton, *Productive Christians in an Age of Guilt-Manipulators: A Biblical Response to Ronald J. Sider* (4th ed.; Tyler, Texas: Institute for Christian Economics, 1986).

29. James Davison Hunter, *Evangelicalism: The Coming Generation* (University of Chicago Press, 1987), pp. 165-80; "What Theologians Believe," *This World*, I (Summer 1980).

30. See the three essays by my critics in Robert Clouse (ed.), *Wealth and Poverty: Four Christian Views of Economics* (Downers Grove, Illinois: InterVarsity Press, 1984). This \$5.95 book was mysteriously pulled from the InterVarsity Press catalogue, and the unsold copies were dumped at 25 cents a copy, within a year of its publication. My publishing company, Dominion Press, bought most of the remaining copies and also the publication rights. We still sell it for \$5.95, plus postage. Sometimes the ideological hostility of my neo-evangelical opponents makes them willing to put money into my bank account. This has happened more than once. I suspect it will happen again.

economics, because they themselves insist on maintaining a similar dualism, namely, a radical distinction between politics and theology. They maintain this dualism—intellectual schizophrenia—because of their insistence on a radical discontinuity between Old Testament law and New Testament ethics.³¹

It is one of my goals in *The Dominion Covenant* to make it crystal clear that my theology and my economic conclusions are an unbreakable unit. If Christians are to make a consistent biblical case for economic freedom, they must make it in terms of the Pentateuch. There is no other way to make a *Christian* case for economic freedom. It does no good to appeal to the writings of humanists to establish the epistemological and ethical foundation for economic freedom, because all humanist thought is inherently self-contradictory. Humanism's dualisms—between subject and object, unity and plurality, determinism and freedom, reason and intuition, phenomenal and noumenal, thought and action—immerse humanists in an impossible goal of bringing coherent explanations to the world. If Christ and the Bible are not acceptable to humanists as the foundations of social institutions, then so much the worse for humanists.

Conclusion

The opponents of Christian Reconstruction say again and again that we Christian Reconstructionists are arrogant. "Arrogant" is their code word for "confident belief in things we disagree with."

Reconstructionists believe that the gospel will conquer the whole geographical world for Jesus Christ, and that the enemies of Christ will be progressively subdued in history. This undoubtedly gives us a lot of confidence—the kind of confidence that Communists and Islamic fanatics share, that is, the kind of confidence that it takes to conquer a civilization. But more important, it is the kind of confidence that it takes to *build* a new civilization—confidence in a decentralized, soul-by-soul, bottom-up transformation of humanist civilization into Christian civilization. We are not looking for a way to *conquer* humanist civilization by force; we expect to inherit it by Christian revival and economic production. Christians will *redeem* humanist civilization—buy it back out of ethical and spiritual bondage.³²

31. Gary North, "The Intellectual Schizophrenia of the New Christian Right," *Christianity and Civilization*, 1 (1982).

32. Gary North, *Inherit the Earth*.

This confidence is resented by pessimillennialists who are equally confident that the gospel will not triumph in history, that the church will fail in its God-assigned mission of worldwide evangelism, and that Christians are historical losers. They deeply resent the fact that Reconstructionists implicitly are calling them to full accountability for their present cultural impotence every time we assert that the gospel of Jesus Christ can and will be triumphant in history, when Christ's followers at last become covenantally faithful to Him by obeying His law through the empowering of the Holy Spirit. Pessimillennial pietists believe that Reconstructionists are pointing an accusing finger at them for the failure of the church in our day. They are correct; we are. But at least we are polite enough to use only our index fingers, unlike the response we have received from several of our critics.

Reconstructionists also believe that God's law establishes the basis of truth in every area of life. This means that Christians who are passively or even vocally content to let the humanists run the world are acting immorally, for they are implicitly accepting the satanic lie that something other than God's law is the standard in history. We reply that God's law is the only standard, now and in eternity.³³ Again, they clearly recognize that we Reconstructionists are calling them moral weaklings for failing to assert the crown rights of King Jesus in every area of life. We are not criticizing them because they have not figured out clear answers to all of life's problems. Our complaint is not that they presently lack sufficient knowledge to exercise dominion. Intellectual problems can be overcome through hard study and hard work in applying what has been learned. We are criticizing them because they implicitly and explicitly deny that Christians *alone* have at their disposal the only possible sources of truth in history, the only possible guidelines for God-pleasing moral behavior in any area of life, and the only possible foundations of victory in history: the ethical mind of Christ (I Cor. 2:16), His inspired written Word (II Tim. 3:16), and the Holy Spirit.

Our critics understand that by saying that the church of Jesus Christ is not doomed by Bible prophecy to be progressively impotent in history, Christian Reconstructionists are also saying that the seeming impotence of the church today must be the responsibility of

33. Greg L. Bahnsen, *By This Standard*; Bahnsen, *Theonomy in Christian Ethics* (2nd ed.; Phillipsburg, New Jersey: Presbyterian & Reformed, 1984).

Christians who have defected from their God-assigned tasks. These Christians have abandoned the legal and ethical terms of the dominion covenant. They have also self-consciously adopted eschatologies of defeat, antinomian ethics, and the humanist myth of neutrality. They are responsible for the failure of the church, not the humanists, and certainly not Bible prophecy. Satan is not alive and well on planet earth; he is sick and dying, fighting a rear-guard action as hopeless as Hitler's counter-attack was at the Battle of the Bulge in the winter of 1944. The seeming impotence of Christians today is the result of *self-inflicted wounds*: pietistic fundamentalists and other Bible-believing groups have schizophrenically abandoned the Bible, while neo-evangelicals have adopted the rhetoric and slogans of political liberal humanists in the name of Jesus. The former have given away the case for victory, and the latter have deliberately sold out to the humanists in exchange for a mess of tenured academic pottage.

They are all without excuse before God. Once *The Dominion Covenant* is published, they will be even more without excuse. If this be arrogance, make the best of it.

INTRODUCTION

I first became convinced of the necessity of investigating the premises and conclusions of a distinctly Christian economics in the early 1960's. Almost from the day I announced this project, I have been asked the same question: "Are you saying that there is a uniquely Christian economics, different from secular economics?" My answer has been simple, "Yes." Yet my answer goes beyond even a simple yes. What I am saying, following the apologetic approach of Cornelius Van Til, is that there is no economics *except* Christian economics. I am not simply arguing that Christians should develop a better approach to economics, both theoretical and practical, but that Christians are required to work out the biblical principles of the only kind of economics there can ever be, *revelational economics*. If we say merely that we have a better approach, an approach that is superior to others, but nevertheless one among many, then we have misunderstood the comprehensive claims of God on our thinking. Every thought, every action, every conceivable aspect of human life must be subdued by biblical principles. There are no neutral zones outside of God's providence and God's law-order. There are no testing areas for God's word. There is only His truth and man's error.

This is not to say that secular economists have discovered nothing that is true. What they claim to have discovered may very often be true, but when such a conclusion is true, then the secular economists have come to that conclusion using borrowed (stolen) premises. Whatever the economist says that is fully consistent with his methodological presupposition of intellectual neutrality, or cosmic impersonalism, or any other form of God-denying humanism, cannot possibly be true. Conversely, anything that he says that is true cannot be fully consistent with his self-proclaimed neutrality, cosmic impersonalism, or other God-denying or God-limiting presuppositions.

I have been assured, repeatedly, that there is no such thing as a uniquely Christian economics. I have been told this by atheists with Ph.D.'s in economics. I have been told this by Christians with Ph.D.'s in economics. I have been told this by pietistic, emotionalistic, anti-nomian Christians without the foggiest notion of economics. After a while, I grew tired of being told this, so I decided that what needs to be written is a comprehensive book on Christian economics. That book has never been written.

There are books, including my *Introduction to Christian Economics*, that have begun to explore a few aspects of Christian economics, but there is no comprehensive treatise along the lines of Adam Smith's *Wealth of Nations* or Ludwig von Mises' *Human Action*. There are smaller books that claim to be defending Christian economics, but which actually defend free market economics, or Keynesian economics, by means of a few biblical quotations. What needs to be written before a comprehensive treatise on Christian economics is a systematic commentary on the Bible which deals with the Bible as a guide for economic reasoning and practice. If we do not know what the Bible has to say about economics, then we are "flying blind" when we begin to construct elaborate economic theories in the name of the Bible. I decided, in 1973, to devote myself to the production of an economic commentary on the Bible as a preliminary study which, I hoped, might lead to the writing of a treatise on Christian economics.

As the task of writing an economic commentary on the Bible has grown ever-more demanding, I finally concluded that there is not enough time for me to write that treatise. The best I can hope for, probably, is to finish a commentary, from Genesis to Revelation. It is my hope that other students of economics who come after me will be able to use my findings to produce many treatises and monographs on economics from a Christian perspective. I am still convinced that we need to know what the Bible has to say about economics before we start writing those comprehensive treatises.

The Dominion Covenant: Genesis is the first volume of a projected multi-volume economic commentary. This volume covers only the book of Genesis, but eventually I hope to publish a commentary on the Pentateuch under this general title. I have not made up my mind whether or not to keep *The Dominion Covenant* as the general title of the entire commentary, Genesis to Revelation. It unquestionably applies to the first five books of the Bible.

I hope that readers will begin to grasp the magnitude of the task I

have set for myself, after they have finished this volume. There should be no question in anyone's mind that the Bible has a lot to say about economics. They still may not be convinced that there is a uniquely Christian economics, but there should be no question of the large quantity of data for economics which the Bible presents to us.

This is a commentary. It should be useful for those biblical scholars who are simply trying to exegete a passage for its inherent meaning, and not just for those who are seeking strictly economic information. I have discovered over the last few years that conventional commentaries are almost devoid of economic insight, and for some verses, the economic ignorance of the writers has proved a stumbling block. They have missed the point entirely in a few cases—not simply the economic aspects of a particular verse, but the major point of the verse (when the point happens to be primarily economic).

There is no doubt that I am breaking new ground exegetically and intellectually with this commentary. Pathbreakers are always going to make mistakes. I will undoubtedly skip over some verse or some aspect of a verse that relates to economics. I will undoubtedly misinterpret some verses, or overemphasize the economic implications of some passage. Nevertheless, I think it is better to publish and wait for the responses, if any, of the critics, and then revise a later version of the commentary. By publishing it in sections, I have made it possible to improve the final version. This gets the intellectual division of labor working for me, and at low monetary cost, since antagonistic critics and nit-picking scholars are content to point out my grievous errors free of charge, just so long as they think their comments will make me look stupid and/or make them look brilliant. I am deliberately using this psychological characteristic of reviewers and critics to my advantage and the advantage of the kingdom, which will eventually receive an improved final version of this work. My philosophy is that it is better to publish something 80% correct, especially when there is no comparable book available, than to wait years to publish a book that is 90% correct, especially when the price of printing keeps rising.

It is a sad commentary on Christian intellectual life that no commentary like this has ever been attempted (as far as I have been able to determine). In fact, it is sad that key men in every academic discipline have not long been writing commentaries in their fields. These should have been begun at least 400 years ago, and certainly 300

years ago. Ironically, it was in the late-seventeenth century that Christian casuistry—the application of biblical principles to daily life—began to decline. It was also the century in which hypothetically neutral economics began to be promulgated, an intellectual innovation described by William Letwin in his book, *Origins of Scientific Economics* (1963, 1965). The fact that it has taken until the final decades of the twentieth century to get into print an economic commentary on one book of the Bible is a testimony to the systematic, conscious retreat from the world of scholarship and practical wisdom on the part of those who call themselves Christians. Why haven't Christian economists written numerous economic commentaries on the Bible, at least one each century, and preferably one each generation? Has it been that Christian scholars have been suffering from an *intellectual illusion*, namely, that there is a *zone of neutral scholarship* which provides Christians with all the data and logic they need, even though the work is being produced by men who believe that there is no God, and if there were, it could not be the God which the Bible presents?

Consider the implications of the statement, "There is no such thing as a distinctly Christian economics [psychology, political theory, education, etc.]." *First*, God has not spoken to His people with respect to how they should think and live. He remains silent, providing them with no ethical guidelines. He does not answer His people when they ask Him, "How shall we then live?" *Second*, the Bible is not a comprehensive book. The "whole counsel of God" is simply the call to repentance. But in specific terms, the Bible does not tell us, "Repentance from what?" The Bible is a book appealing to the heart of man, but the heart has no communication with the mind in areas outside of church policy, evangelism, and—at the most—family life. *Third*, the Bible gives the world over to Satan and his rebellious hordes. Not that they have stolen something from God, but that God gave this world to them. At the very least, they possess it by default, since God has not established guidelines. He does not really own the world, even though He says that He does (Ps. 50:10-12). God has not established rules for lawful stewardship and administration of His property. Satan and his followers have broken no laws of economics, for there are no laws of economics. Or if there are such laws, they are common to every culture, and we do not need the Bible to tell us what they are. Again, we are back to the premise of neutrality. *Fourth*, there are no specifically biblical stand-

dards that we can use in constructing the kingdom of God. (Those who like to argue that there is no such thing as Christian economics also have a tendency to deny that there is now, or ever shall be, a visible kingdom of God on earth, unless Jesus Christ rules it directly by means of standards which He never revealed in the Bible, but which He will tell us about when He returns. Until He returns, we are off the hook; we have no kingdom-building guidelines or responsibilities.) The rules of the kingdom are indeterminate. In fact, the kingdom itself may be indeterminate. *Fifth*, the tradition established by the prophets when they confronted the rulers of their age in the name of God, telling them that they had violated specific biblical laws, is abrogated today. Besides, the argument implies, there really were no written biblical guidelines for those Old Testament rulers and citizens to use in order to measure the extent of their rebellion. Therefore, the prophets must not have come to them in the name of previously revealed law, but in the name of a God who was announcing new laws—laws which, because the Bible does not give us a distinctly biblical law-order, the prophets also neglected to write down for our edification, not to mention the edification of kings who would come after them. What, then, are we to say about the social message of the prophets? Why, nothing, obviously. There is nothing to say, socially speaking, because they never really spoke to concrete social sins themselves, or if they did, *we* are under grace, not law, socially speaking. (That means we are under Moloch, Mammon, or one of the other gods of rebellion, but the critics never mention this, socially speaking. When it comes to topics social, they are sociable: unwilling to “make waves” for the rulers of our day. Undoubtedly, they are not prophets.)

If you do not like any or all of these implications, then you must do one of two things. First, prove to yourself that the implications do not follow from the statement, “There is no such thing as a distinctly Christian economics [psychology, political theory, education, etc.].” Second, if you find that these implications *do* follow from the premise, then you must abandon the premise. If you abandon the premise, then you owe it to yourself, before God, to start learning more about a distinctly Christian economics, psychology, or whatever. And once you learn, then you must begin to *apply* what you have learned to your spheres of influence.

This commentary appears on the surface to be a book without a market. The *economists* are generally atheists or agnostics, and have

been since the early nineteenth century. They have overwhelmingly been *epistemological atheists*, meaning that when it comes to questions of human knowledge, God and His revelation are not relevant, by definition. Therefore, it is unlikely that they will buy this book, read this book, believe this book, or assign this book to their students. The *pastors* are not likely to read a commentary that is explicitly economic in focus. They barely have enough time to read their denominational magazines, let alone a serious book on economics. They are not geared to this sort of commentary, especially since this sort of commentary has not been published in the past. In any case, a book like this will force them to rethink much of what they learned in seminary, and few professional people who are well-established in their field will rethink that field's premises and implications. Then there are *laymen*. They may be interested, but if they believe what this book tells them, they will probably find that what their pastors and friends say about economics does not correspond to what they have learned from this book. That means trouble for them, since pastors and professional businessmen will always be able to challenge their academic competence. The alternative is to remain silent in the face of blatant errors announced by the experts. That, too, is disconcerting. Where, then, is the market?

Parts of this book will be too religious for the economists, and too economic for the pastors. Parts of it will be too difficult for a lot of laymen who are not used to reading carefully. Who are the likely readers? *A remnant*. Those who are convinced that there are serious problems with the modern economies of the world. Those who are convinced that there are biblical alternatives to the collapsing secular humanism of our era. Those who are, in short, convinced that there had *better* be a distinctly Christian economics, and not baptized Marxism, baptized Keynesianism, or baptized Friedmanianism, let alone the unbaptized varieties.

There are four chapters of the book that may prove difficult going for the average reader. These four chapters are the most important ones in the field of *epistemology*, meaning "what do we know, and how can we know it?" These are: Chapter 2, Chapter 4, Appendix A, and Appendix B. Chapter 4 deals with the crucial question of objective value theory vs. subjective value theory. This makes for difficult reading, but what I demonstrate in this chapter is that there can be no such thing as applied secular economics. The secular economists cannot, given their own presuppositions, handle the problems of

economic value, nor can modern, subjectivist economists legitimately assert that economic statistics have any meaning. The modern economist ignores the implications of his own value theory, going on about his intellectual or financial business as if everything were all right. Everything is not all right. Humanist economics is bankrupt.

There is only Christian economics. If you ask the members of any school of economics — Marxist, Keynesian, inductivist-empirical, deductivist-logical — to show you why members of a rival school have no sound basis for what they are writing, the critics can prove it. What I have argued in an earlier essay is that modern economics, given its own philosophical starting-points, cannot deal with the mind-universe gap, the *a priori* vs. *a posteriori* dilemma, the logic-intuition contradiction, or the law-freedom problem.¹ There I was dealing with economic theory. What I demonstrate — or, better yet, what I allow modern economists to demonstrate for me — in Chapter 4, is this: *applied* secular economics is as epistemologically barren as *theoretical* secular economics. This may not prove the existence of a uniquely Christian economics, but it does prove that modern secular economics cannot possibly be valid, given the explicit presuppositions of modern economics.

What Is a Covenant?

The doctrine of the covenant is basic to a proper understanding of the Bible, as important as the doctrine of creation, the doctrine of salvation, and the doctrine of the trinity. Without the doctrine of the covenant, we have no concept of an infallible Bible, and without an infallible Bible, we are third-rate humanists. On this point, R. J. Rushdoony is correct: "Infallibility is an inescapable concept and fact; it is the locale of infallibility which is in question. The canon or rule of life and faith is either from God or from man. It is either the canon of covenant law, or it is the canon of man's word as law."² It is *covenant law* or *humanistic law*. It is either *covenant* or *humanism*.

By identifying the covenant as the very heart of the battle between humanism and Christianity, Rushdoony has challenged the modern church to deal with the biblical covenant and adopt it as the

1. Gary North, "Economics: From Reason to Intuition," in North (ed.), *Foundations of Christian Scholarship: Essays in the Van Til Perspective* (Vallecito, Calif.: Ross House Books, 1976).

2. R. J. Rushdoony, *Infallibility: An Inescapable Concept* (Vallecito, Calif.: Ross House Books, 1978), p. 26.

key to understanding. The very Bible itself, he correctly argues, is a covenant document. Either we adopt the canon of covenant law as our guiding principle of interpretation, or the canon of man's word as law. There is no third option, no neutral ground of confidence.

The Bible, in fact, is divided into two sections, the Old Testament and the New (or renewed) Testament, witnessing to the two great stages of covenant history. The Bible as a whole is God's covenant word or law, His declaration of the history and nature of His covenant.

A covenant book is thus a canonical book: it is the rule of faith, its law. The books of the Bible are canonical because they are covenantal: they are law because they are covenantal. If our view of the covenant is antinomian, then we have neither a covenant nor a canon, only a book for vaguely spiritual and moral counsel. It is then not in essence an infallible word.

While Scripture has many words, it is in essence *one word*, and is so spoken of in Deuteronomy 4:2. With the close of the canon, the *words* now stop (Rev. 22:18-19), and the one, unified word remains. Judgment is promised in Revelation 22:18-19 to all who add or detract from the one word, because an altered covenant law is no longer the law itself but a human substitute for law.³

But what is the biblical covenant? In 1982, when the first edition of this book was published, I could not have answered this question clearly. No one could. It was not until the fall of 1985 that Pastor Ray Sutton for the first time in recorded history discovered the specific five-point model of the biblical covenant. I regard this insight as the most important theological breakthrough in Protestant history. The doctrines of sovereign grace that Luther and Calvin preached can be found in Augustine and other medieval theologians. Such is not the case with Sutton's discovery of the five-point covenant model. Quite recently, others had seen that there is a five-point structure, but nobody had identified accurately what all of the five points are, or how they relate to the New Testament. Sutton's discussion and defense of his covenant model can be found in his book, *That You May Prosper: Dominion By Covenant* (Institute for Christian Economics, 1987).

I was challenged by one theologian to defend the idea that what I call the dominion covenant really is (and was) a covenant. It is far easier for me to defend this idea today than it was in 1982, thanks to Sutton's covenant model. Here is Sutton's model, which I apply to

3. *Idem*. See also Ray Sutton, "The Inescapability of a Master Principle," *Covenant Renewal*, I (June 1987).

the Ten Commandments in the Preface to Part 2 of Volume II of *The Dominion Covenant*, my study of Exodus 20: *The Sinai Strategy* (Institute for Christian Economics, 1986).

1. God's transcendence/immanence (presence)
2. Hierarchy/authority
3. Ethics/dominion
4. Judgment/sanctions
5. Inheritance/continuity

It is a simple model. First, God announces His holy name. He is the absolute sovereign over the universe as its Creator. He is transcendent over, meaning *distinct from*, His creation, yet He is also immanent to, meaning *present with*, this creation. He is neither a deistic God that is so distant from the creation that He cannot sustain it and judge it continually, nor is He a pantheistic God that is so immersed in the creation that He cannot sustain it and judge it continually. He is the Creator; therefore He is the Sustainer and Judge of the universe.

Second, God delegates to men authority over the creation. Men are His stewards. They report to Him. He controls the universe, yet He also delegates authority to men to exercise dominion over the creation. Each of God's covenants is marked by a hierarchical chain of command, a bottom-up appeals court structure, not a top-down bureaucracy.

Third, God calls men to exercise dominion. The tool of dominion is God's law. He judges men in terms of their conformity to the terms of the covenant, biblical law. Without law, there can be no covenant.

Fourth, God judges the performance of men. He executes judgment. This judgment is two-fold: blessing and cursing. There is always equal ultimacy of blessing and cursing, extending beyond the resurrection: the resurrected New Heaven and New Earth and the lake of fire (Rev. 20:14). The sign of this judgment is the oath, technically called a *self-maledictory oath*. The oath-taker calls down the cursing of God if he breaks the terms of the covenant. In His grace, God calls down mankind's well-deserved curses on Himself, which is why Christ had to die on the cross.

Fifth, there is an inheritance. This is the basis of historic continuity. In His grace, God did not destroy Adam and Eve in history on

the day that they sinned. He executed judgment, but they did not die physically. He imputed physical life to them because of Christ's future sacrificial offering at Calvary. To inherit God's blessings, men must be adopted by grace back into God's family (John 1:12). To refuse the offer of ethical adoption is to remain in the family of God's *disinherited son*, Adam (Acts 17:26), and to be cut out of God's inheritance in eternity.

Four Covenants

There are four, and *only* four covenants in the Bible: personal, family, church, and civil. Each corresponds to an agency of government. Each has an oath attached to it, either implicit or explicit. Each has all five points of the biblical covenant.

Personal oaths are called vows. They are referred to in Numbers 30. Women are allowed to take them, and are required by God to adhere to them, but only if the male head of household approves within 24 hours: father or husband (vv. 3-8). Widows and divorced women, as heads of their households, may take vows without permission of a man (v. 9). Even though this is a personal oath, we see hierarchy illustrated by this requirement of hierarchy. The individual is under God, and is held accountable directly by God. Most women have to get permission, but are then held directly accountable by God.

Second, there is the family covenant. It, too, has all five points of the covenant.⁴ God is sovereign over it. There is hierarchy: husbands over wives, parents over children. It has specific laws governing it. It is sealed with a public oath (marriage vow). It involves inheritance and continuity.

Third, there is the church covenant. God is sovereign over it, and specially present in the sacraments. It has a system of hierarchical authority. Specific laws govern it. There is a baptismal oath, either explicit (adults) or representative (parents in the name of infants). There is continuity: membership and ordination of officers.

Finally, there is the civil government. God ordains it and governs it. There is hierarchy: a court system. There are civil laws revealed by God. There are oaths: implicit (citizenship) and explicit (magistrates). There is continuity: elections, constitutional amending process, judicial precedents, etc.

4. Ray R. Sutton, *Who Owns the Family? God Or the State?* (Ft. Worth, Texas: Dominion Press, 1986).

Is the Dominion Covenant Truly a Covenant?

It is *the* personal covenant. Man's very definition is in terms of the dominion covenant of Genesis 1:26-28. Man is made in God's image, and he is to exercise dominion in God's name. There is no escape from this aspect of man's being. It extends beyond the resurrection in the resurrected New Heaven and New Earth, and it thwarts covenant-breakers in the lake of fire eternally. The covenant first appeared in the garden. There is transcendence: God is the Creator, and He assigns the dominion task to mankind. God was present in the garden to teach man the basics (naming the animals). There is a hierarchy, for God placed Adam under Him and over the creation. There was a law, and it was manifested in the garden by a forbidden tree. There was an implicit oath: violate it, God promised, and the curse is inevitable; obey it, and blessings are assured. There is continuity—the promise of eternal life—alongside of discontinuity: the promise of death the day that man rebels.

The dominion covenant is the most fundamental covenant. It governs all the others: personal, family, church, and civil. *Man is defined in terms of the dominion covenant*—not in terms of family, church, or State.

When I wrote this book, I was unaware of the five-point structure of the covenant. In revising it, I was struck by a most remarkable fact: the first six chapters conform to this covenant structure. Chapters Four and Five are both related to the fourth point: judgment. Thus, it would pay us to preview these chapters in terms of the five-point covenant model.

1. *Transcendence/Immanence (Presence)*

Chapter One deals with cosmic personalism. This is based on the Creator-creature distinction. God is wholly distinct from His creation. It shares no common being. There is no "chain of being" between God and man. This is the continuing theme of Sutton's *That You May Prosper*, and it is crucial. The Roman Catholic doctrine of transubstantiation (the bread and wine become the literal body and blood of Christ) is based on a chain-of-being doctrine. So is natural law theory. In contrast to this view is that of the Reformed faith: the *covenantal* connections between man and God, God and the sacraments, man's law and God's law. God is transcendent to the sacraments, yet present in them *covenantally*.

The covenant is basic to the proper understanding of creation,

and the doctrine of creation is basic to the covenant. Any downplaying of the doctrine of God's creation of the universe out of nothing in six literal 24-hour days is an implicit attack on the covenant. It is not a coincidence that Darwinism denied the creation and also denied any covenantal system of personal responsibility of man under God. This is why Darwinism swept the world: nineteenth-century men wanted to escape their sense of covenantal responsibility before God. (See below, pages 250-53.)

2. *Hierarchy/Authority*

I agree entirely with Rushdoony on this point: "The *second* characteristic of Biblical law is that it is a *treaty* or *covenant*."⁵ Man has been placed by God over the creation. In Chapter Two, we see that the sun, moon, and stars were created after the earth and the plants were. They were created to serve the needs of man, primarily as chronological devices. This hierarchy is basic to the covenant structure: under God and over the creation: "And God said, Let us make man in our image, after our likeness: let them have dominion over the fish of the sea, and over the fowl of the air, and over the cattle, and over all the earth, and over every creeping thing that crawleth upon the earth" (Gen. 1:26). This was repeated to Noah after the flood (Gen. 9:1-3).

What representatives of modern pietistic fundamentalists have denied, in their desperate attempt to retreat from personal responsibility, and in their implicit alliance with power-seeking humanists who seek dominion,⁶ is that this covenant involves hierarchy. They argue that while men get to exercise dominion over nature, there is no element of human hierarchy in these verses. This, of course, is theological nonsense: God placed Adam over his wife, and the parents over the children. He places church officers over congregation members, and civil magistrates over citizens and local residents. *There can be no dominion over nature without human hierarchies.* The question then is: Whose covenant law will rule these hierarchies, man's or God's?

Throughout European history, we have seen similar doctrines of a world without hierarchy. In the early radical religious revolution-

5. R. J. Rushdoony, *Institutes of Biblical Law* (Nutley, New Jersey: Craig Press, 1973), p. 7.

6. Gary North, *Moses and Pharaoh: Dominion Religion vs. Power Religion* (Tyler, Texas: Institute for Christian Economics, 1985), pp. 2-6.

ary movements that swept over late-medieval and early modern Europe, century after century, the sects' leaders initially preached total equality. Then, step by inevitable step, they imposed radical totalitarian hierarchy, usually with plurality of wives, but only for the leaders.⁷ They began in the name of radical individualism, and ended in radical hierarchy.

There is no escape from hierarchy. Hierarchy is a covenantal reality. It is never a question of "hierarchy vs. no hierarchy." It is always a question of *whose* hierarchy. Those who preach a world without hierarchy, a world without dominion by covenant, are either seeking to confuse their victims, or else they are incredibly naive accomplices of the power-seekers who do not want God's covenantal hierarchy. Follow their doctrine of "no hierarchy" at your own risk.

3. *Ethics/Dominion*

Rushdoony is correct when he writes: "The third characteristic of the Biblical law or covenant is that it constitutes a plan for *dominion under God*. God called Adam to exercise dominion in terms of God's revelation, God's law (Gen. 1:26ff.; 2:15-17). This same calling, after the fall, was required of the godly line, and in Noah it was formally renewed (Gen. 9:1-17)."⁸ Chapter Three of *The Dominion Covenant: Genesis* is called, appropriately, "The Dominion Covenant." It outlines the basics of God's command to mankind, "subdue the earth." This is a command from God. It is not some after-thought on God's part. It is basic to man's very being. Men are commanded by God to subdue the earth. Thus, obedience requires dominion. Dominion also requires obedience: God's work done in God's way. If man rebels against God, he becomes a destroyer rather than a subduer. The difference between subduing nature and exploiting nature is ethics: conformity to God's law. Thus, I write at the end of the chapter: "... man's fundamental tool of dominion is the moral law of God" (p. 36). The connection between ethics and dominion cannot be broken.

7. Norman Cohn, *The Pursuit of the Millennium: Revolutionary messianism in medieval and Reformation Europe and its bearing on modern totalitarian movements* (2nd ed.; New York: Harper Torchbook, [1957] 1961); Igor Shafarevich, *The Socialist Phenomenon* (New York: Harper & Row, [1975] 1980).

8. *Institutes*, p. 8.

4. *Judgment/Sanctions*

Chapters Four and Five deal with judgment. Chapter Four discusses value theory in economics. Is value objective or subjective? This is the question that has baffled economists for two centuries. The biblical answer is that value is both objective and subjective in God. God declares good and bad. Men are to think God's thoughts after Him as creatures. They are to *render godly judgment as His delegated agents*. Thus, rendering judgment in history is basic to man's calling before God (see also Appendix E: "Witnesses and Judges").

Chapter Five deals with the sabbath rest idea. In the Ten Commandments, this comes as the fourth commandment. In *The Sinai Strategy*, I discuss this commandment under point four of the biblical covenant: "Sabbath and Dominion." By resting on God's sovereignty, man can achieve rest. He acknowledges his position as God's subordinate agent. God will honor His covenant, and bring blessings to those who obey Him. Therefore, resting one day in seven is a covenantal acknowledgment that God is sovereign, not man.

5. *Inheritance/Continuity*

Chapter Six deals with the concept of money. There is no more fundamental aspect of money than continuity over time. Any commodity that is perceived to be valuable over long periods in the past can become a candidate for an economy's money. People will be willing to consider the use of such a commodity as a means of exchange and "storehouse of value," meaning *a valuable thing to store*. As I write in my study of the biblical basis of money: "In short, money is the most marketable commodity. It is marketable because people expect it to be *valuable in the future*."⁹

The fact that I instinctively adopted the five points of the covenant in my original exposition is indicative of just how central the covenant is in biblical documents. It is *the* ordering principle in the Bible, even reflected in the names Old Covenant and New Covenant (Heb. 8:13). We take communion under the authority of God's covenant (I Cor. 11). Sinners take communion under Satan's covenant (I Cor. 10:20-21). We eat the tree of life or the forbidden tree. "Covenant" is an inescapable concept. There is no escape from covenants: the question is: *Which* covenant?

9. Gary North, *Honest Money: The Biblical Blueprint for Money and Banking* (Ft. Worth, Texas: Dominion Press, 1986), p. 20.

Another Ordering Principle?

It could be argued that it is illegitimate to search for a single ordering principle in the Bible. This is a predictable comment *from someone who has a rival ordering principle* that he is quietly importing to his work. Anyone who hears such a critical remark against the use of the covenant as an interpretive model should consider the words of Rushdoony, which I cited above: "The canon or rule of life and faith is either from God or from man. It is either the canon of covenant law, or it is the canon of man's word as law."¹⁰

There are many ordering principles, but only one is crucial in the discussion of the relationship between God and man: the covenant. The only other alternatives are philosophical realism (Aquinas) or philosophical nominalism (Ockham), and they have proven to be dead ends from the day they were offered as valid alternatives to covenantalism. Anyone who argues that some other system of interpretation is available is either a realist or a nominalist. The Christian should not accept either alternative. Rushdoony tells us why not: "Nominalism ends by dissolving the world into an endless sea of unrelated and meaningless facts or particulars, whereas Realism progressively denies the validity of particulars, of the many, and absorbs them into an undifferentiated and shoreless ocean of being. At either end, definition, meaning, and truth disappear; at one end total relativism and anarchy, and, at the other, total authoritarianism."¹¹

Conclusion

In this book, I begin with God's covenant, not humanism. I argue for methodological covenantalism, as opposed to humanism's methodological individualism (anarchism) — *nominalism* — or methodological holism (socialism) — *realism*. I begin with God's revelation, not human speculation. I begin with Genesis, not Adam Smith's *Wealth of Nations* (1776) or John Maynard Keynes' *General Theory of Employment, Interest, and Money* (1936) or Milton Friedman's *Capitalism and Freedom* (1961). This may bother economists, but so what? I do not expect economists to read an economic commentary on the Book of Genesis.

10. Rushdoony, *Infallibility*, p. 26.

11. R. J. Rushdoony, *The One and the Many: Studies in the Philosophy of Order and Ultimacy* (Fairfax, Virginia: Thoburn Press, [1971] 1978), p. 14.

* * * * *

Note to the reader: throughout this book, I have avoided emphasizing any material in direct citations. If an italicized word or phrase appears inside the quotation marks, then the original author made this decision. The only changes I have made are the very occasional use of brackets to define an author's use of an obscure word.

Additional note: I capitalize the word "State"—civil government in general—in order to distinguish it from those regional entities in the United States, "states."

COSMIC PERSONALISM

In the beginning God created the heaven and the earth (Gen. 1:1).

The opening words of the Bible present us with the most important principle of human knowledge: God created the universe. He created it out of nothing, by the power of His word: "Through faith we understand that the worlds were framed by the word of God, so that things which are seen were not made of things which do appear" (Heb. 11:3). Again, "By the word of the LORD were the heavens made; and all the host of them by the breath of his mouth" (Ps. 33:6). God created the universe by fiat, meaning by the power of His command. Speaking of the Second Person of the Trinity, Paul writes:

Who is the image of the invisible God, the firstborn of every creature: For by him were all things created, that are in heaven, and that are in earth, visible and invisible, whether they be thrones, or dominions, or principalities, or powers: all things were created by him, and for him: And he is before all things, and by him all things consist (Col. 1:15-17).

The Revised Standard Version (RSV) translates this latter phrase, "all things are held together in him," and the Berkeley Version concurs: ". . . and in him all things hold together." Through God, the Creator, all things are *sustained*. The doctrine of *creation* is directly linked to the doctrine of *providence*.

From beginning to end, the created world bears the mark of God's handiwork. "The heavens declare the glory of God; and the firmament sheweth his handiwork" (Ps. 19:1). God did not create a self-sustaining universe which is now left to operate in terms of autonomous laws of nature. The universe is not a giant mechanism, like a clock, which God created and wound up at the beginning of

time. Ours is not a mechanistic world, nor is it an autonomous biological entity, growing according to some genetic code of the cosmos. Ours is a world which is actively sustained by God on a full-time basis (Job 38-41). All creation is inescapably *personal* and *theocentric*. "For the invisible things of him from the creation of the world are clearly seen, being understood by the things that are made, even his eternal power and Godhead . . ." (Rom. 1:20).

If the universe is inescapably personal, then there can be no phenomenon or event in the creation which is independent from God. No phenomenon can be said to exist apart from God's all-inclusive plan for the ages. There is no uninterpreted "brute factuality." Nothing in the universe is *autonomous*, an English word derived from two Greek words that are transliterated *autos* (self) and *nomos* (law). Nothing in the creation generates its own conditions of existence, including the law structure under which something operates or is operated upon. Every fact in the universe, from beginning to end, is exhaustively interpreted by God in terms of His being, plan, and power.¹

Modern Science's Impersonalism

The doctrine of creation in its biblical form therefore denies one of the most cherished doctrines of the modern world, namely, the doctrine of *cosmic impersonalism*. This doctrine asserts that all life is the product of impersonal, self-generated, random forces of nature. Cosmic impersonalism is the heart and soul of the modern doctrine of evolution, which asserts that evolution operates through the process of natural selection. Undergirding the concept of natural selection is the idea of randomness. The idea of evolution is not new; in fact, it was the universal belief of ancient societies, with the exception of the Hebrews. Ancient paganism held a concept of a deity or deities that struggled with the primeval chaos (randomness) in order to produce a somewhat orderly, partially controlled universe—one which is constantly threatened by either too much law or a breakdown

1. Cornelius Van Til, *A Christian Theory of Knowledge* (Nutley, New Jersey: Presbyterian & Reformed Publishing Co., 1969), p. 28. Writes Van Til: "All facts of history are what they are ultimately because of what God intends and makes them to be. Even that which is accomplished in human history through the instrumentality of men still happens by virtue of the plan of God. God tells the stars by their names. He identifies by complete description. He knows exhaustively. He knows exhaustively because he controls completely."

of order.² It was Darwin's contribution to the modern world to have convinced men that evolution occurs through random changes in living creatures. The interaction between a deterministic external environment, governed by strict cause and effect, and living creatures that survive or perish on the basis of random mutations in their genes, is the mechanism of evolutionary progress. This is natural selection. The deterministic universe, itself the product of random materialistic forces, brought forth life, and living creatures developed through the uncontrollable random mutations of their genes and the interaction of the biological results of these mutations with the environmental changes external to each species. In its original formulation, Darwinism presented a world which is governed by random variation; randomness begetting randomness in a sea of randomness, yet governed entirely by the universally valid and totally unbreakable iron law of natural selection.

Peter Medawar and his wife Jean, two prominent biological scientists, have stated the case very plainly in their book, *The Life Science* (1977), and in the intellectual journal, *Harper's*. The opening words of the *Harper's* extract from the book are illuminating: "Not so very many years ago people talked about 'God and the physicists,' but today the geneticists have elbowed their way to the footlights, and a great change has come about in relations between science and religion: the physicists were in the main very well disposed towards God, but the geneticists are not. It is upon the notion of *randomness* that geneticists have based their case against a benevolent or malevolent deity and against there being any overall purpose or

2. Cf. Mircea Eliade, *A History of Religious Ideas* (Chicago: University of Chicago Press, 1978), pp. 60, 72-73, 91-93; Eliade, *Patterns in Comparative Religion* (New York: Sheed & Ward, 1958), ch. 12; Eliade (ed.), *From Primitives to Zen* (New York: Harper & Row, 1967), ch. 2. Eliade demonstrates that creation myths other than the Hebrew version were marked by a belief that God either struggled with an existing matter to form the world, or the world stemmed from some aspect of the god's being, usually from his anatomy. Only the Hebrews proclaimed an absolute distinction between creature and Creator, i.e., two separate types of being, as Van Til points out: "All forms of heresy, those of the early church and those of modern times, spring from this confusion of God with the world. All of them, in some manner and to some extent substitute the idea of man's participation in God for that of his creation by God." Van Til, *The Theology of James Daane* (Nutley, New Jersey: Presbyterian & Reformed, 1959), p. 122. On the Mesopotamian evolutionary creation myths, see Thorkild Jacobsen, "Mesopotamia," in Henri Frankfort, et al., *Before Philosophy, The Intellectual Adventure of Ancient Man* (Baltimore, Maryland: Penguin Books, [1951] 1964), pp. 187-89, 214-16. See also Rousas John Rushdoony, *The One and the Many* (Fairfax, Virginia: Thoburn Press, [1971] 1978), ch. 3.

design in nature.”³ The “god of the physicists,” however, had also been a god of randomness, lurking in the shadows of the “as yet-unknown,” moving instantly away from any “light” thrown on events by rationalism’s laws of physical science. The god involved was Kant’s god of the hypothetical “noumenal” realm—a mental construct who cannot influence the external events of nature. So Medawar and his wife have abandoned such a god as being unnecessary, which indeed such a god is. They have forthrightly accepted the new god of creation, *randomness*, giving him all due respect, honor, and glory. Purpose and design, the intolerable evils of Christian theology, must be banished from the kingdom of randomness, at least until man appears on the scene.

Cosmic impersonalism is a way of banishing personal responsibility from the universe. It enables men to ignore the possibility of final judgment in terms of a fixed set of ethical standards. It allows men to ignore the possibility of eternal punishment. It allows man to reinterpret all facts according to his purposes and ideals, both intellectual and moral. Man becomes the determiner and interpreter of the universe. Understandably, secular man prefers not to interpret the universe in terms of God’s categories. He much prefers to live in the hypothetically random universe posited by modern humanism—a universe which is slowly grinding to inevitable extinction (the second law of thermodynamics, entropy). Perhaps the most eloquent statement of what this means has been written by Bertrand Russell, the influential British philosopher-mathematician. The world of modern science, he writes, is “more purposeless, more void of meaning” than the world outlined by Mephistopheles to Dr. Faustus. The modern world has no meaning. “Amid such a world, if anywhere, our ideals henceforward must find a home. That Man is the product of causes which had no prevision of the end they were achieving; that his origin, his growth, his hopes and fears, his loves and beliefs, are but the outcome of accidental collocations of atoms; that no fire, no heroism, no intensity of thought and feeling, can preserve an individual life beyond the grave; that all the labours of the ages, all the devotion, all the inspiration, all the noonday brightness of human genius, are destined to extinction in the vast death of the solar system, and that the whole temple of Man’s

3. Peter and Jean Medawar, “Revising the Facts of Life,” *Harper’s* (Feb. 1977), p. 41.

achievement must inevitably be buried beneath the debris of a universe in ruins—all these things, if not quite beyond dispute, are yet so nearly certain, that no philosophy which rejects them can hope to stand. Only within the scaffolding of these truths, only on the firm foundation of unyielding despair, can the soul's habitation henceforth be safely built."⁴

If anything, as Russell grew older, he became even more pessimistic, more thoroughly consistent with his presuppositions concerning man and the universe. He saw through the glib theologians who had adopted some version of evolution and had then attempted to integrate it into their religious framework. What foolishness, Russell concluded. "Why the Creator should have preferred to reach His goal by a process, instead of going straight to it, these modern theologians do not tell us." But this is only part of their problem. "There is another and a graver objection to any theology based on evolution. In the 'sixties and 'seventies, when the vogue of the doctrine was new, progress was accepted as a law of the world. Were we not growing richer year by year, and enjoying budget surpluses in spite of diminished taxation? Was not our machinery the wonder of the world, and our parliamentary government a model for the imitation of enlightened foreigners? And could anyone doubt that progress would go on indefinitely? Science and mechanical ingenuity, which had produced it, could surely be trusted to go on producing it ever more abundantly. In such a world, evolution seemed only a generalization of everyday life. But even then, to the more reflective, another side was apparent. The same laws which produce growth also produce decay. Some day, the sun will grow cold, and life on the earth will cease. The whole epoch of animals and plants is only an interlude between ages that were too hot and ages that will be too cold. There is no law of cosmic progress, but only an oscillation upward and downward, with a slow trend downward on the balance owing to the diffusion of energy. This, at least, is what science at present regards as most probable, and in our disillusioned generation it is easy to believe. From evolution, so far as our present knowledge shows, no ultimately optimistic philosophy can be validly inferred."⁵ *Humanism is pessimistic.*

4. Bertrand Russell, "A Free Man's Religion" (1903), in Russell, *Mysticism and Logic* (New York: Doubleday Anchor, [1917]), pp. 45-46.

5. Bertrand Russell, "Evolution," in *Religion and Science* (New York: Oxford University Press, [1935] 1972), pp. 80-81.

Biblical Personalism

In direct contrast to cosmic impersonalism stands the biblical doctrine of *cosmic personalism*. Cornelius Van Til, the twentieth-century Christian philosopher and theologian, has put the issue quite forcefully: "According to Scripture, God has created the 'universe.' God has created time and space. God has created all the 'facts' of science. God has created the human mind. In this human mind God has laid the laws of thought according to which it is to operate. In the facts of science God has laid the laws of being according to which they function. In other words, the impress of God's plan is upon his whole creation. We may characterize this whole situation by saying that the creation of God is a revelation of God. God revealed himself in nature, and God also revealed himself in the mind of man. Thus it is impossible for the mind of man to function except in an atmosphere of revelation. And every thought of man when it functioned normally in this atmosphere of revelation would express the truth as laid in the creation of God."⁶

Man's mind has not functioned properly, as originally designed and intended by God, since the day of his ethical rebellion against God in Eden. Nevertheless, man still knows some things, despite the twistings and misinterpretations provided by his own rebellious imagination. He knows enough to condemn him before God on the day of judgment (Rom. 1:18-20). He knows enough to work and progress in his labors. He knows enough to make some sense of his environment. Men have amassed remarkable quantities of information, but despite this, man's mind is not determinative, nor was it determinative before Adam's rebellion. God's mind is determinative. Neither man nor nature is normative. God's exhaustive knowledge of Himself and the creation is normative. Because man is made in the image of God, and because man is fully responsible before God, man's mind is capable of apprehending an underlying bedrock of truth. It is man's responsibility to seek out this truth, to the extent which is appropriate to a creature serving as God's subordinate. We cannot attain perfect, exhaustive knowledge, since such comprehensive knowledge belongs to God alone, but we can attain true knowledge. Therefore, concludes Van Til: "For the Christian system,

6. Van Til, *A Survey of Christian Epistemology*, Vol. II of the series, *In Defense of the Faith* (Den Dulk Foundation, 1969), p. 1. This book is distributed by Presbyterian and Reformed Publishing Co., P.O. Box 817, Phillipsburg, New Jersey 08865.

knowledge consists in understanding the relation of any fact to God as revealed in Scripture. I know a fact truly to the extent that I understand the exact relation such a fact sustains to the plan of God. It is the plan of God that gives any fact meaning in terms of the plan of God. The whole meaning of any fact is exhausted by its position in and relation to the plan of God. This implies that every fact is related to every other fact. God's plan is a unit. And it is this unity of the plan of God, founded as it is in the very being of God, that gives the unity that we look for between all the finite facts. If one should maintain that one fact can be fully understood without reference to all other facts, he is as much antitheistic as when he should maintain that one fact can be understood without reference to God.⁷ No fact (datum) of the universe is independent of God and His plan. No man can assert his own autonomy and then legitimately claim to know anything exhaustively, for to know anything exhaustively requires that the knower understand *everything* exhaustively. Any fact (datum) in the universe might conceivably have some influence on any other fact. This is why we must assert that all truth is interrelated in a single system of interpretation. It is God, and God alone, who possesses this exhaustive system of interpretation.

The quest for exhaustive knowledge by man is demonic. It tempts man to surpass the limits of his creaturely status. It is the lure of Satan, namely, to become "as God." This is why we need God's revelation of Himself in the Bible to achieve accurate, though not exhaustive, knowledge of His creation. *The Bible provides the necessary corrective information, an interpretative context for studying and understanding the creation.* The Bible's revelation keeps us from "going off the deep end" in endless speculation about the inconceivable—inconceivable for man, that is.

Modern man may choose to believe in some version of cosmic impersonalism in preference to a belief in God's cosmic personalism. Nevertheless, the Bible tells us that this is an impossible choice to make. The warfare in the Bible is not between God's personalism and the creation's impersonalism, but between God and Satan. The conflict is inescapably personal. Men worship a true God or a false god, but they worship *personal* forces. There is no escape from the personalism of the choice, however much men seek to impersonalize the universe (generally as a stepping stone to re-personalizing it by

7. *Ibid.*, p. 6.

asserting the sovereignty of man). We find modern psychologists, especially those in the behaviorist camp, grimly and fanatically depersonalizing even man, the chooser, making him just another product in a strictly impersonal, cause-and-effect universe. But the effort is in vain. Men will spend eternity with Satan or God, in the lake of fire (specifically prepared for Satan and his angels: Matt. 25:41) or in the new heavens and new earth (Rev. 21).

Cosmic impersonalism is a myth. We never choose between cosmic personalism and cosmic impersonalism; it is merely a question of *whose* cosmic personalism: God's or Satan's. Eve was tempted by a person. Jesus was tempted in the wilderness by a person (Matt. 4). Cosmic impersonalism is a satanic delusion, a convenient way to mystify men. Men choose to believe in something other than God, and from Satan's viewpoint, anything will do just fine. The result is the same: man's destruction, the alienation of man from God, in whose image he was created. Satan is content to stay in the background, when necessary. He is content to be devilish; publicity for publicity's sake is not his style. The darkness suits him fine.

Perhaps the most perceptive analysis of this aspect of Satan's temptation is found in C. S. Lewis' fictional account of a senior devil's advice to a junior devil. Screwtape, the senior devil, gives this advice in *The Screwtape Letters*, Chapter 7 (written in World War II). "Our policy, for the moment, is to conceal ourselves. Of course this has not always been so. We are really faced with a cruel dilemma. When the humans disbelieve in our existence we lose all the pleasing results of direct terrorism, and we make no magicians. On the other hand, when they believe in us, we cannot make them materialists and skeptics. At least, not yet. I have great hopes that we shall learn in due time how to emotionalise and mythologise their science to such an extent that what is, in effect, a belief in us (though not under that name) will creep in while the human mind remains closed to belief in the Enemy. The 'Life Force,' the worship of sex, and some aspects of Psychoanalysis may here prove useful. If once we can produce our perfect work—the Materialist Magician, the man, not using, but veritably worshipping, what he vaguely calls 'Forces' while denying the existence of 'spirits'—then the end of the war will be in sight."

Providence and Economics

The justification for an economic commentary on the Bible is based on the opening lines of Genesis. God created the world. It is

now governed, and has always been governed, by His personal power and purpose. The world is sustained by God. Our world is providential. It reflects His orderly being. Our world is therefore coherent, and it is man's responsibility, as a species, to discover the providential regularities of the universe, including man's own being, and then use this knowledge in the tasks of subduing the earth to the glory of God.

When man rebelled, both he and nature were cursed by God. Neither man nor nature was ever normative, but after the Fall and the curses, it is even more erroneous to claim that man or nature is normative. God's word alone is normative. It alone can provide the necessary correction to man's rebellious mind and supply the necessary presuppositions of intelligent, God-honoring understanding. This is why we need to study the Bible if we are to discover the truths of economics, or any other academic or professional discipline. The Bible informs us of the limits of man's speculative fancies concerning economics (or anything else). Man has great power under God. He also has definite limits. The Bible reveals both the potential of man and the limits placed on man by his creaturehood, as well as by man's rebellious Fall into sin and the curses placed on the human race by God as a result of this rebellion.

The "Impersonal" Free Market

It is quite common for economists to speak of the impersonalism of the market process. By this, the academic economist means that the free market's processes are virtually independent of the will or plans of any single market participant. One man's influence is normally infinitesimal from the point of view of the overall market system. The market is understood as an impersonal mechanism in the sense that it is the product of millions of human decisions and actions at any point in time. People enter into voluntary exchanges with one another, and the results of their activities have far-reaching implications when considered as a whole. Hayek has gone so far as to describe this attitude toward the market—an attitude which he shares, and which he has defended more eloquently than any other social philosopher of the twentieth century—as “an attitude of humility toward the impersonal and anonymous social processes by which individuals help to create things greater than they know. . . .”⁸

8. F. A. Hayek, *Individualism and Economic Order* (Chicago: University of Chicago Press, 1948; London: Routledge & Kegan Paul, 1949), p. 8.

This "impersonal and anonymous" social process is supposed to be a reliable source of continuing economic benefits and continuing personal freedom.

Biblically speaking, this view of the market is incorrect. While the free market's processes may appear to be impersonal from the point of view of the individual observer, the market is not impersonal from the point of view of God, the omniscient observer. The Christian economist must assert from the beginning that *this supposed impersonalism of the market process must never be understood to be a process autonomous from God*. The operations of the market, like the operations of the atom, are ultimately guided by and upheld by God. In fact, the strongest philosophical and theological argument in favor of the free market is that it thwarts the attempt of power-seeking men to attempt to imitate God by centralizing the economic planning system through the civil government, thereby directing the lives of other citizens in terms of the goals of some elite central planning board. *The free market decentralizes economic power*, thereby limiting the quest for personal power. It has as one of its most important functions a definite religious purpose: *to restrict men in their attempt to play God*. No one has been more eloquent in the presentation of the free market as an institution which decentralizes power than F. A. Hayek. His best-selling book, *The Road to Serfdom* (1944), which was condensed and published in the mass-circulation magazine, *Reader's Digest*, in 1945, stated the case for the market in terms of the limitation of political power.⁹ What Hayek and other secular defenders of the free market have failed to understand is this: it is precisely because the market is *not* impersonal with respect to God and His law-order that it can be said to be impersonal with respect to the plans and actions of any single participant.

The market as a human institution has a definite role to play in limiting the illegitimate quest for total power, an inescapable aspect of all centrally planned economies, since central economic planning requires the use of political coercion in order to allocate goods and services in a world of scarce resources. It is not a coincidence that the market serves this purpose, for it has not evolved as the exclusive product of human action—action which did not have the creation of a market economy and market institutions as a goal. The market is

9. Hayek, *The Road to Serfdom* (Chicago: University of Chicago Press, 1944). The reprint from the *Reader's Digest* was published in 1979 by the Economic Institute for Research and Education, P.O. Box 611, Boulder, Colorado 80306.

not the product of human choices that were, with respect to the advent of the market and the numerous social requirements of a market order, utterly random historically. Just because no *human* planning agency ever designed the market, does not prove the market was undesigned.¹⁰ Men did not design a free market to fit their needs for social, economic, and political order, but this in no way implies (as the socialists, Marxists, and central planners in general assert) that the market does not fit men's needs for social, economic, and political order. The market has a whole series of purposes for man because it is a direct outgrowth of the application of fundamental moral and economic principles that were established by God to meet the needs of responsible human agents. It is a part of God's comprehensive social law-order.

Conclusion

The Creator-creature distinction is the beginning of wisdom. It is the first point of the biblical covenant: *the transcendence of God*. This doctrine must undergird the science of economics, and also every other science. God is absolutely sovereign over the creation. The creation is therefore personal. Any discussion of the market as an impersonal process or institution must always be qualified by the doctrine of cosmic personalism. God, not man, is sovereign. He is fully responsible to God.

10. The continuing theme in the writings of Hayek is the concept promoted by the eighteenth-century Scottish rationalists, especially Adam Ferguson, that society is the product of human action—the multiple actions of individuals—but not of human design. Like Charles Darwin, the Scottish rationalists were seeking an explanation of the operations of the world apart from continual appeals to the thoughts, plans, and miracles of a transcendent designing God. Hayek has argued for this position in numerous works: "The Use of Knowledge in Society," *American Economic Review*, XXXV (Sept. 1945); reprinted in *Individualism and Economic Order*, ch. 4; *Law, Legislation and Liberty*, Vol. I: *Rules of Order* (Chicago: University of Chicago Press, 1973), chaps. 1, 2; *Studies in Philosophy, Politics and Economics* (Chicago: University of Chicago Press, 1973), chaps. 5, 6, 11; "The Three Sources of Human Values: A Postscript to *Law, Legislation and Liberty*," the Hobhouse Lecture given at the London School of Economics (May 17, 1978), reprinted in *Literature of Liberty*, II (April-June, 1979), pp. 63-64. For an extremely perceptive critique of Hayek's evolutionistic epistemology, see Eugene F. Miller, "Hayek's Critique of Reason," *Modern Age* (Fall, 1976). See also John N. Gray, "F. A. Hayek on Liberty and Tradition," *Journal of Libertarian Studies*, IV (Spring, 1980); Arthur M. Diamond, Jr., "F. A. Hayek on Constructivism and Ethics," *Journal of Libertarian Studies*, IV (Fall, 1980). The best critical discussion of Hayek is John Gray, *Hayek on Liberty* (London: Basil Blackwell, 1984). Finally, see Appendix B, "The Evolutionists' Defense of the Market."

PURPOSE, ORDER, AND SOVEREIGNTY

And God said, Let there be lights in the firmament of the heaven to divide the day from the night; and let them be for signs, and for seasons, and for days, and years; And let them be for lights in the firmament of the heaven to give light upon the earth: and it was so. And God made two great lights; the greater light to rule the day, and the lesser light to rule the night: he made the stars also (Gen. 1:14-16).

These verses do not seem to be related to the topic of economics in any way. Yet in terms of their importance for human thought in general, and economic science in particular, they cannot be overestimated. They are second in importance only to Genesis 1:1 in the field of cosmology. Because of this, modern secular science is at war with the plain teaching of these verses. Furthermore, these verses are far more difficult to allegorize than Genesis 1:1. Their time frame is too specific. Their perspective is too concrete. Scientists who might be willing to shrug their shoulders at Genesis 1:1, as if the words were harmless poetic relics of the past, would groan in horror if someone suggested that these verses must be taken literally.

An affront to modern evolutionary science is posed by the chronological sequence of the creation of the heavenly bodies. We are told that the stars, sun, and moon were created on the fourth day, the day following the creation of living plants. There is no possible way that this chronological sequence can be integrated into an evolutionary time frame's sequence of historical events. It is unfortunate that respectable Bible commentators have compromised the explicit language of Scripture by arguing that the stars, moon, and sun were created on the same day that the earth was, but that they did not have any specific function with respect to the earth prior to the fourth (possibly non-literal) day. Nevertheless, the Bible affirms that God created light by the power of his word. This super-

natural light separated day from night. Only on the fourth day were specific bodies created to provide light and to separate day from night. One commentator has argued that the sun existed on the first day, but God concealed it by means of some sort of veil, which He then removed on day four.¹ How any serious scholar can read such a story into the plain words of Genesis 1 is baffling. Why should we tamper with the plain teaching of the Bible in this fashion? Are we naive enough to believe that if Christians push back the creation of the stars to the first day, making them co-temporal with the earth, modern evolutionists in the fields of astronomy and cosmology are going to think Christianity might just be plausible after all? Are we trying to buy a little academic respectability by means of this sort of exegesis? Modern science holds that the earth is a relatively late development, possibly only five billion years old, in a universe at least ten billion years old. What good do we think we will accomplish by ignoring the words of Genesis 1 and arguing for the creation of the sun and stars on the first day, inventing a hypothetical veil or cloud cover to provide an explanation of why the Bible speaks of the sun, moon, and stars as being created on the fourth day? If we are inevitably going to be looked at as fools for holding to biblical revelation, which is unquestionably the case (I Cor. 1:19-21), then why not at least be consistent, straightforward, more offensive fools—fools thoroughly committed to this foolish revelational faith, fools untarnished by the pseudo-wisdom of the world? Would anyone have bothered to invent a veil or cloud cover for the sun, moon, and stars on days one through three, had he not been confronted with some version of evolution, which he then decided to conform to, at least partially, in order not to appear unrespectable?² Let us side with biblical language and cease our pathetic, unrealizable quest for academic respectability within the world of secular humanistic scholarship.

1. Derek Kidner, *Genesis: An Introduction and Commentary*, in the Tyndale Old Testament Commentaries (Downers Grove, Illinois: Inter-Varsity Press, 1967), pp. 48-49. Kidner does not explain what this "veil" might have been.

2. As an example of just such a naive compromise, see the quotation from Edwyn Bevan's essay, "The Religious Value of Myths in the Old Testament," cited *favorably* by Kidner (p. 55): "The stages of which the earth comes to be what it is cannot indeed be precisely fitted to the account which modern science would give of the process, but in principle they seem to anticipate the modern scientific account by a remarkable flash of imagination, which a Christian may also call inspiration." For a detailed account of the depressing history of such Christian misreadings of (and compromises with) evolutionary chronologies, see Appendix C: "Cosmologies in Conflict: Creation vs. Evolution."

It does absolutely no good whatsoever to create such exegetical diversions in an attempt to make the Bible's account sound more reasonable, meaning more scientific, meaning more evolutionary. There are several reasons for this. *First*, modern astronomers argue that the solar system and the earth are relatively recent phenomena when compared to the age of the universe. Astronomers writing in the 1970's generally had come to some agreement about the limits of chronology, given the fact that many of them seem to have adopted the "big bang" theory of cosmology. Sometime in the distant past, between ten billion and fifteen billion years ago, an original hyper-condensed matter-energy exploded, thereby creating the universe.³ The solar system and the earth came much later, approximately 4.6 billion years ago.⁴ Modern secular science would have to reject any suggestion that the sun, moon, and stars were created on the same day that the earth was created.

Second, when it comes to questions of ultimate origins, the scientists are not agreed among themselves anyway. Toulmin and Goodfield write that "over these cosmological theories there is nothing like the same kind of agreement among astronomers that exists over theories of stellar evolution. In cosmology, the chief protagonists take up standpoints which are sharply opposed, and even—as at present formulated—irreconcilable. Some see the astronomical evidence as supporting a belief that the entire universe began at an initial moment in time about 10,000 million years ago, through a cataclysmic Creation, by which time and matter came into existence together, once and for all. Others believe that the cosmos has had an unlimited existence in time, and its average state and appearance have always been similar to what they are today. This

3. Gerald J. Whitrow, "The Role of Time in Chronology," in Wolfgang Yourgrau and Allen D. Breck (eds.), *Cosmology, History, and Theology* (New York: Plenum Press, 1977), pp. 175-76. He accepts the 10 billion to 15 billion estimate: p. 176. Carl Sagan, the best-selling astronomer from Cornell University, where he is Director of Planetary Studies, accepts the "big bang" theory and the 15 billion years figure: *The Dragons of Eden* (New York: Ballantine Books, 1977), p. 13. See also Clive Kilmister, *The Nature of the Universe* (New York: Dutton, 1971), p. 151, for a 10 billion years estimate. George B. Field holds to the 10 billion figure, in William C. Saslaw and Kenneth C. Jacobs (eds.), *The Emerging Universe* (Charlottesville: University Press of Virginia, 1972), p. 146. The citations could be multiplied.

4. The 4.6 billion years figure is cited by Field, in Saslaw and Jacobs (eds.), *The Emerging Universe*, p. 145, and by Harvard astronomer, Fred Whipple, *Earth, Moon, and Planets* (Cambridge: Harvard University Press, 1970), p. 244. The 4 billion to 5 billion years estimate is quite conventional.

uniformity-throughout-eternity is even presented at times as a necessary axiom of all scientific thought about cosmology—a rational presupposition, to which any acceptable account of the universe must conform. A third party has adopted yet another point of view. The cosmos has neither had an initial Creation, nor displayed an eternal changelessness: instead, it has passed through a recurring cycle of similar changes, oscillating between two extremes, with an overall period of perhaps 100,000 million years.”⁵ This last viewpoint is analogous to the pagan concept of recurring historical cycles, and modern Hinduism still holds to it.⁶ In fact, as Toulmin and Goodfield argue, all three cosmologies go back to Greek speculation. “Details apart, the *general* resemblances between twentieth-century cosmology and its ancestors are no mere coincidence. Rather, they prompt one to look for an equally general motive. Is it, for instance, the case that, when evidence about the remote past is too slender for an empirical reconstruction of earlier history, the human intellect—for want of anything better—falls back naturally on these *a priori* patterns of theory?”⁷ In other words, the cosmologists simply are uncertain about the origin of the cosmos.

Hannes Alfvén, the 1970 Nobel Prize winner in physics, has stated the case even more bluntly. Alfvén is an opponent of the “big bang” theory of cosmology. “Since the Big-Bang hypothesis is unacceptable, the question arises of what other hypothesis we should place in its stead. The answer is simple and straightforward: *none!* The Big-Bang conjecture is a myth, a wonderful myth maybe, which deserves a place of honor in the columbarium which already contains the Indian myth of a cyclic Universe, the Chinese cosmic egg, the Biblical myth of creation in six days, the Ptolemaic cosmological myth, and many others. It will always be admired for its beauty and it will always have a number of believers, just as the millennia-old myths. But nothing is gained if we try to place another myth in the place which the Big-Bang myth occupies now, not even if this new myth is adorned with still more beautiful mathematical formulas.”⁸

5. Stephen Toulmin and June Goodfield, *The Discovery of Time* (New York: Harper Torchbook, 1966), p. 255.

6. Cf. Swami Nikhilananda, “Hinduism and the Idea of Evolution,” in *A Book that Shook the World* (Pittsburgh: University of Pittsburgh Press, 1958), pp. 48-60. The book in question was Charles Darwin’s *Origin of Species* (1859).

7. Toulmin and Goodfield, *Discovery of Time*, p. 258.

8. Hannes Alfvén, “Cosmology: Myth or Science?” in Yourgrau and Breck (eds.), *Cosmology, History, and Theology*, pp. 12-13.

The best a scientist can do is to guess about the state of the universe a billion years ago, and "the chance that this guess is realistic is negligible. If he takes this guess as the starting point for a theory, this is unlikely to be a scientific theory but very likely will be a myth. . . . To try to write a grand cosmic drama leads necessarily to myth."⁹ If he is correct—and I think he is correct—then why should orthodox Christians try to rewrite the story of the six-day creation in order to make it seem a bit more respectable, slightly more in conformity to the latest secular version of the three archetypal cosmic myths concerning origins that happens to be popular at the time?

The *third*, and by far the most important reason why it is useless and counterproductive to modify the plain teaching of Genesis 1 concerning the sequence of creation, is that *the heart of modern science's opposition to this account is not the chronology as such*. The reason why modern science has adopted the ancient Greek accounts of cosmology—not the details, of course, but the basic outlines—is that modern scientists, like the ancient Greeks, are attempting to escape from the concept of God-ordained purpose. *What is most offensive to modern science is the idea of cosmological purpose prior to the evolutionary advent of man*. The heart of the Bible's account of the creation is God and His purposeful word, while the heart of modern evolution is the denial of purpose, whichever of the secular cosmologies a man decides to accept. Apparently this fact has not been understood by conservative Bible expositors who have chosen to rewrite Genesis 1. What we must bear in mind is that it was Darwin's insistence on the unplanned, purposeless nature of geological and biological change that won him instant success in the world of secular humanism. Darwin denied all the old arguments for divine purpose as a cause of the orderliness of nature. Natural order proves no such thing, he insisted; natural selection of randomly produced mutations, not supernatural design, accounts for nature's orderliness. Evolutionary scientists accepted Darwin's denial of cosmic purpose long before there was any idea that the universe might be ten billion years old. The heart of the Darwinian intellectual revolution was not evolution. The central factor was Darwin's hypothetical *explanation of undesigned order*. It was his denial of final purpose, of the universe's ends-orientation, of *teleology*.

9. *Ibid.*, p. 13.

Teleology

Teleology had served Christian apologists since the days of Thomas Aquinas (d. 1274) as a major pillar of the five supposedly irrefutable proofs of God. Teleological arguments assert that the order of the universe reflects the orderly God who created it. Not only does this order reflect God, as Paul had argued (Rom. 1:18-20), it supposedly also demonstrates logically that such a God must exist. The universe can only be explained in terms of supernatural design. William Paley, writing in the late eighteenth century and early nineteenth century, convinced the majority of his English and American audiences of the logic of the argument from design. (See Appendix A: "From Cosmic Purposelessness to Humanistic Sovereignty.")

"In the early years of the nineteenth century," writes Stow Persons, "orthodox Protestant Christian thinkers, both in England and in America, absorbed the Deist argument in its rationalistic aspects by harmonizing natural religion with revelation. The one was found to strengthen and confirm the other. . . . Out of this fusion of natural and revealed religion came one of the great arguments for the support of the orthodox faith. This was the doctrine of design. Just as Paley's famous watch bore its own testimony to the activity of the watch-maker, so the universe in all of its marvelous detail sang the praises of its Creator. In an age in which theories of natural law came to permeate social thought, and in which the achievements of applied science were already lending prestige to a rationalistic and materialistic view of things, the argument from design became one of the most useful and widely used defenses for Christianity. Natural religion must of course be supplemented by revealed religion, for each plumbed distinctly incommensurable dimensions. Nevertheless, natural law, as then conceived, was, like the revealed word of God, fixed, absolute, and immutable. The one was clearly apprehended by the intelligence, and the other by the study of Holy Writ."¹⁰ The concept of mechanistic, self-sufficient natural law had not been recognized as a threat to Christian orthodoxy—a denial of cosmic personalism. Nineteenth-century Christians did not recognize the danger of constructing a systematic theology which

10. Stow Persons, "Evolution and Theology in America," in Persons (ed.), *Evolutionary Thought in America* (New York: George Braziller, 1956), pp. 422-23. This was first published in 1950 by Yale University Press. It is a compilation of lectures delivered to the American Civilization Program at Princeton University in 1945.

rested simultaneously on a biblical pillar and a pillar of secular autonomy. The logic of design seemed so sure, so unanswerable. How else could men explain the extraordinary "fit" among all the parts of creation? Does not such an integrated, coherent environment demand men's faith in a cosmic Designer? And is not this Designer the God of the Bible? If the universe is designed, then it has a purpose assigned to it by God. Even the ungodly must acknowledge the logic from design, Christian defenders of the faith insisted. The logic seemed inescapable: order implies design; design implies a Designer; a Designer implies purpose. What could be more logical? Christian apologists gave little or no thought to the intellectual vulnerability of this two-pillar defense. What if the secular pillar collapsed?

Darwin destroyed the claim of teleologists that no other secular explanation can suffice to explain the orderliness of nature. Not all of his early followers fully understood this point. One who did was Karl Marx, who hailed Darwin's achievement: "Darwin's book is very important and serves me as a basis in natural science for the class struggle in history. . . . Despite all its deficiencies, not only is the death-blow dealt here for the first time to 'teleology' in the natural sciences but their rational meaning is empirically explained." Marx wrote these words in 1861, two years after the publication of Darwin's *Origin of Species*.¹¹ (Marx knew little about biology; he praised the crackpot racist Pierre Trémaux.¹²) Darwin's correspondence over the years reveals a few sentences in which some degree of unspecified and impersonal final causation might be admitted, but he never openly embraced a full-fledged teleology, nor is there any primary source evidence documenting his supposed death-bed conversion to Christianity.¹³ (These stories of death-bed conversions of famous skeptics have plagued both orthodox Christian historians and the outraged families of skeptics for well over a century. So common

11. Karl Marx to Friedrich Engels (Jan. 16, 1861), in *Marx-Engels Selected Correspondence*, edited by Dona Torr (New York: International Publishers, 1935), p. 125.

12. Nathaniel Weyl, *Karl Marx: Racist* (New Rochelle, New York: Arlington House, 1979), p. 72.

13. For an example of a repetition of the myth of Darwin's late conversion to Christianity, see Francis Nigel Lee, *The Central Significance of Culture* (Nutley, New Jersey: Presbyterian & Reformed Publishing Co., 1976), p. 44. Lee cites as his source a book by H. Enoch, *Evolution or Creation?* (London: Evangelical Press, 1968), pp. 166-67. Enoch, in turn, cites a 1916 article in the *Bombay Guardian* (March 25, 1916). In 1916, Darwin had been dead for 34 years.

were these unsubstantiated rumors of death-bed conversions in the late nineteenth century, that the atheistic National Secular Society in Britain felt compelled to publish extensive obituaries of its members in order to forestall these predictable rumors.¹⁴)

There is no question that Genesis 1:14-16 states clearly that the stars, sun, and moon have a specific purpose. They were created on the fourth day to replace the supernatural light that had governed night and day for the first three days. They were created to give light and to separate day from night, as well as to serve as means of identifying the seasons. It is this which is the heart of the conflict between secular science and biblical revelation. The Bible clearly states that the universe is theocentric, for God created it. This means, in turn, that the earth, as the home of man, the image of God, is the center of the universe, for it is the center of God's concern, the place where His Son was to live and die and rise again. This does not necessarily mean that the earth is the spatial center of the universe, if indeed it is possible to conceive of the spatial center of the universe. There are some indications that it is not mentally possible.¹⁵ It does mean that it is the center of God's interest and plan, and the fact that it was created prior to the heavenly bodies should be sufficient to prove the point. The heavenly orbs were designed by God to serve man and the other living creatures. This is the *purpose* of the heavenly bodies.

Modern secular science, from Darwin to the present, has as its operating presupposition this premise: all causation is autonomous in nature, and no causation is purposive—until the advent of man. The origin of order must be sought in purposeless randomness—the basis of unbreakable scientific law in the nineteenth century, and the

14. On late-nineteenth-century "death-bed conversions," see Susan Budd, "The Loss of Faith in England: Reasons for Unbelief among Members of the Secular Movement in England, 1850-1950," *Past and Present*, No. 36 (April, 1967), pp. 107, 116ff. Writes Budd: "It was so widely believed that an Atheist would not die without having repented, that less than thirty hours after [Charles] Bradlaugh's death his daughter began to receive inquiries asking if it were true that he had recanted" (p. 118). Bradlaugh was the founder of the National Secular Society. Rushdoony called attention to this phenomenon of rumors of death-bed conversions in the *Chalcedon Newsletter* 34 (June 17, 1968). He cites such stories regarding Horace Greeley, the newspaper publisher in America's Civil War period, Charles Darwin, and Martin Luther King, Jr., the American Negro leader of the 1950's and 1960's.

15. See Alexander Koyré, *From the Closed World to the Infinite Universe* (Baltimore, Maryland: Johns Hopkins University Press, [1957] 1976).

acknowledged sovereign in the twentieth — and not in God's purpose and design. To quote the Medawars' statement once again: "It is upon the notion of randomness that geneticists have based their case against a benevolent or malevolent deity and against there being any overall purpose or design in nature." The Medawars have spoken not simply for geneticists, but for the whole of modern science.

To overcome the logic of Paley, late-nineteenth-century scientists took the *first* crucial step: to ascribe the origin of perceived order to random change. *This hypothesis was the major intellectual revolution of the nineteenth century.* The importance of this scientific presupposition cannot be overestimated: it served to free secular science from critics, potential and actual, who might have succeeded in redirecting the work of scientists along biblical lines. But there was a more fundamental aspect of this affirmation of randomness: *to shove God out of the universe, once and for all.* Man wanted to escape the threat of control by a supernatural Creator. Once that step had been taken, scientists took a *second* step: to assert the sovereignty of man. Since there is no cosmic purpose in the universe, secularists concluded, man is left free to make his autonomous decisions in terms of his own autonomous plans. Man becomes the source of cosmic purpose. The purposeless forces of random evolutionary change have at long last produced a new, purposeful sovereign, *man*, and man now asserts his sovereignty over creation. He takes control, by means of science, of the formerly purposeless laws of evolutionary development. The universe needs a god, and man is that god.

The concept of an order which developed but which was not transcendentally designed appeared first in the social sciences, especially in the writings of the Scottish rationalists, most notably the two Adams, Ferguson and Smith. These two mid-eighteenth-century social theorists were attempting to explain the rationality of the market economy in terms of human actions that had never been intended to produce the market order. The market was explained as the product of human action, but not of human design. The evolutionary nature of this explanation should be clear: society is the product of spontaneous forces that are not controlled by any overall purpose of a personal authority. F. A. Hayek, the twentieth-century economist and social philosopher, has devoted the bulk of his later academic career to a comprehensive consideration of the implica-

tions of this explanation of social development.¹⁶ Social evolutionary theory preceded biological evolutionary theory. Darwin and Wallace invented the idea of evolution through natural selection after reading Thomas Malthus, the parson who pessimistically predicted that population growth would continually outrun man's ability to increase agricultural production.¹⁷ Even the concept of "the survival of the fittest" was coined originally by a social philosopher, Herbert Spencer, another defender of the unhampered free market.¹⁸

The question arose early in post-Darwinian science: Now that man has appeared, can the random processes of nature be left alone to work out their endless non-destiny? Or should man begin to redirect the forces of evolution? Darwin's cousin, Francis Galton, became the founder of eugenics, the idea of genetic planning.¹⁹ In the United States, an early founder of sociology, Lester F. Ward, concluded that the unhampered free market cannot be trusted to produce humane ends, any more than the unhampered forces of nature can be relied upon to promote the purposes of humanity. He began to publish his opinions in the early 1880's, and he was ignored; by the early 1900's, his ideas had overthrown the arguments of the Social Darwinists (primarily Herbert Spencer and William Graham Sumner).²⁰ The formerly autonomous and spontaneous forces of the market must now be redirected by social and

16. F. A. Hayek, "The Use of Knowledge in Society," *American Economic Review*, XXXV (Sept. 1945); reprinted in Hayek, *Individualism and Economic Order* (Chicago: University of Chicago Press, 1948), ch. 4.

17. Gertrude Himmelfarb, *Darwin and the Darwinian Revolution* (Gloucester, Mass.: Peter Smith [1959] 1967), p. 66; Loren Eiseley, *Darwin's Century* (Garden City, New York: Doubleday Anchor, [1958] 1961), pp. 181-82, 331-32. Cf. R. M. Young, "Malthus and the Evolutionists," *Past and Present*, No. 43 (1969), pp. 109-45.

18. Darwin attributed the phrase to Herbert Spencer in the 5th edition of *Origin of Species* (1868), chap. III (Modern Library edition: p. 52). It was the first time Darwin used the phrase. Spencer first used it in his 1852 essay, "A Theory of Population, deduced from the General Law of Fertility." Cf. J. D. Y. Peel, *Herbert Spencer: The Evolution of a Sociologist* (New York: Basic Books, 1971), pp. 137-38.

19. Galton's most influential book was *Hereditary Genius* (1869). Cf. D. W. Forrest, *Francis Galton: The Life and Work of a Victorian Genius* (New York: Taplinger, 1974). For a highly critical assessment of Galton and eugenics, see Allan Chase, *The Legacy of Malthus: The Social Costs of the New Scientific Racism* (New York: Knopf, 1977), pp. 100-4.

20. Lester Frank Ward, *Dynamic Sociology* (New York: D. Appleton, 1883), 2 vols. Reprinted by Johnson Reprints (1969) and Greenwood Books (1968). For a discussion of Ward's importance, see Richard Hofstadter, *Social Darwinism in American Thought* (New York: George Braziller, 1959), ch. 4. See below, pp. 297-317.

economic planners. Predictably, the biologists picked up the lead of the new social scientists; they also wanted to be sure that evolution would henceforth be purposeful.

Purpose

The importance of Genesis 1:14-16 for economic theory, as with all other theories about man and the universe, is the assertion of *design* and *purpose*. All of the creation has its purpose in terms of the plan of God. That plan sets man at the pinnacle of the cosmos. Thus, the order of the universe is not the product of an unexplainable cosmic explosion of an original matter-energy. Life is not the random product of random inanimate forces. The development of the market order also is not the product of purely and exclusively random human forces. *The universe is infused with purpose because of the cosmic personalism of the entire creation. Man's attempt to shove God out of the universe leads inevitably to the assertion of man's sovereignty over the processes of evolution.* Similarly, man's attempt to explain the orderliness of human institutional arrangements—the development of language, the development of the family, the development of the State (“social contract”), the development of orderly markets, etc.—also leads to the assertion that man, meaning an elite, must take control of the spontaneous forces of economic development. In both instances—human biological evolution and human social development—those humanists who have argued for the continuing viability of random, unplanned, undirected, and undesigned processes have encountered increasingly successful academic opposition from the more consistent humanists. Ethically rebellious men refuse to live under the dominion of randomness. Yet they also refuse to live with the idea of a sovereign personal God. Therefore, they have adopted the only intellectual alternative: *dominion by elite planners*. We have seen that men who are determined (meaning self-willed) to escape the dominion of both a caring but sovereign personal God and an uncaring but hypothetically sovereign impersonal random process have chosen to accept the slavery of elitist planning, at least in theory. In practice, they generally try to thwart the plans of the planners in cases where those plans are inconvenient to them.

Purpose is inescapably linked to *personal sovereignty*. Men of the second half of the nineteenth century who prided themselves in their defense of autonomous natural science's autonomous natural universe were attempting to banish God's sovereignty by banishing

the concept of *transcendent* cosmic purpose. The result was the creation of an intellectual monstrosity which almost no one has been willing to accept. Men usually desire purpose, which means that they desire a purposeful, personal sovereign. A new sovereign was brought forth: planning mankind, which has meant, in the twentieth century, a planning elite. Humanism has created a philosophy of sovereign purpose, and it has thereby helped to bring us the necessary concomitant of such a philosophy: the bureaucratic cage.

A few traditional humanists, whose intellectual roots are still in the nineteenth century, have attempted to revive the fading faith in the acceptability and even beneficial nature of decentralized purposefulness. They have continued to quote favorably Adam Ferguson's eighteenth-century observation that human institutions are the product of human action—decentralized, individualistic planning—but not of human design. The economic theories of virtually all defenders of free market economics, but especially the theoretical framework of the so-called Austrian School—Ludwig von Mises, F. A. Hayek, Israel Kirzner, Murray Rothbard—have been constructed in terms of this eighteenth-century cosmology. Despite the cogent economic arguments of these men, the modern world has systematically refused to take these arguments seriously. Men want to believe in a concept of immanent cosmic purpose, and this means a concept of a coherent, competent, order-producing planner. Men refuse to believe that successful social and economic coordination which is beneficial for all or most of the members of society can be the product of uncoordinated human actions that are somehow coordinated through a system of private property and freely fluctuating prices. They cling religiously to the concept of personal design. *Most men want to live in a universe with meaning and purpose, but this requires the concept of predestination.* As Rushdoony writes: "The only alternative to the doctrine of predestination is the assertion of the reign of total chance, of meaningless and brute factuality. The real issue is what kind of predestination we shall have, predestination by God or predestination by man?"²¹ In other words, it is never a question of predestination or no predestination. It is always a question of *whose* predestination.

Modern men have rejected the concept of predestination by God. They have been forced to locate some other predestinator: random

21. R. J. Rushdoony, *The Biblical Philosophy of History* (Phillipsburg, New Jersey: Presbyterian and Reformed, [1969] 1979), p. 6.

evolutionary development, market forces, environmental determinism, the forces of production, the cunning of history, sexual sublimation, the will to power, hidden conspiracies, or the central planning agency. In all cases the predestinating power is part of the creation. Men become subservient to some aspect of the creation. Human responsibility is therefore not the opposite of predestination, but rather the obverse of it. Again, the real question is the source of the predestination. To whom will man become responsible?

The doctrine of biblical responsibility is very important to biblical economics. Paul's injunction to "work out your own salvation [salvation which is yours] with fear and trembling" (Phil. 2:12b) is crucially important. It points to the locus of responsibility in the individual. The biblical methodology is *methodological covenantalism*, not methodological holism or methodological individualism. All social, political, and economic analyses must begin with the assumption that the basis of order in society is a personal relationship between God and individual men, and between God and responsible collective groups. *Cosmic personalism is the basis of social order*—the observed regularities in the affairs of men.²² These regularities are not exclusively the product of acting men, nor are they exclusively the product of collective action. They are in no way the product of purely random forces or purely deterministic impersonal forces (holism). But there is no question that *individual responses to God's commands* are central to the understanding of the various covenants of God, including the dominion covenant. So the individualistic approach of the classical economists and the neo-classical economists (pre-Keynesian) is not without merit. But classical economics could not survive the onslaught of Darwinism. Rushdoony's analysis is correct: "Classical liberalism is based on this Enlightenment faith, as is modern libertarianism and conservatism. Nature has, inherent within itself, its own processes and laws which govern reality. Hence, man's attitude is one of *laissez-faire*; there must be no interference with nature's laws and controls. Planning was thus transferred from God to nature. Darwinism destroyed this faith in nature. The process of nature was now portrayed, not as a perfect working of law, but as a blind, unconscious energy working profligately to express itself. In the struggle for survival, the fittest survive by virtue of their own adaptations, not because of natural

22. R. J. Rushdoony, *The Foundations of Social Order: Studies in the Creeds and Councils of the Early Church* (Fairfax, Virginia: Thoburn Press, [1968] 1978).

law. Nature produces many 'mistakes' which fail to survive and become extinct species and fossils. The destiny of the universe is extinction as its energy runs down. All of this served to shatter the older faith in nature. Nature as an agency of predestination was gone. It became increasingly evident to naturalistic thinkers that man must control his own evolution and also control the evolution of plant and animal life. Moreover, man must create and control his own social order, so that total statism, total socialism, is 'scientific socialism,' that is, socialism which recognizes that man cannot exist without predestination and therefore provides for the control of process, for total planning and predestination, by the elite men."²³ The modern heirs of classical liberalism, being Darwinians, have been unable to counter successfully this drift into total planning, despite their cogent arguments in favor of individual responsibility and the free market as an agency of coordination. *Men want cosmic personalism*, and if the God of the Bible is excluded, by definition, by modern humanism, then the god of the planning State will have to suffice. The god of the market is too impersonal, too devoid of cosmic purpose, too theoretical, and unable to guarantee its man-benefiting sovereign power, to impress most Darwinian and post-Darwinian seekers after coherence.

Providence and Government

Biblical economics acknowledges the existence of coordinating institutions in human society other than the civil government. The family, the church, the voluntary association, the profit-seeking business, and other local, decentralized structures all provide social order. Government is not simply civil government. *Self-government* is far more crucial than civil government. Within society, the institution of the free market—private property rights, legitimate profits and losses, open entry to the market, and freely fluctuating prices—can provide a remarkable system of social cooperation. The impressive defense of the market as an agency of coordination of individual plans—notably, the defense produced by the "Austrian School" of economists—has to be accepted. But the process is not autonomous. There are constants that the consistent Darwinian cannot admit, such as the constancy of human nature, the constancy of biblical law, and the constancy of God's personal judgment. The intellectual defense of the market must be made in terms of the laws of cause and

23. R. J. Rushdoony, *Biblical Philosophy of History*, p. 7.

effect. Cause-and-effect relationships are the product of God's *providence*—His sustaining hand, in direct government, planning the secondary causes of men's actions, and judging men according to His law. The free market must not be defended by means of Darwinian logic. This intellectual defense has proven ineffectual in thwarting the far more consistent arguments of those Darwinians who assert the necessity of gaining direct control, through centralized planning, of a supposedly random, meaningless, purposeless, directionless, and above all, *mindless*, process of natural selection—a process which in no way guarantees the survival of humanity, let alone its prosperity. Such a random process of development cannot guarantee humanism's goal: man's place in the universe as the source of cosmic personalism. The proper way to defend the validity of market processes is therefore not by means of the assertion of the sovereign autonomy of market forces, but by means of the opposite assertion: the non-autonomy of market processes, under God. Market processes require an ethical defense, not simply a pragmatic defense based on economic efficiency or the absolute sovereignty of individual men over their voluntary exchanges.²⁴

Conclusion

The triumph of Darwinism cannot be understood without an awareness of the fundamental premise of Darwin: the absence of any cosmic purpose in the universe *prior to the evolution of man*. Darwinian evolution is the religion of modern humanism: the denial of cosmic purpose apart from mankind. The Darwinist maintains that all historical events apart from man and man's influence must be understood as products of impersonal forces: a combination of random chance and unbreakable natural law. There can be no future-orientation in the development of the universe. Thus, Darwinism is at war with Christianity, for the Bible teaches that God is sovereign, that the universe was created by God, that its meaning and purpose are understood only in relation to God's decree, and that man is God's delegated covenantal agent on earth.

This is the second point of the covenant, the doctrine of *hierarchy*. Man serves God, and the universe serves God through serving man. The cause-and-effect relationships in the original creation were future-oriented, earth-oriented, and man-oriented. God created the stars, sun, and moon for man. The earth is older than the heavens. This is what the Bible teaches, and is an offense against anti-biblical religion.

24. See Appendix B, "The Evolutionists' Defense of the Market."

THE DOMINION COVENANT

And God said, Let us make man in our image, after our likeness: and let them have dominion over the fish of the sea, and over the fowl of the air, and over the cattle, and over all the earth, and over every creeping thing that creepeth upon the earth. So God created man in his own image, in the image of God created he him; male and female created he them. And God blessed them, and God said unto them, Be fruitful, and multiply, and replenish the earth, and subdue it: and have dominion over the fish of the sea, and over the fowl of the air, and over every living thing that moveth upon the earth (Gen. 1:26-28).

The first chapter of Genesis proclaims the absolute sovereignty of God the Creator. As the Creator, God must be honored by all the creation, for He is Lord over all (Isa. 45:23; Phil. 2:10). For man to honor God, he must have respect for God's law-order. Man was created specifically as God's representative on earth. Man is made in God's image. He is under God in the same way that a military man is under his commanding officer. He is to abide by his Commander's instructions, and he is to "do it by the book," which in this case is the law-order revealed to man verbally and through the creation ordinances.

Man cannot be properly understood apart from the two facts revealed by Gen. 1:26. *First*, man is made in God's image. He is therefore the capstone of all creation. Though for the present, he is made "a little lower than the angels" (Ps. 8:5) in terms of knowledge and power, man will ultimately judge the angels (I Cor. 6:3). The lawfulness of capital punishment (execution) is based on the fact that a murderer has struck out against this image of God (Gen. 9:6).¹

1. A discussion of capital punishment is found in Gary North, *The Sinai Strategy: Economics and the Ten Commandments* (Tyler, Texas: Institute for Christian Economics, 1986), ch. 6.

Second, man is to have dominion over all the creation. Presumably, it is the fact of man as God's image-bearer which gives man this right and responsibility of dominion. The two statements are placed together in Genesis 1:26. *It is man's position as God's image-bearer which is fundamental*, not the fact of his lawful dominion over nature.² It is improper to elevate "man, the supervisor over nature" above "man, the image-bearer of God." This is the enormous heresy of numerous humanistic thinkers, including traditional magicians, Enlightenment philosophers, post-Darwinian scientists and social planners, and Marxists. *It is only because man is under God, as God's image-bearer, that he possesses limited sovereignty over nature.* On the other hand, it is also illegitimate to ignore or deny the covenant of dominion when one accepts the principle of man, the image-bearer. God has specified that the purpose of man is to honor God by exercising dominion, as His image-bearer, over the creation. At least one small American Presbyterian denomination has explicitly denied the post-Fall legitimacy of the covenant of dominion (also referred to as the cultural mandate), thereby ignoring the explicit reconfirmation of this covenant by God with Noah (Gen. 9:1-2).³ Prior to 1980, virtually all twentieth-century fundamentalism and pietism by implication and practice denied the existence of such a covenant. The idea that men are responsible, as faithful servants of God, to bring the whole world under the rule of God's law, is repulsive to the vast majority of professing Christians. Rushdoony has accurately identified two philosophical justifications for this retreat from responsibility: *manicheanism* and *neoplatonism*. Manicheanism is the idea that the creation is somehow innately sinful, and that the attributes of the flesh, especially power, are evil.⁴ Neoplatonism holds that "matter" is somehow inferior to "spirit," and thus unimportant.⁵

The Inescapable Covenant

We should understand that this covenant is not simply ethical

2. Francis Nigel Lee, *The Origin and Destiny of Man* (Nutley, New Jersey: Presbyterian & Reformed, 1974), p. 41.

3. I refer to the Bible Presbyterian Church. Cf. R. J. Rushdoony, *Institutes of Biblical Law* (Nutley, New Jersey: Craig Press, 1973), pp. 723-24.

4. Rushdoony, *Politics of Guilt and Pity* (Fairfax, Virginia: Thoburn Press, [1970] 1978), p. 175. Cf. Rushdoony, *Thy Kingdom Come: Studies in Daniel and Revelation* (Fairfax, Virginia: Thoburn Press, [1968] 1978), pp. 134, 250.

5. Rushdoony, *The Flight from Humanity: A Study of the Effect of Neoplatonism on Christianity* (Fairfax, Virginia: Thoburn Press, [1973] 1978).

in its form. The command to exercise dominion is not simply a "take it or leave it" variety of command. The covenant is announced to man in the 28th verse, but in verse 26, God's own self-counsel establishes dominion as the very function of human nature. Man *must* exercise dominion. It is part of his nature to do so. The suppression of this aspect of human personality is part of an overall attempt to suppress the image of God. It is an act of ethical rebellion, but ultimately suicide is the only means of escape from this covenant. Man must exercise dominion as he goes about his daily tasks. Even the hermit, who is not part of the economy's division of labor—the ultimate means of dominion used by man—must plant, or hunt, or search for berries. He displaces other life. The animals fear him and give him deference, a feature of life which was part of God's reaffirmation of the covenant of dominion with Noah (Gen. 9:2). For man to live is to exercise dominion. Only in hell, or afterward, in the lake of fire, can man at last escape the responsibilities of the covenant of dominion; he can never escape their consequences.

Sin, however, is not limited to the attempted rejections of the covenant of dominion. It is also very much in evidence in the attempts of self-proclaimed autonomous men to exercise humanistic dominion apart from God or God's law-order. As Rushdoony has commented: "As a result of the fall, however, man's urge to dominion is now a perverted one, no longer an exercise of power under God and to His glory, but a desire to be God. This was precisely the temptation of Satan, that every man should be his own god, deciding for himself what constitutes right and wrong (Gen. 3:5). The ultimacy of man in both law and power was asserted."⁶ The twentieth century has been the most thoroughly secularized and humanistic one in the history of the post-Roman Empire West. It has also been the century of totalitarian tyranny and total warfare, where over 100 million people had perished violently by 1970.⁷

6. Rushdoony, *Institutes of Biblical Law*, p. 448.

7. Gil Elliot, *Twentieth Century Book of the Dead* (New York: Charles Scribner's Sons, 1972), p. 1. Elliot's figures vastly underestimate the murders by Communist China, 1948-70: two million as opposed to as many as 60 million. Also, he does not count abortions, which by the late 1970's were running in the 35 to 55 million range, per year, world-wide. As Elliot says, "To set such a figure [100 million man-made deaths] against a scale of violence in previous times involves the difficulties of comparing like periods and of allowing for population increase. However, every attempt to do so shows the twentieth century to be incomparably the more violent period" (p. 1).

Fundamentalists in the twentieth century have repeatedly accused dominion-oriented Christians of being in the same camp as the theological and political liberals. The so-called Social Gospel movement, which arose in the late nineteenth century, was strongly in favor of social action, economic redistribution, and the elevation of the powers of the civil government, especially the national government. Social action, meaning political action, was subsequently equated by fundamentalists with the Social Gospel movement. Historically, the argument is inaccurate; if anything, the liberal theologians of, say, 1870-1970, were *imitating* an older tradition of theological orthodoxy, especially the tradition of early New England Puritanism and early nineteenth-century Presbyterianism, both northern and southern.⁸ The Social Gospel was a secularized reconstruction of the optimistic, activist, decentralist, conservative Protestant tradition in the United States. The defenders of the Social Gospel, in effect if not in theory, removed the sovereignty of God and the validity of God's revealed law-order, and then substituted a new god, the State, with its relativistic law-order.

The twentieth century has witnessed the steady erosion of confidence among both fundamentalists and liberal theologians. The First World War created a major transformation in liberal theology. The optimism began to go out of the movement.⁹ It revived again during the Second World War, flickered on through the brief tenure of President John F. Kennedy, and then steadily died out during the late 1960's and early 1970's. A growing number of liberal theologians now share with Protestant fundamentalists a pessimism concerning

8. On the optimism of pre-Civil War Southern Presbyterians, see Jack P. Maddex, "From Theocracy to Spirituality: The Southern Presbyterian Reversal on Church and State," *Journal of Presbyterian History*, LIV (1976), pp. 438-57. See also James B. Jordan, "A Survey of Southern Presbyterian Millennial Views Before 1930," *Journal of Christian Reconstruction*, III (Winter, 1976-77), pp. 106-21. In the North, the faculty of Princeton Theological Seminary, the most influential of the orthodox Presbyterian seminaries, was noted for its postmillennial optimism: Archibald Alexander, A. A. Hodge, Charles Hodge, and Benjamin B. Warfield.

9. A classic statement of the pessimism of the theological liberals is Walter Marshall Horton, *Realistic Theology* (New York: Harper & Bros., 1934). An extract of this book appears in William R. Hutchison (ed.), *American Protestant Thought: The Liberal Era* (New York: Harper Torchbook, 1968), pp. 190-96. Reinhold Niebuhr is the archetype of the shift from optimism to pessimism, and he is the focus of the book by Donald Meyer, *The Protestant Search for Political Realism, 1919-1941* (Westport, Connecticut: Greenwood, [1960] 1973). See also Robert T. Handy, "American Religious Depression, 1925-1935," *Church History*, XXIX (1960), pp. 3-16.

the possibility of successful efforts to reconstruct society in terms of Christian presuppositions. Most notably, it has been the liberal churchmen of the Iron Curtain nations who have capitulated to the forces of tyranny, compromising continually with the powers that be. The face of tyranny has paralyzed the liberals more than the conservatives in these churches. Rushdoony is correct when he states that "Liberals, neo-orthodox, existentialists and others have renounced the idea of power as an illusion or a temptation, and the possession of power as an evil. The result has been to accentuate the drift to totalitarian power."¹⁰

Power renounced is not power diminished; it is merely power transferred. What is needed is a reassertion of the total sovereignty of God. Then, as a direct consequence, power must be redistributed widely, away from central governments and into the hands of local political bodies, local churches, local voluntary institutions of all kinds. The Bible affirms the legitimacy of power. It places all power in the hands of Jesus Christ (Matt. 28:18). Then it directs Christians to go forth, preaching the gospel and discipling nations, teaching them to observe "all things whatsoever" Christ has commanded (Matt. 28:20). "All things," as Greg Bahnsen's study, *Theonomy in Christian Ethics*, demonstrates so forcefully, includes the whole of biblical law.¹¹ What we call the Great Commission of Christ to His church (Matt. 28:18-20) is in fact another reaffirmation of the covenant of dominion, taking into account the progress of redemptive history.

Subduing the Earth

Christianity is a religion of self-conscious *activity*. This is true because it is a religion demanding *ethical passivity*. With respect to God, the source of all ethical standards, man is to be wholly passive. It was the sin of Adam and Eve that they attempted to become ethically determinative. They sought a zone of pure autonomy, where they might test the word of God. They accepted the devil's idea that they might not surely die on the day they ate of the forbidden fruit. They had been assigned a passive role in relation to God; they were to think His thoughts after Him, in a creaturely fashion. Then they were to extend God's authority over all the earth. *Passivity*

10. Rushdoony, *Institutes of Biblical Law*, p. 448.

11. Greg L. Bahnsen, *Theonomy in Christian Ethics* (2nd ed.; Phillipsburg, New Jersey: Craig Press, 1984), p. 448.

before God was to lead directly to *active dominion*. They were assigned the task of subduing the earth.

God assigned a task to the first humans. They were to subdue the earth, an indication that the natural world, while unquestionably good in itself (Gen. 1:10, 12, 18, 21, 25), is incomplete. It requires active administration. The natural world, even before the curse of the ground (Gen. 3:17-19), was not to be considered normative. It is God's law which is normative, and man, as the image-bearer of God, is to exercise dominion in terms of God's law.

This is not to say that there is no such thing as natural law. There is a fundamental *orderliness* to the processes of creation. The sun, moon, and stars possess a regularity which serves the purposes of man and, in a subordinate fashion, the living creatures of the earth (Gen. 1:14-18). The animals reproduce according to the laws imposed by God (Gen. 1:21, 24-25). *Natural law can never mean autonomous law*. It can never mean law which is a product of an autonomously existing natural order (or disorder). All "laws of nature" (regularities) are inescapably personalistic. This is simply one application of the doctrine of cosmic personalism. Adam was to honor the created laws of God that governed the natural realm. He was also to respect the laws revealed directly to him by God, or perceived by Adam because of his position as God's image-bearer. The point is this: *his knowledge of law was his tool of dominion*. As a creature, he was under law, but as God's image-bearer, he was able to use his knowledge of law to become *subordinately active* under God and subdue the earth.

There is no question that rebellious man, who has asserted his independence from God as a self-proclaimed active and autonomous agent, has frequently become a destroyer. Nature has suffered at his hands. Unrestrained by biblical law or a sense of responsibility, rebellious men have subdued the earth for their own glory and profit, and the result has been the disruption of the earth. We are told, for example, that the reason why the Israelites had to be carried off into captivity for 70 years was that they had refused to honor the law of God by giving the land its sabbath rest every seventh year. In their absence for seven decades, the land would have its lawful rest (II Chr. 36:21; Jer. 50:34). This rest allowed the land's natural restorative processes to replenish its fertility. Nevertheless, the land was not to be wholly free from man's dominion. The leaders and mighty men of valor, the craftsmen and smiths—in short, those

worth carrying off—were forced out of the land. “None remained,” the Bible says, “save the poorest sort of the people of the land” (II Ki. 24:14b). Those who could barely exercise dominion stayed; the land was not deserted entirely. Only in the rare case of the total and irreversible judgment of God against a city was the land to be left to the rule of nature (Jer. 50:39). This was understood as the ultimate social curse.

Yet there is another possibility for rebellious man: an attempted retreat from the responsibilities of ecological dominion. The idea of ecological romantics, Eastern mystics, and numerous primitive cultures is that man must live “in harmony with nature.” Man must conform himself to the laws of nature. Of course, it is difficult to determine which laws apply in specific instances, but the idea of the overall sovereignty or normativity of the natural order is paramount in these cosmological systems. Man is nothing more than one small part of an autonomous natural process, but a force for evil when he allows his powers to take control of nature. Rather than seeing man as the agent of dominion over nature, these systems place man under the dominion of nature. Rebellious man, in short, *actively defied God* by abandoning his responsibilities under the covenant of dominion, and in doing so, he eventually becomes essentially *passive before nature* or *passive before the State*.

The Christian acknowledges that man has become a rebellious destroyer. We know that the whole creation groans to be delivered from “the bondage of corruption” (Rom. 8:21). The earth is under a curse because of man. But Christians are “saved by hope” (Rom. 8:24), a hope in God’s redemption, not in hope of some hypothetical return to a natural paradise. Man is indeed a destroyer, an ethical rebel who seeks release from the comprehensive requirements of God’s law-order. Nevertheless, “man, the destroyer” is not the result of “man, the controller”: He is the product of “man, the ethical rebel.” It is not man’s dominion over the earth that is illegitimate, but rather man’s attempt to dominate the earth apart from God’s control over man. The only foundation of man’s right to dominion is his conformity to the requirements of God. Captains who rebel against generals can expect their corporals to be insubordinate. Our polluted regions of the earth are rebelling against man’s rebellious, lawless rulership, not against rulership as such.

In a widely quoted and reprinted essay, “The Historical Roots of Our Ecological Crises” (1967), medieval historian Lynn White, Jr.,

argued that it was the Christian concept of man's dominion over nature which brought the pollution crisis to the West. A similar argument was offered by historian Arnold Toynbee in 1973. White's remarkable familiarity with the history of medieval technology in the West restrains him to the extent that he has to admit that certain key advances in technology were due primarily to differing environmental and geographical circumstances. But his underlying view was the heart of the essay's popularity with the ecological romantics of the 1960's and 1970's: "By destroying pagan animism, Christianity made it possible to exploit nature in a mood of indifference to the feelings of natural objects."¹² (The fact that paganism, even in its radically animistic forms, can result in societies that pollute the earth, is not mentioned by White.) His conclusion: "Hence we shall continue to have a worsening ecologic crisis until we reject the Christian axiom that nature has no reason for existence save to serve man."¹³ (The Christian axiom is rather that all creation is to serve God, the Creator.) Yet he admits that it was primarily in the mid-nineteenth century that the fusion of science (theory) and technology (practice) finally created the industrial society which is now ruthlessly polluting and destroying nature. In short, it can be dated from the period in which Darwinian speculation, radical atheism, and unbounded confidence in the autonomous forces of secular progress came into ascendancy in Western Europe and, a generation later, in the United States.

A fine, but neglected, answer to White and Toynbee appeared in the conservative journal, *National Review*, in late 1974. The author, R. V. Young, Jr., dissects the arguments of the two critics, showing how it was not Christianity but the materialists who were the designers and engineers of the modern industrial system. His conclusion is significant. "In every instance the pattern is the same: secularization leads to the apotheosis of material 'progress,' and old traditions of piety and reverence—the sense of man's limitations and obligations—crumble. In Christianity, as in most religions of the world, pride—the attempt to transcend the conditions of mortal life and become as a god—is the fundamental sin, and the corresponding virtue is humility. What is usually called the 'environmental' or

12. Lynn T. White, Jr., "The Historical Roots of Our Ecological Crisis," *Science* (10 March 1967); reprinted in Garrett de Bell (ed.), *The Environmental Handbook* (New York: Ballentine, 1970), p. 21.

13. *Ibid.*, p. 25.

'ecologic' crisis is really only one aspect of the pervasive moral and cultural crisis of our time, and the cause of this crisis is pride. For too long we have believed that no bounds need be placed on human ambition and desire, but now it has been discovered that even scientific technology, the instrument of modern man's intended self-deification, must bow to the finitude of reality."¹⁴ In short, it is the arrogance of autonomous man, who has inherited the products of a Christian vision of dominion through adherence to law, but who no longer acknowledges the sovereignty of the God who establishes the law-order which transfers power to man, that has created the pollution crisis. It was not the fault of Christianity, which always regarded the earth as capital wealth entrusted to man as something to be treated with deference. Man is a steward in the Christian view, not an owner of the earth (Ps. 24:1). The secularists denied God and transferred God's sovereignty to man. "Man, the steward" became "man, the autonomous owner," and modern ecological devastation began in earnest.

Man is to subdue the earth, not destroy it. Man is to replenish it, care for it, use it to God's glory. This permits him to benefit from the fruits of the land, for he is made in God's image. When man tries to appropriate the fruits of the earth apart from the restraining law of God, then he can expect results that are costly to him. Ours is a universe of law, and the moral law of God is more fundamental than the natural regularities of the created realm. Moral law is primary, and God has built into His world a kind of "negative feedback." When men consistently and systematically violate the moral law of God in a certain area of life, external events—seemingly unrelated to the moral realm—begin to place restraints on the rebels. The best example in Scripture is the tree of the knowledge of good and evil. Men rebelled against God through their father, Adam (Rom. 5). Adam ate of the tree. The whole creation was cursed as a result. God's word predicted the penalty of death, but Satan implied that God's word could not be trusted. How could any "neutral" scientist have predicted any cause-and-effect relationship between the eating of a particular fruit and the cursing of the universe? But that supernaturally controlled cause-and-effect relationship was there. Ours is a universe of cosmic personalism. God respects His word more than

14. R. V. Young, Jr., "Christianity and Ecology," *National Review* (Dec. 20, 1974), p. 1479.

He respects the external regularities of the creation (II Pet. 3:4-7). Because of this, man's fundamental tool of dominion is the moral law of God. Secondly, natural law—nature's external regularities—can be discovered by man, and serves as a tool of dominion—a dominion assignment which is subordinate to the moral law. Without the tool of God's moral law, which restrains man (for he is a creature under law), his power-granting knowledge of natural law makes him a destroyer. He is granted his knowledge of the external world because he is made in the image of God, and because he is under the terms of God's dominion covenant. He is to use his knowledge of nature's external regularities to subdue the earth, not to destroy it. Without the restraining effects of moral law, man becomes suicidal. "All they that hate me love death" (Pr. 8:36b). The earth and its man-serving resources are ravaged by self-proclaimed autonomous man. The intellectual inheritance of the *idea of progress* and *natural law as a tool of dominion*—both of which are explicitly and uniquely biblical ideas—becomes a loaded gun, or something worse, in the hands of rebellious man.

Conclusion

God made man in terms of a covenant, the dominion covenant. The third point of the biblical covenant is *ethics*: obedience to God as the means of man's dominion over the earth. Ethics and dominion are inescapably related in the biblical covenant structure.

Because man rebelled against God, his dominion assignment has become more twisted. Man apart from God is a rebel, a murderer, a destroyer. Only God's grace can begin to restore mankind to obedience to God. God's grace is therefore the basis of mankind's dominion and power.¹⁵

Mankind cannot escape the dominion covenant. He can pervert it, fight it, and publicly abandon it, but he cannot escape it. Man is defined in terms of it in history. Only in hell and the lake of fire does man's ability to fulfill it disappear—a sense of eternal loss for covenant-breakers. People are either under God ethically, or else under the creation, Satan, other men, or the supposedly impersonal forces of nature. Those who are passive toward God can exercise long-term dominion over nature. Those who are active rebels against God become the slaves of nature. But there is no escape from the terms of the dominion covenant.

15. Gary North, *Dominion and Common Grace: The Biblical Basis of Progress* (Tyler, Texas: Institute for Christian Economics, 1987).

ECONOMIC VALUE: OBJECTIVE AND SUBJECTIVE

*And God saw everything that he had made, and behold, it was very good.
And the evening and the morning were the sixth day (Gen. 1:31).*

The first chapter of Genesis repeats this phrase, “and God saw that it was good,” five times (vv. 10, 12, 18, 21, 25), in addition to the final summation in verse 31. God’s creative acts were evaluated by God and found to be good. They reflected His own goodness and the absolute correspondence between His plan, His standards of judgment, His fiat word, and the results of His word, the creation. The creation was good precisely because it was solely the product of God’s sovereign word. God therefore imputed positive value to His creation, for He created it perfect. It was completely in conformity to His decree. The doctrine of *imputation* lies at the heart of the doctrine of *creation*. The creation was good because God created it good and because God said it was good. It was good *objectively* because of its inherent conformity to God’s decree. It was good *subjectively* because God announced its perfection, indicating its conformity to His standards. The Creator is also the Imputer. God’s original subjective — meaning *personal*, not relative — standards served as the sole standard of the creation itself; once created, the creation then was evaluated in terms of the original standards, and God the infallible, subjective evaluator announced that in no way did the creation deviate from His standards.

Prior to his ethical rebellion, man was consistently able to think God’s thoughts after Him in a creaturely, human fashion. Man had language from the beginning; he had the power to relate mental constructs to the external realm of creation. He was assigned the task of naming (classifying) the animals (Gen. 2:19) and dressing the garden (Gen. 2:15), indicating his ability to fulfill God’s requirement that he establish dominion over the creation. In both tasks, human

judgment was crucial, and this judgment was to be in conformity to the standards set forth by God, both verbally (Luke 4:4) and indirectly through the creation itself (Rom. 1:19). In short, man had the power of evaluating or imputing value to aspects of the creation because he had been created in the image of God. He had the power to impute value *accurately* because he was not yet in rebellion against the standards of God. He was assigned the task of exercising dominion over the earth according to God's command and in terms of God's law. This meant that man must use judgment in designing plans of action. He must act purposefully in terms of God's standards.

The problem of value is central to the science of economics. Is value determined objectively or subjectively? Is the value of some scarce economic resource inherent in that resource, or is it derived from the evaluations of acting men? In short, is value *intrinsic* or *imputed*? This debate has raged within the economics profession for several centuries.

The Great Debate

It is generally regarded as the essence of the "marginalist" intellectual revolution of the early 1870's that value is to be understood as strictly subjectively determined. Acting men impute value to scarce economic resources which have no inherent or intrinsic value. All value is subjective; no value is objective, meaning intrinsic. Prof. F. A. Hayek has argued that "it is probably no exaggeration to say that every important advance in economic theory during the last hundred years was a further step in the consistent application of subjectivism."¹

Classical economics, which we generally date from the publication of Adam Smith's *Wealth of Nations* in 1776 to the work of John Stuart Mill, just prior to simultaneous and independent discoveries of "marginalism" by Jevons (England), Menger (Austria), and Walras (Switzerland) in the early 1870's, held to several competing explanations concerning the source of all value. Smith held both the labor theory of value and a cost-of-production theory of price. He also believed that supply and demand determine prices, and that the "natural price" of any scarce resource is based on the labor it takes to make it, or the cost of all resource inputs. The competition of supply

1. F. A. Hayek, *The Counter-Revolution of Science: Studies on the Abuse of Reason* (New York: Free Press of Glencoe, [1952] 1955), p. 31. Reprinted by Liberty Press, 1979.

and demand will produce a price which fluctuates around the "natural price." The fact that the labor theory of value and the cost-of-production theory of price are incompatible is explained in most of the standard histories of economic thought. Gide and Rist put it bluntly: "They remain juxtaposed in the *Wealth of Nations* because he never made up his mind which to adopt. As a result his work is full of contradictions which it would be futile to try to reconcile."² How supply and demand are related either to the labor theory or cost-of-production theory was also impossible to demonstrate. Almost a century later, Karl Marx and John Stuart Mill brought the classical period to a close; neither of them was able to reconcile the formation of prices on a market with the labor theory of value or a cost-of-production theory.³

The heart of the debate over intrinsic (fixed) value can be seen in the problem that bothered all of the classical economists, the so-called *diamond-water paradox*. Why is it that something so essential to life, water, is so cheap, while diamonds, things merely ornamental, are so very expensive? If intrinsic value has any meaning, shouldn't water be more valuable than diamonds? Furthermore, why do the prices of diamonds change? And how do diamonds conform to the labor theory of value? If human effort is the source of all value, why is it that a diamond which is discovered accidentally is so valuable? Smith, in his lectures of 1762-63, noted the problem and answered by means of the logic of supply and demand: "It is only an account of the plenty of water that it is so cheap as to be got for the lifting; and on account of the scarcity of diamonds (for their real use seems not yet to be discovered) that they are so dear."⁴ Smith did not include these lines in the *Wealth of Nations*; he turned to other explanations of price which were to mislead economists for a century.

The marginalists, or subjectivists, had an answer to the age-old

2. Charles Gide and Charles Rist, *A History of Economic Doctrines* (Boston: D. C. Heath & Co. 1948), p. 95.

3. For the classic critique of Marx's economics, see Eugen von Böhm-Bawerk, "The Unresolved Contradiction in the Marxian Economic System" (1896), in *The Shorter Classics of Böhm-Bawerk* (South Holland, Illinois: Libertarian Press, 1962). This is a modern version of the book, *Karl Marx and the Close of His System*. See also my section on Marx's economics: *Marx's Religion of Revolution: The Doctrine of Creative Destruction* (Nutley, New Jersey: Craig Press, 1968), ch. 5.

4. Cited by H. M. Robertson and W. L. Taylor, "Adam Smith's Approach to the Theory of Value," *Economic Journal*, LXVII (1957); reprinted in Joseph J. Spengler and William R. Allen (eds.), *Essays in Economic Thought* (Chicago: Rand McNally, 1960), p. 292.

problem. The question is not the total utility of "water in general" versus "diamonds in general." The question is rather what a given quantity of water will exchange for on the open market versus one diamond. What we find is this: men do not trade indeterminate aggregates. They trade with discrete units or quantities. If a particular quantity of water is interchangeable with an equal quantity of water anywhere else in an economy, and the same is true of diamonds, then the "last drop" of water will be worth just slightly ("marginally") less than the "next to the last drop." Similarly, the last diamond will be worth only slightly less than the next to the last diamond. But since there are so few diamonds available, and such a strong demand for them, that last diamond—the one being exchanged in any given transaction—will command considerable quantities of other scarce resources. On the other hand, that final unit of water, given the huge quantities of water available for sale, will not command a high price. Thus, it is the value of the *marginal* unit—the one given up by the seller and bought by the buyer—which determines the exchange value of all other similar units being offered for sale in the market. It is not "general value" which determines the price of a specific unit of any commodity or service, but the *marginal* value of the *least* valuable unit offered for sale.

It should also be noted that a glass of fresh water on Lake Michigan (or an unpolluted fresh-water lake) will not command a high price, while a glass of water in the desert may. The transportation costs of getting fresh water to a man in a desert are high. He must bid a high price to induce someone to make the effort. We cannot speak of "water in general." Supply and demand explain market prices; they determine what people will actually pay for a particular resource. An abundant resource will result in low prices for each specific unit of that resource, since the *final use* (least heavily demanded use) which will be served by that resource will be *well down on the scale of men's values*. The higher uses (more strongly demanded uses) will already have been served by other available units of the resource in question. Therefore, the price of every unit offered for sale can be no higher than the highest price offered for the final unit.⁵ When you buy an alarm clock at the supermarket, you will find that each one costs \$6.98, or whatever. They are interchangeable, and if one unit were to cost \$17.50, while another was selling

5. This assumes that buyers have knowledge of all the sellers' prices, which is not a realistic assumption, but which comes close to the operations of a mass-production economy in which advertising and other forms of price information are available.

for \$6.98, no one would spend \$17.50 to get an identical clock (assuming everyone really believes the clocks are identical). The value of the final good, or *marginal* good, determines the value of each of them being offered for sale (disregarding transportation and information costs).

This explanation of market pricing created an intellectual revolution in the field of economics. The late nineteenth century saw the advent of this explanation and its triumph among academic economists by 1900. Menger, Jevons, and Walras buried the arguments for intrinsic value as the basis of market value. As one observer has put it: "If people value it, it has value; if people don't value it, it doesn't have value; and there is no 'intrinsic' about it."⁶ Value is therefore *imputed* by acting men. The *act of imputation* is the foundation of the *subjective theory of value*.

Men wish to achieve their goals with the minimum expenditure of scarce resources possible. They prefer giving up less to buy a good than giving up more. They want to buy cheap and sell dear. It is this goal which has led to the development of the free market. The market permits men to impute their own personal value to a multitude of scarce resources, depending upon their knowledge, goals, and available resources. It enables them to make judgments through a system of competitive bidding. Men compete for specific quantities of specific goods and services. They offer specific prices. This competition leads to the establishment of market prices for specific units of scarce resources. The market price of a resource is therefore the product of a multitude of subjective imputations of value; it is established through competitive bidding. Market prices are therefore the products of a grand *auction process*, in which buyers and potential buyers compete against each other for specific quantities of a particular resource, while sellers compete against potential sellers in order to sell to the highest bidding buyers. A market price is therefore an *objective* result of competitive *subjective* valuations.

Let us consider an example which illustrates some of the implications of this view. We might call it the *Bible-pornography paradox*. The Bible is the very word of God and infinitely precious to mankind. Yet in a perverse culture, it is quite likely that a capitalist could earn far more income by selling pornographic literature than by selling Bibles. The market does not evaluate the Bible in general versus pornography in general. The market only informs us about the

6. The statement was made in a speech which I attended in 1967. It was delivered by the then-Member of Parliament, Enoch Powell.

comparative price of a specific Bible and a specific pornographic book or magazine. Furthermore, the culture may be made up of rebellious people who are determined to work out their own damnations without fear or trembling. They impute value to pornographic books, and little or no value to Bibles. The market will reflect this phenomenon in an objective manner. It will reflect it in the profit-and-loss statements of publishers. Those who meet market demand will prosper, while those who do not meet it will falter or go bankrupt. The profits and losses will be a result of the subjective valuations of acting men, who make decisions in terms of their values. Christian literature must be subsidized, while pornography produces income.

The humanistic, relativistic economist looks at these facts and can conclude that in a specific market, pornography is more valuable at the margin than Bibles are. He says that he is making no *ethical* value judgment when he says this; he is only reporting the objective results of multiple subjective valuations on the market. But since he allows no concept of objective value to enter his economic analysis—not consciously, at least—he is unable to take a stand against the market except by means of stating his *personal opinion* that Bibles are better than pornographic magazines. However, the market supposedly must be left alone to have its way, since one man's opinion must not be allowed to thwart the operations of the market process. His relativism leads to an objective result: the spread of pornography through price competition, thereby lowering the costs of achieving damnation and cultural disintegration.

The biblical explanation is different. The Bible affirms that men do have the power to impute economic value. It also affirms that there are absolute, objective standards of value. In fact, it is because of these standards that all coherence in the universe can be said to exist. The creation reflects these standards, revealing the God who created all things (Rom. 1:19). The Bible reveals these standards verbally. Therefore, *all human imputation goes on within a framework of God's absolute, objective standards*. God imputes good and evil in terms of His own standards, and this imputation provides the only reliable standard of evaluation. The facts are what God determines and imputes, not what the market determines and imputes, or some socialist planning board determines and imputes. The accuracy of each man's individual act of imputation stands or falls in terms of its correspondence to God's act of imputation. We live in a universe of cosmic personalism.

What we must say is this: *a* Bible has no intrinsic (fixed) market value, but *the* Bible has intrinsic (ultimate) value. Everything has intrinsic value or intrinsic evil or some mixture, depending upon God's sovereign act of imputation in terms of His absolute standards and His plan for history. But the market need not reflect this intrinsic value or intrinsic evil. The market is the arena of competing human imputations, one arena in which men work out their salvation or damnation (Phil. 2:12). The fact that the economist, as a self-proclaimed neutral scientist, denies that there can be such a thing as intrinsic economic value, only means that he is using the market as the sole source of explanation. There is no intrinsic value concept in contemporary non-Marxist economic thought because prices change, men's evaluations change, and no hypothesis of God has any scientific meaning for the humanistic economist. As Ludwig von Mises once put it: "We may leave aside the genuine dogmas such as Creation, Incarnation, the Trinity, as they have no direct bearing on the problems of interhuman relations."⁷

It would seem, then, that modern economics, by focusing exclusively on pragmatic goals and thus proximate utility, has erased all traces of the pre-modern idea of intrinsic value or objective value. Yet this is wholly a delusion. In terms of the actual practice of economists, objective value theory has never been stronger. The reason for this is the increasing reliance of economists on statistical aggregates, both for the purposes of economic forecasting and planning, and for the purposes of formulating theory itself. Macroeconomics, econometrics, and modern input-output analysis rely heavily on the premise that *economic value* and *statistical aggregates* are intertwined. In other words, when we say that "the economy" has "grown" at 3 percent per annum for several years, we think we are saying something significant about human welfare, meaning individual well-being. We think we are saying something more than the mere cataloguing of numbers. We think, in other words, that subjective valuation and objective historical-statistical data are linked. We think we have somehow captured subjective value in statistical aggregates. More than this: if we cling fervently to the theory of subjective value, we will have to give up completely the idea that economic statistics are in any real sense meaningful indicators of

7. Ludwig von Mises, *Theory and History: An Interpretation of Social and Economic Evolution* (Washington, D.C.: Mises Institute, 1985), p. 46. The book was first published by Yale University Press in 1957.

the human condition. In other words, the old doctrine of objective value theory is being smuggled into the world of modern economic thought through the back door of statistical aggregation.

The Failure of Utilitarian Economics

Let us consider for a moment the famous "law of diminishing utility." In the post-classical form, the economists have argued along the following lines. As an individual receives more and more units of monetary income (other things being equal, such as the purchasing power of the monetary unit), he allocates the additional money to uses that are progressively lower on his value scale (scale of priorities). He may buy food with his first dollar, shelter with his second dollar, clothing with his third, entertainment with his fourth, and so on. Each new dollar is less and less valuable to him, for he has satisfied his more crucial needs. So far, so good. But a group of English economists, generally called welfare economists, began around 1900 to use this economic law in a unique way. They argued that because each additional dollar (or pound sterling) in a rich man's income is worth less to him than an additional dollar in a poor man's income, the civil government can increase total social utility by taking the rich man's dollar and giving it to the poor man, assuming basic productivity is not reduced because of this transfer. The rich man puts little value on his final dollar, while the poor man puts great value on his, since he has so few. With the new program of wealth redistribution, these welfare economists concluded, the growth of total social welfare has been accentuated.

This problem in welfare economics is related to the familiar problem faced by philosophers: the human pin cushion. Perhaps some sadist enjoys sticking pins into people. He receives exquisite pleasure from seeing people jump in response to the pins. In most instances, those who have been stuck with the pins resent it. The experience is painful. Question: Does the pleasure received by the sadist offset the pain experienced by the victims? If there were a means of measuring pleasure and pain, and we discovered that the pleasure received in a particular instance of pin-sticking really was greater than the pain received by the victim, could we devise a social policy in terms of "aggregate pleasure"? Will *all* instances of pin-sticking by this sadist offset the pain experienced by the victims? Will *all* instances of *all* pin-sticking sadists offset the pain experienced by all present and future victims? Even if "aggregate social

pleasure" were thus always made positive, should lawmakers enact legislation permitting universal pin-sticking? Should the rights of the victims be sacrificed for the pleasure of the sadists? I assume that most people recognize the hypothetical nature of the problem. We have no such measure of pleasure. We cannot "weigh" the pleasure received by sadists against the pain received by their victims.

We might state the problem in a different way. What about the pleasure of the sadists? If the civil government intervenes, making pin-sticking illegal, haven't the interests of the sadists been sacrificed to the interests of the potential victims? By prohibiting pin-sticking, hasn't the civil government infringed on the rights of the pin-stickers? The legislators are trapped. Someone's interests must be infringed upon. If the civil government does nothing, the victims' interests are sacrificed. If the authorities ratify this set of conditions by legalizing pin-sticking, the victims' interests are sacrificed. And if the civil government makes pin-sticking illegal, it will sacrifice the interests of the pin-stickers. The law cannot be neutral. Somebody wins and somebody else loses, whatever the civil government does, even if it does nothing.

The welfare economists were working with a similar problem. The Western legal tradition has long respected the rights of private property. Private individuals have not been permitted to steal from others, even if the thief is poorer than the victim. But what if the politicians act as agents of the poor? What if they do the stealing? Have we not drawn perilously close to a social order which is based on legal pin-sticking? Hasn't the State become the agent of the sadists? The analogy is strained, since rich people may voluntarily give to the poor, whereas only masochists are likely to give pin-sticking sadists the opportunity to amuse themselves by acts of violence. But the philosophical problem is the same: Do we have a means of measuring pleasure and pain, utility and disutility? Can we make valid conclusions concerning "aggregate social utility"? This was the problem which faced (and still faces) economists and policy-makers.

The welfare economists tackled the problem in the name of science. They had not been content to rely on "common sense" arguments concerning equity or fair play. They had not called for State intervention simply in the name of morality, or traditional charity, or some other non-scientific standard. They had called for the politicians to pass legislation taking money from the rich and

giving it to the poor, but *in the name of science*. The law of diminishing utility supposedly proved the case—a fully scientific case—for statist wealth redistribution.

It took over three decades for any economist to come up with a definitive answer—theoretical answer—to this argument. Lionel Robbins, who had been greatly influenced as a young man by Mises, was equal to the task. In his now classic book, *An Essay on the Nature and Significance of Economic Science* (1932, 1935), Robbins shattered the scientific validity of the older welfare economics scheme. The law of diminishing marginal utility holds up quite well for a particular individual, Robbins argued, but it cannot be applied to two or more individuals. The fact that one person prefers choice A to choice B is economically significant, but this does not tell us *how much more* he prefers A to B. We cannot measure the difference; we have no yardstick to measure subjective utility. Similarly, we cannot say, as economic scientists, that the satisfaction (marginal utility) gained by the rich man is less (or more, or the same) than the satisfaction gained by the poor man when each of them receives one more dollar of income. We cannot measure the subjective loss of satisfaction when the rich man has his dollar removed by the State's authorities, and we cannot measure the increase in satisfaction accruing to the poor man who receives the confiscated dollar. As Robbins writes: "Introspection does not enable A to measure what is going on in B's mind, nor B to measure what is going on in A's. There is no way of comparing the satisfactions of different people."⁸ The politician may think he knows, or voters may think they can make such estimations, but the economist must assert that from a scientific point of view, no such comparison is possible.

Robbins' book remains one of the classics in the methodology of economics. Yet its implications are devastating for modern economics. It was attacked by R. F. Harrod in his presidential address before Section F of the British Association, the economics organization, and reprinted in the *Economic Journal* in September of 1938. Harrod was concerned about the implications of Robbins' book for applied economics, specifically, the formulation of economic policy. On what grounds could an economist who follows Robbins' epistemology ever be able to give advice to anyone concerning the appropriateness of any given economic action? Harrod wrote: "It

8. Lionel Robbins, *An Essay on the Nature and Significance of Economic Science* (2nd ed.; New York: St. Martins, [1935]), p. 140.

may be urged that the economist hereby goes outside his proper 'scientific' field. This point is strongly urged by Professor Robbins. Whether the n th unit of X has greater or less utility than the m th of Y to a given individual may be made the subject of a test. He can be given the choice. But there are no scientific means of deciding whether the n th of X has greater utility to individual P than the m th of Y has to another individual Q. The choice can never be put. This implies that we cannot in fact decide whether two pence have more utility to a millionaire than a beggar. We may have a shrewd suspicion. But this, we are told, is 'unscientific,' for lack of a test." But what answer can Harrod provide? Only that economics really isn't very much of a science after all. "This objection would be very weighty if economics itself were a mature and exact science. Yet in fact its achievements outside a limited field are so beset on every side by matters which only admit of conjecture that it is possibly rather ridiculous for an economist to take such a high line."⁹ He then abandons the whole idea of scientific logic, of a scientific epistemology. He appeals to "common sense" in order to justify the scientific economist in making value judgments and policy decisions in the name of scientific rigor. "Can we afford to reject this very clear finding of common sense? Of course, great caution must be exercised in not pushing the matter too far. Since the evidence is vague, we must not go farther than a very clear mandate from common sense allows."¹⁰ This, however, does not answer the problem. Whose common sense is he talking about? The socialist's? The Keynesian's? (Keynes was the editor of the *Economic Journal* when Harrod's article was published, and Harrod was Keynes' biographer after Keynes died in 1946.) Harrod's "common sense" is simply an admission of intellectual and epistemological bankruptcy.

Harrod understood the threat Robbins' book posed and will continue to pose to applied economics. "If the incomparability of utility to different individuals is strictly pressed, not only are the prescriptions of the welfare school ruled out, but all prescriptions whatever. The economist as an adviser is completely stultified, and, unless his speculations be regarded as of paramount aesthetic value, he had better be suppressed completely. No; some sort of postulate of equality has to be assumed."¹¹ This *postulate of psychological equality*

9. R. F. Harrod, "Scope and Method of Economics," *Economic Journal*, XLVIII (1938), p. 396.

10. *Idem*.

11. *Ibid.*, p. 397.

asserts that men are sufficiently alike, so that the final dollar of income to the millionaire is worth so little on his value scale, and it would be worth so much to the poor man, that the State can increase social welfare by confiscating at least a percentage of that final dollar of income to the millionaire and transferring it to the poor man. Also implied, of course, is that the millionaire's moral outrage at the State is either irrelevant, or offset by the approval of the poor man. Nevertheless, we must be careful when we apply this postulate of psychological equality. "But it should be carefully framed and used with great caution, always subject to the proviso 'unless the contrary can be shown.'"¹² The problem is, *the contrary cannot be shown*, precisely because the postulate of psychological equality is not itself capable of proof. Scientifically, we cannot prove either equality of psychic income or inequality. Robbins was correct; we simply cannot, as economic scientists, make such comparisons. Yet we must, if we are to make any kind of policy recommendation, or even add up a column of figures, if we assert that the total is meaningful from an economic point of view.

In the December, 1938 issue of the *Economic Journal*, Robbins capitulated to Harrod. He accepted the "postulate of equality" which supposedly allows us to make interpersonal comparisons of subjective utility. He did not demonstrate how his acceptance of his postulate was conformable to his previous denial of the possibility of making interpersonal comparisons of subjective utility. He simply wanted to retain the role of the economist-as-policy-advisor. As he wrote: "My own attitude toward problems of political action has always been one of what I might call provisional utilitarianism. I am far from thinking that thorough-going utilitarianism *a la Bentham* is an ultimate solution of any of the major problems of social philosophy. But I have always felt that, as a first approximation in handling questions relating to the lives and actions of large masses of people, the approach which counts each man as one, and, on that assumption, asks which way lies the greatest happiness, is less likely to lead one astray than any of the absolute systems. I do not believe, and I never have believed, that in fact men are necessarily equal or should always be judged as such. But I do believe that, in most cases, political calculations which do not treat them *as if* they were

12. *Idem.*

equal are morally revolting.”¹³ He does not *believe* men are necessarily equal. He *feels* that “as a first approximation” the “provisional utilitarian” position of the greatest good for the greatest number is useful. This has been his *attitude*. But we must not accept “absolute systems.” Bentham’s utilitarianism—a consistent philosophy of applied economics, and one based on the universal acceptability of the postulate of psychological equality—is not “an ultimate solution of any of the major problems of social philosophy.” What Robbins admitted was that in remaining a defender of applied economics, he had to abandon any claim of scientific rigor and epistemological consistency. He had to abandon economic science as he had defined it in his book.

Then how does the scientist make policy recommendations? By coming to the policy committee as a scientist, but then admitting, if pressed, that he can make no suggestions as a scientist. His scientific credentials get him invited to the meeting, but if he is honest, he really cannot use them in making policy recommendations. Robbins cited William S. Jevons, one of the founders of modern, subjectivist economics, in his own defense. Jevons abandoned any attempt to make interpersonal comparisons of subjective utility. “‘I see no means,’ Jevons had said, ‘whereby such comparison can be accomplished. Every mind is inscrutable to every other mind and no common denominator of feeling is possible.’ Would it not be better, I asked myself, quite frankly to acknowledge that the postulate of equal capacity for satisfaction *came from outside*, that it rested upon ethical principle rather than upon scientific demonstration, that it was not a judgment of fact in the scientific sense, but rather a judgment of value—perhaps, even, in the last analysis, an act of will? Ought it not to be made clear, for instance, that theories of public finance which went beyond tracing the effects of given measures on prices, quantities produced and such-like measurable magnitudes, and which attempted to sum social gain or loss, were not, strictly speaking, economic science?”¹⁴ Well put, Professor Robbins! And what of the necessary intellectual conclusion, that the economic scientist can, on the basis of his secular methodology, say nothing concerning policy? “But I confess that at first I found the implications very hard to swallow. For it meant, as Mr. Harrod has rightly

13. Lionel Robbins, “Interpersonal Comparisons of Utility: A Comment,” *Economic Journal*, XLVIII (1938), p. 635.

14. *Ibid.*, p. 637.

insisted, that economics as a science could say nothing by way of prescription. It could say whether a certain course of action could lead to a desired end. It could judge the consistency of different policies. But, in itself, it passed no verdict of good or bad. It was not possible to say that economic science showed that free trade was justifiable, that inequality should be mitigated, that the income tax should be graduated, and so forth."¹⁵ But Robbins could not bear this logically necessary conclusion. "Further thought, however, convinced me that this was irrational."¹⁶ Why was it irrational? Because economists have always known that their prescriptions "were conditional upon the acceptance of norms lying outside economics. . . . Why should one be frightened, I asked, of taking a stand on judgments which are not scientific, if they relate to matters outside the world of science?"¹⁷

In other words, because economists have always known they were not really being scientific when they made policy recommendations, it is therefore irrational to worry about making policy recommendations. Because scientific economics has never been able, scientifically, to make policy recommendations, economists should not stop making policy recommendations now. "In the past, it seemed to me, a failure to recognize the arbitrary element in certain of the findings of traditional Political Economy had been conducive to too facile a use of these findings in framing prescriptions for action."¹⁸ However, he made his position clear: "I was not at all desirous of preventing economists from giving prescriptions."¹⁹ We must still make the assumption of the postulate of psychological equality among men. "I think that the assumption of equality comes from the outside, and that its justification is more ethical than scientific. But we all agree that it is fitting that such assumptions should be made and their implications explored with the aid of the economist's technique."²⁰

The responsibility for formulating the postulate of psychological equality is therefore pushed into the camp of the philosophers, specifically, the ethicists. Then, once we *assume* that *they* have proven

15. *Idem.*

16. *Idem.*

17. *Ibid.*, p. 638.

18. *Ibid.*, p. 639.

19. *Idem.*

20. *Ibid.*, p. 641.

the validity of the postulate, it can be imported and used as the epistemological foundation of applied economics.

The problem with this strategy is that the specialists in ethics are faced with precisely the same philosophical paradoxes, and they have not come to any agreement about the resolution of the problem of making interpersonal comparisons of subjective utility. This is the *incommensurability problem* in hedonism and utilitarianism. Pleasures and pains cannot be quantified, even by the individual. There is an ordinal scale (*this is more pleasurable than that*), but no cardinal scale (*this is exactly this much more pleasurable than that*). McIntyre's comment on John Stuart Mill's utilitarianism applies equally well to Robbins: "Mill's whole tenor of thought is that of a utilitarian who cannot avoid any of the difficulties which this doctrine raises, but who cannot conceive of abandoning his doctrine either."²¹ What was Mill's philosophical difficulty? Writes McIntyre: "... trying to bring all the objects and goals of human desire under a single concept, that of pleasure, and trying to show them as all commensurable with each other in a single scale of evaluation."²² Modern economists do not solve this commensurability problem by substituting the word "utility" for "pleasure."

Robbins was not some amateur philosopher who could legitimately call upon the ethical theorists to solve his problem. His problem was the same one which had baffled ethical theorists for many years. Richard Brendt's article in the *Encyclopedia of Philosophy* on "Hedonism" even turns to the economists as examples of the continuing debate over whether "we can know nothing about the mental states of other persons, since there is no way of observing them directly; . . ."²³ Professor Smart has put the matter quite well: "The fact that the ordinary man thinks that he can weigh up probabilities in making prudential decisions does not mean that there is really no sense in what he is doing. What utilitarianism badly needs, in order to make its theoretical foundations secure, is some method according to which numerical probabilities, even approximate ones, could in theory, though not necessarily always in practice, be assigned to any imagined future event. . . . But until we have an adequate theory of

21. Alasdair McIntyre, *A Short History of Ethics* (New York: Macmillan, 1966), p. 235.

22. *Ibid.*, p. 236.

23. Richard B. Brendt, "Hedonism," in *The Encyclopedia of Philosophy*, edited by Paul Edwards (New York: Macmillan, 1967), III, p. 434.

objective probability, utilitarianism is not on a secure theoretical basis."²⁴ Keynes' teacher and fellow pervert, the philosopher G. E. Moore, put it more graphically when he wrote, concerning the summing up of individual pleasures in a social aggregate: "It involves our saying that, for instance, the state of mind of a drunkard, when he is intensely pleased with breaking crockery, is just as valuable in itself—just as well worth having—as that of a man who is fully realizing all that is exquisite in the tragedy of King Lear, provided only the mere quantity of pleasure in both cases is the same. Such instances might be multiplied indefinitely, and it seems to me that they constitute a *reductio ad absurdum* of the view that intrinsic value is always in proportion to quantity of pleasure. Of course, here again, the question is quite incapable of proof either way."²⁵ But if it is quite incapable of proof for the ethicists, then there is nothing for the economists to import from this source which can serve as the foundation for the necessary assumption of the postulate of psychological equality among men. The economics of secular humanism must make unprovable assumptions about mankind in order to operate—assumptions that cannot legitimately be made, according to the logic of secular humanism, but must and will be made by policy-makers.

Mark A. Lutz, an economist, and Kenneth Lux, a psychologist, have attacked methodological individualism and laissez-faire economics by challenging the presuppositions of the individualists in the field of epistemology. They are methodological collectivists, and they believe that the State can and should reorder economic priorities in terms of collective needs. They have grasped the fact that it is illegitimate to use Robbins' arguments against welfare economics to criticize only collectivists' policies, if Robbins' arguments are not simultaneously used to criticize all policy decisions, and indeed, all economic aggregates. They write: "In the absence of any way to measure utility directly, the most reasonable thing to do is to assume equal utility scales across people, which in effect means equal capacity for satisfaction. In fact, it is hard to see how any other assumption makes sense. And this assumption is precisely what economics

24. J. J. C. Smart, in Smart and Williams (eds.), *Utilitarianism: for and against* (Cambridge University Press, 1973), pp. 40-41.

25. G. E. Moore, "Multiple Intrinsic Goods," (editor's title) in Wilfrid Sellers and John Hospers (eds.), *Readings in Ethical Theory* (2nd ed.; New York: Appleton-Century-Crofts, 1970), p. 387. The selection is taken from Moore's book, *Ethics* (Oxford: Clarendon Press, 1912).

adopted in order to be able to add up different individuals' incomes, and assume it was adding up utility or value. Within the confines of marginal utility theory, this is the assumption that allows us to use aggregate statistics, such as GNP. Without the assumption of additivity of utility, by adding income, there would be no basis for comparing GNP figures from one country to another, or even within the same country from year to year. This is the kind of assumption neoclassicals had to invoke whenever they made a case for the social benefits of any kind of economic policy, such as free trade or *laissez-faire*. Proceeding from the same basis, the conclusion that equalizing the distribution of income and wealth was beneficial appeared to be inescapable."²⁶

The authors are correct about the necessity of the assumption of comparability of subjective utilities for making policy decisions and comparing economic aggregates. This, however, does not answer Robbins' original point: economists cannot possibly make such an assumption as economists. Therefore, we must abandon scientific logic, they conclude, just as both Harrod and Robbins concluded. We must appeal to that most priceless of all rare commodities, *common sense*. They do not accept Robbins' original logic. They, like Harrod, do not find it convincing. Why not? Not because they can fault its coherence, but because they do not like its policy implications. "Once the economist accepts that there is an ordering of importance of needs, the question of differences in needs between people is relatively unessential, and we feel that the economist *must* accept that there is an ordering of needs among people. To do otherwise is to, once again, fly in the face of common sense."²⁷ But what is this ordering principle? It is human life. "The more necessary for life, or life supporting a particular good, service, or experience is, the more important it is. It is as simple as that. An economics that has no theoretical way of making a distinction between the importance of supplying water and the importance of supplying tobacco hardly seems relevant to a living organism, let alone a human development."²⁸ If we find that Americans have sufficient income to smoke (or that some Americans do), and we find that nomads in the North African Saheel area need water, what must be our conclu-

26. Mark A. Lutz and Kenneth Lux, *The Challenge of Humanistic Economics* (Menlo Park, Calif.: Benjamin/Cummings, 1979), pp. 83-84.

27. *Ibid.*, p. 18.

28. *Idem.*

sion? Obviously, the State should take away income from the tobacco-smoking (or chewing or snuffing) Americans, buy water, and send it to the nomads. Any other conclusion defies the economics of egalitarian redistribution. Any other economics defies "common sense." While the authors are not quite this radical in their conclusions—almost, but not quite—the direction in which their logic would carry international society is clear enough. To quote them, "It is as simple as that."

Once the secular humanistic economist acknowledges the fact—and for finite minds, it *is* a fact—that he cannot, as a scientist, measure subjective utility, and that he therefore cannot make interpersonal comparisons of subjective utility, most of what we know as modern economics disintegrates. Like an acid, the argument systematically and relentlessly erodes the philosophical, intellectual, and moral foundations of every economic doctrine that it touches, and it touches virtually every aspect of applied economics. It is the inescapable conclusion of all subjective value theory, yet it undermines the economics based—supposedly based—exclusively on the idea of subjective utility.

If there is only subjective value, then these values, unlike objective prices, cannot be compared. This is the thrust of Robbins' argument. It is as impossible to measure subjective utility as it is to measure hate, love, or any other human emotion. A person can *order* his preferences, but he cannot *measure* them. No yardstick is available.

Comparing Statistical Aggregates

This being the case, the logic of subjective utility leads to some very unorthodox conclusions. For example, consider the possibility of nuclear war. Assume that war breaks out in Europe. All of France is destroyed, except for one man, who happens to love French wine more than anything on earth, and one enormous vat of his most loved wine. So large is this supply that he will be able to spend the remainder of his days consuming all he wants of this wine—the attainment of his lifelong dream. On the other hand, the United States is untouched by the war. All of its cities are intact, all of its capital structure is intact. Using the law of subjective value, with its corollary prohibiting the interpersonal comparison of subjective utilities, the fully consistent economist cannot say whether the Frenchman's capital is greater or less than the capital structure of the

entire United States. Who is richer? We cannot say. We cannot legitimately, scientifically, economically compare the subjective utilities of 240 million U.S. citizens and that single ecstatic Frenchman. Subjective utilities, being subjective, cannot be added up like a column of figures. The economist may intuitively know that the United States has more capital and wealth than "France," meaning that one happy Frenchman, but he cannot prove it using the laws of modern subjective economics.

Readers may think that this a frivolous example. It is anything but frivolous. A debate over its implications took place at a 1974 conference of "Austrian School" economists held at South Royalton, Vermont. Prof. Israel Kirzner, who took his Ph.D. under Mises, defended the idea that economists, as scientists, cannot state whether or not "France" has more capital and wealth than "the United States," since all such aggregates are fictions, and we cannot make interpersonal comparisons of subjective utility. Prof. Murray Rothbard, on the other hand, challenged this view as nonsensical. Of course the United States would be richer under such conditions. In short, Rothbard took the "common sense" position, while Kirzner remained true to the logic of subjective value theory.

It should be clear that Rothbard is correct. The United States would unquestionably be richer than France in the example. Yet our knowledge of this obvious truth cannot be proven, or even consistently defended, in terms of the subjectivist axiology (value theory) of modern economics. Kirzner's position is the systematic one. We have to conclude that the problems associated with the interpersonal comparisons of subjective utility are presently unsolvable in some instances. The logic of the subjectivist position leads directly to intellectual dead-ends, or "nonsense." Like purely objective explanations of value, the purely subjective explanations are equally contradictory in certain instances. The antinomies (contradictions) in the reasoning of self-proclaimed autonomous man are inescapable. No one can make intelligent, consistent, systematic judgments in every area of life by means of some hypothetically logical, hypothetically rational, hypothetically consistent version of pure autonomous thought and value. Each philosophical system disintegrates because of the contradictions of its own presuppositions and applications.

Kirzner has discussed the theory of capital at some length in his book, *An Essay on Capital* (1966). He asks very pointed questions

concerning capital per head in various nations. He also provides some unique answers. He writes: "Is it really without meaning to say that the capital per head in country A is greater than in country B? Is it meaningless to attempt to explain the higher productivity of labor in country A by reference to the larger quantity of capital combined with each man-hour of labor? It is indeed difficult to deny that we, in fact, use aggregate concepts of capital in this manner; what is the meaning to be attached to such concepts, and how do they relate to the 'individualistic' concept of capital that has been adopted for the purpose of this essay?"²⁹ The consistency with which Kirzner answers his questions is unprecedented: "Careful reflection on the matter will, it is believed, reveal that the aggregate concept of capital, the 'quantity of capital available to an economy as a whole,' is, for a market economy, a wholly artificial construct useful for making certain judgments concerning the progress and performance of the economy. When using this construct one is in fact viewing the economy in its entirety [entirety] *as if* it were *not* a market economy but instead a completely centralized economy over which the observer himself has absolute control and responsibility. . . . One is thus *not* merging the plans of all the individual capital owners who participate in the market economy, one is conceptually *replacing* these plans by a single master plan that one *imagines* to be relevant to the economy as a whole, and against which one gauges the performance of the economy as a whole."³⁰

We must ask Kirzner, how is it that such a "wholly artificial construct" which imagines that the economy is one vast outworking of a single economic plan—in contrast to the operations of the free market, with its multiple plans—should be "useful for making certain judgments concerning the progress and performance of the economy"? Why should such an artificial construct be deemed intellectually defensible? Why should it be useful? Why should defenders of the logic of the market be forced to rely on a wholly artificial construct in order to make judgments in the area of applied economics? Is applied economics really applied *economics*? Is it not rather applied common sense? But must common sense be our only source of such judgments, when common sense apparently relies on the holism or collectivism of such a mental construct? Isn't this

29. Israel Kirzner, *An Essay on Capital* (New York: Augustus Kelley, 1966), p. 120.

30. *Ibid.*, pp. 120-21.

artificial construct wholly in opposition to the presuppositions of free market economics, and in conflict with the methodological individualism of subjective value theory?

Kirzner himself calls this a "holistic capital concept." He spells out the assumptions of such a holistic capital concept: "The truth is that the aggregate concept of capital has meaning only on assumptions according to which all parts of the capital stock are completely integrated with one another. Each piece of capital equipment in the stock is assumed to have been constructed as part of the *same* central plan which led to the rest of the stock. Each capital good has its part to play; no two capital goods have a function which precludes the full utilization as planned, of the other. But these conditions can exist in a market economy (in which planning is decentralized) only in the state of equilibrium [a technical concept which hypothesizes perfect foreknowledge on the part of everyone in the economy, a concept which Kirzner himself denies can ever be applied to the real world—G. N.]. The essential function of the market is, after all, to bring individual plans which do *not* mesh, into greater mutual coordination. So that it turns out that the aggregate concept of capital presupposes conditions that are not only violated in the real world, but which assume away some of the major problems which it is the task of a market theory of capital to elucidate."³¹

Kirzner has understood the implications of radical subjectivism in economics far better than the majority of his professional peers. He has seen that in order to make accurate, meaningful comparisons of capital stocks, we must assume the existence of a *comprehensive, omniscient, integrated plan* which is made in advance and then executed perfectly by an *omniscient planning agent*. Yet this is precisely what the logic of the free market *denies* to man or any group of men. What, then, are we supposed to give up? Are we supposed to abandon our wholly common practice of comparing the value of capital stocks in different nations, or under different economic systems? Are we therefore supposed to cease comparing the output-per-unit-of-resource-input under socialism with output under capitalism? Are we supposed to abandon the impressive argument—impressive to common sense, anyway—that the high output of laborers who live in capitalist nations is due to the far higher investment in capital per capita in capitalist nations, compared to the low output and low per

31. *Ibid.*, pp. 121-22.

capita investment in socialist countries? These arguments rest on the “wholly artificial construct” of aggregate capital value, which is quite obviously based on a concept of objective economic value. On the other hand, must we abandon the key presupposition of modern free-market economics, namely, the concept of *methodological individualism*, which has as a corollary the idea of subjective economic value? Must we abandon the arguments of free market economists against the Marxists, who still cling to one version of objective value, namely, the labor theory of value—the very heart of classical economics’ value theory, against which modern economists, from Menger, Jevons, and Walras to the present, have reacted?

Modern economics thus faces a true intellectual dilemma. Economists may choose not to recognize it, but it is there nonetheless. The subjectivists have all accepted the use of statistical aggregates to one extent or another, even the supposedly “pure subjectivists” in the Austrian camp.³² Yet their epistemology of methodological individualism categorically denies the possibility of meaning for such aggregates. There can be no interpersonal comparisons of subjective utility, so the aggregates are economically meaningless. The free market economists deny the logic of the single, unified economic plan. Yet all of them eventually point to the *statistical results of socialism*—the economy of the hypothetically unified economic plan—and the *statistical results of capitalism*—the economy built on the presupposition that there can be no coherent, systematic, unified economic plan—and conclude that the statistical results demonstrate the superiority in practice of capitalism. But the whole concept of “statistical results” requires the existence of objective, measurable economic value, and methodological individualism categorically denies the existence of objective, measurable economic value.

32. See, for example, the statement by Gerald P. O’Driscoll, Jr. and Sudha R. Shenoy: “However, after 1945, the problem turned around completely and became that of gently (and later, more rapidly) rising prices. In eleven major developed countries, prices declined hardly at all, and when they did, it was only for a couple of years during the early fifties. Prices remained stable for some years in several of these countries, but these periods of relative price stability were outnumbered by years of rising prices, so that in effect prices have been rising more or less steadily ever since the end of World War II.” O’Driscoll and Shenoy, “Inflation, Recession, and Stagflation,” in Edwin G. Dolan (ed.), *The Foundations of Modern Austrian Economics* (Kansas City, Kansas: Sheed & Ward, 1976), pp. 186-87. Any discussion of rising prices involves the use of statistical aggregates, specifically, index numbers.

Equally ironic is the fact that defenders of socialist and Marxist economies, who affirm the validity of central economic planning, who deny methodological individualism, and who thereby affirm the existence of objective economic value and meaningful economic statistics, constantly deny the meaningfulness of their economies' inferior economic performance, as measured by statistics. Such statistical measurements, they tend to argue, do not measure the "real" welfare provided to citizens of a particular socialist commonwealth. In other words, the aggregate statistical data are not "true" indicators of individual economic welfare inside socialist economies. There is something "extra" received daily by socialist citizens that is intensely valuable to them, but which somehow does not appear in the statistical data. The data therefore are insufficient to reveal the full benefits to the "whole man" under socialism.

What we find, then, is that the methodological individualists, whose intellectual presupposition denies the possibility of statistical aggregation, enjoy using statistics to criticize their socialistic opponents. The socialists, who are methodological collectivists (holists), are constantly seeking to deny the meaningfulness of embarrassing economic statistics, despite the fact that the very possibility of socialist planning requires the planning authorities to collect, interpret, and efficiently use economic statistics in the central planning process.

What, then, is the solution to these intellectual dilemmas? How can we affirm man's ability to make use of statistical aggregates, and at the same time keep our economics from drifting into the paradoxes of objective value theory, where "water" is supposed to be more valuable than "diamonds"? And how can we reconcile the fact that something objectively good, like the Bible, is worth less in a particular market than pornographic literature? Are there biblical answers to these apparently unanswerable intellectual problems?

A Biblical Solution

The Bible affirms man's ability to impute value, for man is made in the image of God, and God imputes value to His creation. The Bible affirms that there are absolute standards, meaning objective standards. Man is to think God's thoughts after Him. God created the universe in terms of His eternal, comprehensive plan. He sustains it, moment by moment. He is absolutely sovereign over it. No aspect of creation is outside His comprehensive knowledge and

absolute control. Therefore, the mind of God integrates all facts and judges all facts in terms of His perfect plan. Men cannot make absolute, comprehensive value imputations, since men are creatures. But they can, as limited creatures, make value imputations that are valid in God's eyes, and before the rebellion of man in the garden, this is what man did. Each man still makes these value imputations, and man, as a creature responsible to God, cannot escape the revelation and restraint of God. Men do make value imputations. They live and act in terms of God's laws, either as rebels or faithful men. As living creatures, they must deal with the universe as it objectively exists, if they wish to succeed. They must interpret the information they receive from the universe through their senses, and they must interpret correctly, meaning objectively, meaning in terms of God's law-order for His universe, if they are to remain successful. Thus, their *subjective interpretations* are supposed to conform to the *objective standards* which God requires for man, who is made in His image.

There is an overall economic plan in God's mind. This forces men, to some degree, to conform themselves to this plan and to adjust their plans in terms of it. We can therefore say, along with Kirzner, that in order to make assessments of comparative wealth, there must be a single, integrated plan. Furthermore, unlike Kirzner, we can say that such a plan exists. As creatures made in God's image, we can make at least reasonable, useful estimations of the value of capital or other goods, even though we could not do so legitimately if all value were exclusively subjective, as if there were no overall plan of God.

Economists are generally self-consciously atheistic in their pre-suppositions. Man, and man alone, does the imputing of value. Yet at the same time, all economists, without exception, use such mental aggregate constructs as "capital," "income," "national income," and "productivity." None of these mental constructs is valid, given the logic of modern subjectivism, yet the economists use them constantly. Professor Mises, an important figure in the development of modern subjectivism, and perhaps the most important figure if we are to believe the assessment of his more famous pupil, F. A. Hayek,³³ argued throughout his career against the validity of all aggregates in economics, yet when he attempted to explain the productivity of workers under capitalism, he used the concept of per

33. Hayek, *Counter-Revolution of Science*, p. 210, footnote 25.

capita capital investment: "What constitutes the greater wealth of a capitalistic society as against the smaller wealth of a noncapitalistic society is the fact that the available supply of capital goods is greater in the former than in the latter. What has improved the wage earners' standard of living is the fact that the capital equipment per head of the men eager to earn wages increased."³⁴

If one adheres to a subjective theory of value, how is it possible to divide actual machines by actual workers? Kirzner explicitly denies that such a procedure is legitimate, unless it is confined to a single worker and his equipment.³⁵ Can we measure capital in terms of money? Mises seems to think so, but how can he? The purchasing power of money is constantly changing, as Mises' book, *The Theory of Money and Credit* (1912), explains so brilliantly. You can construct a price index, of course, to measure the rise and fall of prices, but we are then back to a statistical aggregate, which Mises explicitly rejects.³⁶ Furthermore, money invested in capital may well be mal-invested, such as in the years preceding a depression, another insight developed by Mises.³⁷ The capital value really may be zero or less — a looming loss — under such conditions.

Given the logic of subjective value theory, how can one speak of increasing per capita wealth, increasing per capita output, or per capita anything else? How can we legitimately compare the economic output of a socialist nation with a capitalist one? What is a "nation"? How can we accurately *individuate* the units being compared? How can we measure any change over time? How can we measure anything without a *fixed measuring device*, something which is explicitly denied by the logic of subjective value theory? In short, how can the defenders of capitalism legitimately use any aggregate statistics to prove their case? As economists, they must remain as silent as a Zen Buddhist master. They never do, of course. Kirzner, however, comes close to the ideal of silence. He says that capital

34. Ludwig von Mises, *The Anti-Capitalist Mentality* (Princeton, New Jersey: Van Nostrand, 1956), p. 89. Cf. Mises, *Socialism: An Economic and Sociological Analysis* (New Haven, Conn.: Yale University Press, [1922] 1962), p. 459.

35. Kirzner, *Essay on Capital*, pp. 105-7.

36. Mises does admit some minor validity to a price index as an historical tool, although it is not clear why such an index should be valid in retrospect: *The Theory of Money and Credit* (Irvington, New York: Foundation for Economic Education, [1912] 1971), pp. 187-90. For his general critique of statistical aggregates, see *Human Action* (3rd ed.: Chicago: Regnery, 1966), pp. 351ff.

37. Mises, *Human Action*, pp. 560ff.

estimates are valid only when made by individual entrepreneurs concerning the *estimated* present and future values of their own capital stock. Presumably, an entrepreneur could make estimates of his rivals' stocks, but only in terms of the effects of their stocks on the value of his. Kirzner is forthright: "Individual forward-looking measurement is both possible and feasible, because the problem of possibly inconsistent plans does not arise. An individual evaluates each component of his capital stock in terms of the plans he has in mind; *he* may have to take care to avoid possible inconsistencies, but in appraising his measurement of his capital we may assume that he *has* successfully integrated his own plans."³⁸ Yet this assumption cannot possibly be made by an outsider. How can we know anything about whether or not he has integrated his plans? He may be a madman. He may be misforecasting the state of the market and the value of his capital. The market may make hash of his plans. He is not omniscient, even in his own limited sphere of influence. Where is the standard of measurement? Where is the objective reference point? The market? But the market is supposedly purely the product of multiple plans, many of them mutually contradictory (one man bets that wheat prices will rise, while another plans in terms of a fall in wheat prices). As Kirzner has shown, we cannot make assessments of capital value by aggregating market prices for capital goods.³⁹ So how does the individual evaluate the value of his capital? By use of the market, Mises has stated so clearly; without a market, no such evaluation is possible, a fact argued by Mises as early as 1920,⁴⁰ and one which he once immodestly claimed "is certainly the most important discovery made by economic theory."⁴¹ Mises clearly stated that in human affairs, "The truth is that there are only variables and no constants."⁴²

Is it surprising, then, that his disciple Kirzner should throw out Mises' inconsistently held idea that there is some meaning to the words "per capita capital"? As Kirzner concludes: "Underlying state-

38. Kirzner, "The Theory of Capital," in Dolan (ed.), *Foundations of Modern Austrian Economics*, p. 142.

39. Kirzner, *Essay on Capital*, pp. 120ff.

40. Ludwig von Mises, "Economic Calculation in the Socialist Commonwealth," (1920), in F. A. Hayek (ed.), *Collectivist Economic Planning* (London: Routledge & Kegan Paul, [1935] 1963).

41. Mises, *Epistemological Problems in Economics* (Princeton, New Jersey: Van Nostrand, [1933] 1960), p. 157. Reprinted by New York University Press.

42. Mises, *Theory and History*, p. 12.

ments that compare the quantity of capital in one country with that in another is a convenient and relatively harmless fiction."⁴³ He politely dismisses Mises' argument by means of Mises' other arguments. Yet he is too polite; such a comparison is more than a harmless fiction. In terms of the logic of subjective economics, it is nothing short of a subterfuge, a sleight-of-hand deception to be used by capitalism's defenders to dismiss the arguments of their socialist opponents. Most capitalists point to capitalism's productivity as a major defense of capitalism, yet the logic of modern economics denies that such a conclusion can be reached using the logic of subjective value theory. Consistent subjectivism denies the validity of all such comparisons.

Hayek has stated that "every important advance in economic theory during the last hundred years was a further step in the consistent application of subjectivism."⁴⁴ He wrote those words in 1952. It would seem that we have reached the end of the road, or at least a major fork in the road, for subjectivism. It, too, has run directly into the implications of its own presuppositions. Pure subjectivism makes lonely solipsists of us all, with no way for us to test our generalizations or compare the products of our hands, let alone the products of billions of other human beings. When Mises wrote that "the macro-economic concept of national income is a mere political slogan devoid of any cognitive value,"⁴⁵ he simultaneously denied the validity of all statistical comparisons of the productivity of nations, including his own comparisons.

All of this may seem like academic hair-splitting, as indeed it is. All scholarship, all intelligent pursuit of truth, eventually gets involved in hair-splitting. But the point I am trying to make is not merely technical; it is absolutely fundamental. Purely "objective" theories of value produce incongruous conclusions, so the promoters of such theories have always returned to the market forces of supply and demand to explain prices. But the market's evaluation of price and value is not stable, since conditions change. It is therefore not an objective source of value. On the other hand, subjective value theory's success in explaining the way in which the market operates has not overcome the inherent contradictions of radical subjectivism. Economic theory in a purely subjectivist mold cannot

43. Kirzner, "Theory of Capital," p. 142.

44. Hayek, *Counter-Revolution of Science*, p. 31.

45. Mises, *The Ultimate Foundation of Economic Science* (Princeton, New Jersey: Van Nostrand, 1962), p. 87. Reprinted by New York University Press.

legitimately say anything about aggregates. It cannot make comparisons about wealth over time, or wealth across borders. Neither system of value theory can survive by itself, and the proponents of each theory borrow liberally from the methodology and conclusions of the other. As Van Til once remarked in another context, they profit by taking in each other's washing.

Conclusion

Point four of God's covenant structure is *judgment*, or *sanctions*. God evaluates His creation continually in terms of His purposes, decree, and covenant requirements. Men are made in God's image, so we necessarily must judge in history. The Bible says that redeemed mankind will judge the angels (I Cor. 6:3). Life for the covenant-keeper is a training ground for rendering better judgments. (See Appendix E: "Witnesses and Judges.")

In the field of economics, this means that men can and must impute value to scarce economic resources. As creatures made in the image of God, we can impute value to economic goods. We can trade with others at discrete prices. These prices are the product of competitive bargaining among acting men. We can record such prices. We can also make rough estimates of *aggregates of these prices*, and make rough estimates of the *meaning* attached to such aggregates by other acting men. The *constant factor* in market imputations over time is therefore the *image of God in men*, as far as our assessment of other people's imputation of meaning is concerned. The ultimate constant is God's evaluation of worth and His plan. There is objective value in the universe, and men, to one degree or another, must conform themselves to, or react against, this standard of value.

Mises was correct in his attempt to compare the wealth and output of socialist and capitalist nations, just as Rothbard was correct in concluding that the capital of the United States would be worth more than one vat of French wine. But the accuracy of their conclusions is in sharp contrast to their presuppositions concerning subjective value theory. The Bible invites us to make such comparisons. We are specifically told that the economic productivity of a godly society will be greater than the long-run productivity of rebellious societies (Deut. 8:11-18; Ezek. 36). We are able to make such estimates because there really is a single, consistent, comprehensive plan, and a single Planner who has made economic assessments in terms of an omniscient plan. All capital belongs to the ultimate Planner (Ps.

50:10). The forward-looking plan is God's (Isa. 45:1-8). God knows all things, and some of these things are revealed to us, though not all of them (Deut. 29:29). We can make rough estimates of economic and statistical aggregates because there is an integrated plan, and because we are made in the image of the Planner.

Because there is an imputing, planning, creative, sovereign God, there can also be an imputing, planning, derivatively creative mankind. Because there is objective value based on the acts of creation and imputation by God, there can be a science of applied economics, and not just solipsistic, subjectivist economic theory which is divorced from all statistical aggregations. There is *objective value*, which is based on the Creator's value standards and the unity of God's comprehensive plan; there are *subjective values* believed and held among men because each man is a responsible person before God. *The image of God in men is the metaphysical foundation of economic thought and action.* Without this basis for our knowledge and valuation, there could be no consistent, rational science of economics.⁴⁶

The heart of man's problem is not metaphysics, meaning the reality of man's being and the underlying foundation of existence. Man's problem is ethics: obedience to God. The closer men come to obeying the terms of God's covenant, the closer their judgments will conform to the God-created reality. Men are given the ability to make judgments. As rebels, they make poor, inaccurate judgments. They do not meet God's standards. These inaccurate judgments (preferences) are reflected in market pricing and profitability.

Ethical rebellion eventually produces intellectual chaos. Men reject the creation as it truly is because it reflects God (Rom. 1:18-22). Their eyes are then darkened. Marxist economics, socialist economics, and Keynesian economics are inaccurate precisely to the degree that they reject God's assessment of ethical cause and effect in man's environment. The breakdown of modern economic thought is the result of the covenant-denying presuppositions of the economists. Economies that are constructed in terms of these ethically rebellious theories suffer painful consequences. Mises has called planned economies "planned chaos."

46. See Appendix B, "The Evolutionists' Defense of the Market."

GOD'S WEEK AND MAN'S WEEK

Thus the heavens and the earth were finished, and all the host of them. And on the seventh day God ended his work which he had made; and he rested on the seventh day from all his work which he had made. And God blessed the seventh day, and sanctified it: because that in it he had rested from all his work which God had created and made (Gen. 2:1-3).

We come now to a topic which is exceedingly controversial theologically, and has important implications for modern business practices. A full consideration of its business implications must be deferred until the exegesis of Exodus 20:8-11. At this point, it is more important to consider the sabbath in relation to Adam and his dominion responsibilities.

We are told that at the end of the sixth day, God saw everything that He had made, and that it was very good (Gen. 1:31). The whole creation was without a flaw. By "whole creation," I mean the earth, the inhabitants of the earth, and the physical celestial bodies. We are not explicitly informed about the condition of the angelic host. We are not told that Satan had fallen, along with his followers, although some Christian expositors have assumed that this event had already taken place prior to the sixth day, perhaps even before the creation of the earth in Genesis 1:1.¹ But we know that the physical creation was

1. Since we are not told specifically about the creation of the angelic host, we can only speculate about the time, or pre-time, of their creation. But since the angels are often associated with the stars (Jud. 5:20; Dan. 8:10; Matt. 29:29; Jude 13; Rev. 1:20; 3:1; 6:13; 8:12, etc.), and the stars were created on the fourth day, it is reasonable to assume that this was the day of the creation of the angels, whose purposes include the worship of God and service to man. If this is the case, then the rebellion of the satanic host probably occurred on the morning of the first sabbath, just prior to man's rebellion. We are certainly not told in the Bible of any function of the angels that necessarily pre-dated the creation of the physical universe. Their close association with man's purposes points to their inclusion in the week of the creation. Satan could inherit Adam's lawful inheritance if he could successfully place Adam beneath

perfect and complete with respect to its component parts. It was not fully developed historically, but it was complete as far as God's original creative activity was concerned. Man, however, had not yet begun his full-scale dominion assignment.

Adam had not participated in the acts of creation. He had been wholly passive in the creation of Eve, providing his rib. He had been active in a preliminary assignment, though dependent: the naming of the animals (Gen. 2:20). A recapitulation of his efforts on the sixth day is provided in Genesis 2. His wife was given to him only after he had fulfilled the original assignment, a subject which will be considered in greater detail in the exegesis of Genesis 2:20-23. He had to complete this one task before he was given his wife. He had become aware of his need for a helper especially designed by God to complement his efforts. He needed to recognize the economic potential of the division of labor. God announced that it is not good for a man to live alone (Gen. 2:18). He then brought the animals to Adam for naming (classification), which Adam did (2:20). Adam received empirical evidence of the incompleteness of the human species. The animals were in male-female pairs. Adam, at that stage, was alone. He worked alone. Something was missing. God had announced Adam's incompleteness beforehand, and Adam could see it. He needed help. He needed a helper.

Adam and Eve rested on the seventh day of the creation. They had not worked as a team yet, but they were nevertheless the recipients of a day of rest. God's first week was complete. Adam and Eve saw the tail end of that original week. They knew that God's week involved a day of rest on the final day.

This raises an important point. The first full day of life for mankind was a day of rest, a sabbath. The seventh day was God's day of rest, or cessation from His creation work. Man had seen part of the sixth day. Adam had worked briefly as a kind of apprentice under God's immediate supervision (He had brought the animals to Adam). But the seventh day for God's creation week was the first full day for mankind. It was a day of rest.

him covenantally. If Adam would subordinate himself to Satan's covenant, then Satan could claim lawful control over everything that God had assigned to Adam as part of the dominion covenant. Satan was successful in his attempt. Only when Jesus came to reclaim the lost inheritance as the "second Adam" did Satan's title to the world require a second temptation. He tempted Jesus to worship him, and promised him the world (Matt. 4:9). Jesus rebuked the devil, died and rose again, and willed the reclaimed inheritance to His people. See Gary North, *Inherit the Earth: Biblical Blueprints for Economics* (Ft. Worth, Texas: Dominion Press, 1987), ch. 5.

Man's week was therefore fundamentally different from God's week. God's week was wholly the product of God's creative acts. It ended with God's resting from His acts of creation. Man's week, on the other hand, *began* with rest. Man was wholly dependent on God. Man was not originally creative. Man could not legitimately claim to be the source of his environment, the source of meaning, the source of power, or the source of any aspect of the creation. Man began where God left off. Man was not originally creative; he was subordinate and re-creative.

How would man regard the day *following* the sabbath? Would he view it as the second day of man's week, a day of re-creative activity which followed a day of rest? Or would he view it as the first day of man's week, a day of man's original and autonomous creative activity? In other words, would man view his week as subordinate to God, beginning on God's seventh day, the day of rest? Or would he view his week as if he himself were God, launching a new program of creation, just as God had launched a week earlier?

The eighth day was to have been Adam's second day of the week, covenant man's week. By acknowledging his total dependence on God as a creature, and by acknowledging that his week began with a day of rest, Adam would have proclaimed his status as a covenant-keeper. The day following the seventh day of God's original week was to begin man's workweek.² Man had to begin work on that eighth day.³ The question was: Would man begin as a covenant-

2. Adam's labor on the sixth day constitutes a partial fulfillment of the dominion assignment. Eve was not present yet, and since the dominion covenant was made between God and mankind as a species ("and let *them* have dominion" [Gen. 1:26a]), Adam was working as the representative head of the family. This naming of the animals should not be considered as the equivalent of the full-scale dominion assignment, for man was still an apprentice. He was being taught a lesson concerning his incomplete status. God *brought* the animals to Adam (Gen. 2:19), indicating the preliminary status of his efforts. He was not yet fully on his own as a spatially (though not ethically or metaphysically) independent agent. God was still close to him in a way which was not the case when Satan approached the pair. The apprenticeship stage was followed by his time in the garden as a training camp. This, in turn, was to have been followed by the spread of mankind across the face of the earth. Man did not remain in the garden long. If my thesis is correct, he was there less than one full working day. God came before them in the cool of the day (Gen. 3:8a), and this could have been the morning rather than the evening. I believe that it was more likely the evening than the morning. They were expelled from the garden as the day was ending—a day of judgment.

3. The concept of the eighth day goes back to the earliest writings of the church fathers. *The Epistle of Barnabas*, which may have been written as early as 100 A.D.,

keeper or a covenant-breaker? It would be man's ethical status before God which would determine how man would regard the eighth day (the day following God's sabbath): as his second day of the week or his first. Would he regard the day of rest as the *foundation* of man's week or the *culmination*? It had been the culmination of God's original week. Would Adam attempt to assert his own autonomy, as if he were God, and announce the inauguration of autonomous man's week by regarding the eighth day as man's first day of the week?

The question arises: How soon did man rebel? This is a speculative question. We have no explicit revelation. We can make intelligent guesses based on the testimony of the Bible, but we are not told for certain. What I am offering here as a possible answer, it must be understood, is only speculation on my part.

Adam and Eve probably sinned on the first sabbath day. There are reasons for this conclusion. They were told that on the day that they sinned, they would surely die (Gen. 2:17). The tree of the knowledge of good and evil was prohibited. It was "off limits." They were to subdue the earth to God's glory, but they were at first to labor with this prohibition in front of them. It constituted a limit on what they were allowed to do.

Man is not a static being. He develops. He learns. That was why God put them in the garden. They were to learn about the tasks of dominion in a beautiful setting, so that they could eventually venture out into the world to subdue it. The longer Adam and Eve continued as faithful stewards to God, the more ingrained the habits of obedience would become. That, of course, is what a training camp is supposed to teach new apprentices or recruits. The longer they continued as obedient servants, the more difficult it would have been for them to break the pattern of obedience. Clearly, the sooner Satan lured them into open rebellion, the easier it would be for him. It would be easier to tempt them successfully, and it would be easier to replace any habits of obedience with habits of disobedience. The

summarizes God's words regarding the sabbath: "Your present Sabbaths are not acceptable to me, but that is which I have made [namely this,] when, giving rest to all things, I shall make a beginning of the eighth day, that is, a beginning of another world." *Epistle*, XV; in Rev. Alexander Roberts and James Donaldson (eds.), *The Ante-Nicene Fathers* (Grand Rapids, Michigan: Eerdmans, [1885] 1979), I, p. 147. Justin Martyr's *Dialogue with Trypho*, written in the mid-second century, writes of the Christian sabbath: "For the first day after the Sabbath, remaining the first of all the days, is called, however, the eighth, according to the number of all the days of the cycle, and [yet] remains the first." *Dialogue*, XLI; in *Ante-Nicene Fathers*, I, p. 215.

biblical principle is stated in Proverbs: "Train up a child in the way he should go: and when he is old, he will not depart from it" (22:6). If this is a general rule for the fallen sons of fallen man, how much more true of sinless Adam and Eve?

Second, not only is man a developing being, but he is a mortal being. If sin must be visited with death, then they would need the mercy of God the moment they transgressed if they were not to die physically that very day. There could be no period of suspended judgment on God's part. Either they would receive mercy immediately, or they would die immediately. In short, they would need a substitutionary sacrifice.

What do we know of God's sacrificial system? We know that all male children in Israel had to be circumcised. This ritual had to be performed on newborn male infants on the eighth day (Lev. 12:3). Furthermore, the sacrifice of the firstborn male animals of Israel also had to be made on the eighth day (Ex. 22:30). The mother of the animal could keep it for seven days; she lost it forever on the eighth. The mother of the Hebrew boy could cuddle him as he had been born for seven days; on the eighth day, he was taken from her and physically marred. There was sorrow for mothers in Israel. God reminded them of their sinfulness, and of the sin of their mother, Eve. They were reminded graphically of the blood that has to be shed for the remission of sins (Heb. 9:22).

The ultimate sacrifice, of course, was Jesus Christ, whose blood was shed for the remission of sins (Matt. 26:28). He rose on the first day of the week, the day after the Hebrew sabbath, the day of rest. He inaugurated the restored week, the new beginning. The Christian sabbath is the first day of the week, the new beginning. The Christian sabbath is the first day of the week, for our rest is in principle established. Christ has overcome the world. No longer do we proclaim autonomous man's week. Christ, the perfect human, has re-established redeemed man's week. The day of rest for man is the first day of the week, the eighth day. Man now has a covering for his original transgression.

What Christians should understand is that the eighth day is a day of rest for us because the seventh was the day of Adam's sin. Adam announced by his self-proclaimed autonomous action in eating the forbidden fruit that he would be as God, that he would inaugurate man's week: six days of labor followed by a day of rest. His week would imitate God's original week, for he was imitating God.

He needed no rest as a creature; he could begin as an originally creative being. The seventh day was his first day of the week, a day of original, autonomous work. He could then rest at the end of the week, as God had rested, when his work was finished. He would complete his own work, announce its perfection, and then rest, as God had rested. He did not begin with rest, nor did he begin with a perfect environment provided to him by God, Adam proclaimed. He began his week by means of his own labor, and to prove his full independence, he began with a violation of God's covenant.

God, in effect, "rubbed man's nose" in his own rebellion. God established the six-and-one pattern as a requirement for man, until the day of redemption came in history. Covenant-keeping man in the Old Testament era would begin work on the seventh day, and his rest could come only at the end of his labors. Man's life would be a life of labor, not beginning with a day of rest, but promising rest only at the end of man's days. Man's rest, even for a covenanted man, would come only at the end. The six days of labor symbolized man's rebellious week, a week begun autonomously, denying the reality of that first full day of rest which prepared man for his week of service. Man turned his back on that first sabbath; God then did the same for man. "Your rest will come at the end of your days, after death has cut you off in the midst of your days." The six-and-one framework was a blessing, for it promised covenant man eventual rest, but it was also a curse: it delayed man's day of rest. Man wanted to be as God, resting at the end of his week of labor. God allowed him to achieve his goal, but only through grace: rest at the end of man's week (life).

Man announced that he, autonomously, would begin his creation week on the seventh day. God's curse on Adam was that his work would henceforth be burdened. Man wanted to demonstrate his own creativity. God showed him how limited he was as a creature, making him struggle with the creation. Man had received a completed, perfect creation as God's gift. It awaited him for the eighth day of history, his second day of the week. Adam spurned the gift, choosing to regard himself as the creator. The cursed earth now serves as a testimony to man of the difficulties of creation, even in an environment that was completed by God.

Adam's first full day of life was also his first day of sin and judgment. What he failed to see was that his *life* and his *rest* were linked. By denying the validity of his rest, he denied the foundation of his life. God cursed man. Every man who is not given life is also not

given rest. He shall have no rest in eternity, for autonomous man is not the source of life, nor can he complete his work and take his own day of rest. Regenerate men will receive rest, and therefore eternal life, but only after their days of earthly life are over. The *promised day of rest* at the end of the week was a *promised day of redemption* at the end of time. What covenant men were to understand from the six-and-one framework was that the day of redemption was in the future. It should have been clear to them that once the day of the Lord (the Lord's day) was revealed in history, the original standard for man's week would then be re-established: one and six.

God honors His plan of history. Man can never escape the testimony of his rebellion. He rebelled and died spiritually on the seventh day. He needs hope in a new life (resurrection) on the eighth day. Christ's resurrection on the eighth day gives covenantally faithful men this hope. They must regard this day as their new day of life. Because of Adam's sin in history, covenant man cannot ever return to the seventh day as his first day of the week (first full day of life). He fell. His day of life depends on Jesus Christ. Therefore, his day of rest is now the eighth day of the week, resurrection day, or the Lord's day. This begins redeemed man's week.

By establishing the first day of the week as the day of rest, Christ and the church assert the new humanity. Redeemed man begins on a new foundation. No longer is he autonomous. No longer does he claim to be able to create a new heaven and a new earth by means of his own autonomous labor. As long as men attempt to imitate God, beginning their week in terms of their own strength, they are doomed to failure. Men must rest on Christ's sacrifice, and in hope of the resurrection, Christ's firstfruits offering. On the day following the sabbath at the end of Passover week, the Israelites offered a firstfruits offering (Lev. 23:10-11). On that day, when the sheaf offering was waved, a lamb was sacrificed (Lev. 23:12). Paul refers to "Christ the firstfruits" (I Cor. 15:23). This firstfruits offering was therefore made on the eighth day. It is the hope in "Christ the firstfruits" which is redeemed man's hope for the resurrection: "For as in Adam all die, even so in Christ shall all be made alive. But every man in his own order: Christ the firstfruits; afterward they that are Christ's at his coming" (I Cor. 15:22-23). Redeemed man's hope is focused on the meaning of the eighth day. Adam died on the seventh day, the self-proclaimed first day of fallen man's week; Christ arose on the eighth day, the God-proclaimed first day of man's week.

Why the eighth day? The Bible points to the sin of man, on Adam's proclaimed first day of his week of creation, or better put, on the first day of man's first week of fully responsible dominion. The first week had been God's week exclusively. He rested on the seventh day. He removed Himself from the physical presence of Adam and Eve. It was their first full day of life. Adam had served as an apprentice the previous day, but on the seventh day, he and his wife received their independence. God would see how they would handle temptation. They did not handle it well. They sinned. He returned to judge them in the evening. This is why the sabbath is "the day of the Lord," meaning judgment day. (The church recognizes this in the sacrament of the communion meal, which is preceded by self-judgment.)

Adam also should have rested and judged, just as God did. He should have condemned Satan at the time of the temptation, as God's delegated representative. He could then have waited for God to return to render final judgment. (See Appendix E: "Witnesses and Judges.") Having condemned Satan, he and Eve could then have had a communion meal with God (as the church does covenantally: Lord's Supper) at the tree of life. Instead, they had communion at the forbidden tree—a satanic communion, like the one forbidden by Paul in I Corinthians 10:20-21.

Adam rebelled against God. Satan had told Eve that on the day the two of them ate of the forbidden fruit, they would become as gods (Gen. 3:5). What had they both learned about God's activity? They knew that He had created the world in six days. They had not been present at the creation, but they had seen part of the sixth day of the week. They could begin their first week as subordinates to God or as imitation gods. They could rest, and the next day begin to work under the authority of God, or they could attempt to establish themselves as sovereign creators apart from God and in rebellion against God. By resting on that seventh day, waiting one day to begin work, they could begin the dominion assignment in the second week of the earth's history, clearly derivative in their authority. On the other hand, by rebelling they could declare a new creation, a new beginning, as autonomous creators. They could declare "man's week" as an alternative to, and a program superior to, God's week. Would man begin the full-scale tasks of dominion acknowledging his secondary importance in the second week, or would he deny the relevance of the week that had preceded "man's week"?

If he chose to become the new god, he would have to act fast. In fact, his first act would have to be an act of rebellion, in order to

establish man's first day of sovereign lordship over his new creation. For Satan to make an effective case for rebellion, he would have had to approach Eve on the morning of the seventh day, the first day of man's week. To interrupt man's labors mid-week would have meant that man had labored for part of his first week under God's sovereign authority. Obviously, at least part of the week would have been visibly God's week, not man's. So Satan probably began his temptation on the morning of the seventh day.

God, as totally sovereign over history, resting assured, rested the seventh day. Autonomous man cannot rest in confidence that his labors will be successful. He dares not "waste" time. He cannot afford to waste any resource as precious as time. Covenant man can rest on God's sabbath, for he knows that God is sovereign, and that he, as God's obedient subordinate, possesses the grace of God. His work will persevere. He can enjoy the day of rest because he knows that every week is God's week. The law of God is his tool of dominion, and he knows that the law of God is in conformity to the operations of the world. He does not have to labor seven days a week in order for God to bless his efforts as dominion man. He is subordinate to God, so he can be confident as a dominion man over God's creation. Covenant man enjoys his rest.

Autonomous man's week never ends. The eighth day is like the sixth day, and the seventh day is like the second day. The week is never-ending, and the work is never-ending. Man's week is not a week at all; it is a life of frantic labor, for man must establish his dominion over foreign territory—God's creation—in terms of antinomian rebellion. But law is man's tool of dominion, so the task becomes an ever-greater burden as rebellious man departs more and more from God's revealed law-order. There is no day of rest—psychological, confident rest—in man's week. Covenant-breaking man cannot enjoy his rest as a zero-cost blessing.

Satan wanted to make man his slave. He wanted to drive his new slave unmercifully, just as the Pharaoh of the oppression wanted the Hebrews to serve as slaves, and the Pharaoh of the exodus did with his Hebrew slaves (Ex. 5:5-14). God wants servants; Satan wants slaves. God wants men to prosper and rest; Satan wants men to fail and bleed at their labors. God's week gives covenant man confidence in his own labors, for it gives him a day of rest. Satan's week—for man's week apart from God is Satan's week, ethically—is a week without confidence or rest.

Man sinned, and he sinned early. He did not taste the fruits of righteousness for eons before he rebelled. He went straight to the forbidden fruit, in a rebellious assertion of his own autonomy. He was not content with the glorious rest he had been offered. He had been offered a taste of the fruits of labor, a rest without a week of human labor preceding it. God had shown him what lay ahead, if only he would conform his heart and his labor to Him. Like a dessert before the meat and potatoes, God had offered Adam and Eve the blessing of godly rest. In the face of this, they turned their backs on God and declared man's week. They converted man's day of rest into a day of *seeming* economic loss, for man would henceforth be faced with alternative costs. For every hour he remained at rest, man would lose the income which that hour's labor might have produced. Outside the covenant, man can no longer count on the fixed relationship between God's law and God's blessings. Outside the covenant, rebellious man can no longer rest assured that his rest will have its reward. In man's week, men are faced with a decision: steal time from God's sabbath rest, but increase their short-run income; or forfeit short-run income on the day of rest, but reap the rewards of faithfulness that God promises to His covenantally faithful people. Had Adam not rebelled, he would not have acknowledged the validity of this choice. He would have rested, confident that he was not stealing from God, and confident that he was not forfeiting any income that he might otherwise have earned. He would have known the fruits of righteousness. His day of rest would never have appeared to him as an expense, but as a blessing from God. In God's week, the day of rest is an unmitigated blessing, a cost-free blessing, not a day for agonizing over the costs of resting (the forfeited economic benefits of working). When Adam declared man's week, he robbed himself of a blessing he might have experienced: a day of rest which is free of charge.

While the one-six and six-one patterns are those that we associate with a week, we should also recognize the *life-sabbath-dominion* pattern of three days. Adam was created on the sixth day. He served briefly as an apprentice under God, getting a taste of the nature of God's dominion assignment. He should have rested the next day, his first full day of life. This can also be understood as the second of three days. The third day, he was to have begun his work. He was to have begun as a covenant-keeper. His dominion assignment would have brought fulfillment to him, for his work was to have been

meaningful and blessed by God. The second day, given this three-day framework, he rebelled. But his life was to have been marked by the initial three-day pattern: preliminary labor as an immediate subordinate to God, rest the next day, and dominion labor as God's agent on the third day. In short, *life, sabbath, dominion*.

We see this same pattern in Christ's work of redemption. On the day before the Hebrew sabbath, He was taken to the cross and executed, suffering for the sake of His people. He had served throughout His life as a suffering servant of God, and this act of sacrifice on the final day of His pre-resurrection life was the essence of His redemptive work on earth. The next day, His body rested in the tomb. This was the sabbath day.

Christ's sabbath rest was spent in the presence of God. He told the thief on the cross, "To day shalt thou be with me in paradise" (Luke 23:43). His earthly body rested in the tomb, but His disembodied soul had fellowship with God for the entire sabbath. *Perfect rest and perfect fellowship*: here is the heart of the sabbath. Christ, because of His death, fulfilled perfectly the terms of the sabbath. The third day, he rose from the dead. He had been cut off in His prime; now He lived again, ready to inaugurate the dominion phase of His life, through the church, His body (I Cor. 12:12-20). All power was given to Him (Matt. 28:18). The day after the sabbath, therefore, was the third day, yet it was also the eighth day, the first day of redeemed man's new week. So we see a fusion: third day, eighth day, and first day. Christ's resurrection re-established the pattern of Adam's life that had been God's original requirement: a day of life, a full day of rest, and a day of dominion under God. Our new life in Christ is celebrated now on the first day of the week.

Because Christ's new life is imparted to His people through regeneration, we can serve as dominion men, in time and on earth. Our sabbath is now (Heb. 4:1-11), so we can rest spiritually, but at the same time, we are exercising our dominion responsibilities. We are dominion-minded because we have the mind of Christ (I Cor. 2:16). He has conquered Satan, so we in principle have conquered. We have the down payment (earnest) of our inheritance in Christ (Eph. 1:14). This means that we have a down payment on our future era of sabbath rest, which is also an era of total dominion. We work now, yet we also rest now. Our rest is not perfect, nor is our dominion perfect, but as we work out our salvation with fear and trembling, we learn the meaning of both rest and dominion.

Conclusion

The foundation of *dominion under Christ* is *rest in Christ*. The basis of our new life in Christ is His resurrection. He rose on the third day after His life ended, thereby covering the sin of Adam, who rebelled the day after he had been given life, assuming my previous argumentation is correct concerning the day of Adam's Fall. Christ calls us to rest on the first day because God wants us to acknowledge ritually that the basis of dominion is our commitment to God, who provides everything for us, including life, before our dominion assignment even begins. We begin with rest, as Adam was supposed to have done. We view the day of *true life* as our sabbath day, our day of *confident rest* in Christ, which can be seen as the eighth day and also as our first day of the week, redeemed man's week.

Adam announced his autonomy when he inaugurated man's week. It began with work, but it was Adam's autonomous, rebellious work. Prior to the coming of Christ, God made His people adhere to a sabbath plan: rest on the seventh day. Their rest was always before them at the end of the week. God was telling them graphically that their ultimate rest in Him was also being delayed. Then came Jesus Christ. His resurrection on the first day of the week, the day after the Passover sabbath, the eighth day, brought God's promised rest to His adopted sons. Their rest was now assured. The proof of this rest is Jesus Christ. He came in history, so the promised rest is, in principle, manifested in the past. We celebrate our rest on the first day of the week now. Christians announce their reliance on Christ's work by resting on the first (eighth) day of the week. They no longer claim autonomy. They, as the former sons of the first Adam, no longer declare their creative independence by working the first day of the week, as Adam did. Redeemed man's week begins with rest, in full assurance that God's providence will sustain him and prosper him. Unredeemed man's week begins with labor. The Jews hope for the promised future rest, and they still celebrate the seventh day sabbath. The pagans, unless influenced by Jews or Christians, or unless influenced by the Islamic imitation of both "religions of the Book," which celebrates its rest on the sixth day (Friday), still cling to their autonomy, still drive themselves mercilessly. Autonomous man's week is a full seven days, and autonomous man will never achieve rest.

THE VALUE OF GOLD

And the gold of that land is good: there is bdellium and the onyx stone (Gen. 2:12).

In describing the land of Havilah, Moses singles out its supplies of precious metal and stones. (Some think bdellium was a plant or plant byproduct.) This is the sole reference to inanimate objects prior to the rebellion of man which specifies their unique quality. Moses understood that the people of his day would comprehend the value of a land which possessed jewels and gold. Man's place of original responsibility was a splendid land, and the presence of fine gold was one of its marks of splendor. God's generosity to man was immediately apparent to anyone reading or hearing Moses' account of Adam's environment.

Precious metals and jewelry have been regarded as basic wealth objects for as long as man has left records. Gold has been a form of money for as far back as we can investigate. Its brilliance, durability, malleability, and universal respect as a metal of continuing value have made it a unique economic resource. Its scarcity in relation to the high value men place on the ownership of the metal (high marginal utility) has made gold a universal currency. Gold is something worth owning. Even Adam in the garden could be regarded in retrospect as blessed, Moses made it clear—all the more reason to condemn Adam's ethical rebellion. In a perfect creation, which God had announced as being good, gold and jewels were something special.

Gold is the universal money. Wherever men truck and barter, they respect gold as a means of exchange. Why? What is money, and why should gold serve as its universal archetype? Money is simply *the most marketable commodity*.¹ To one extent or another, money must

1. Ludwig von Mises, *The Theory of Money and Credit* (New Haven, Conn.: Yale

have the following characteristics: *divisibility*, *durability*, *transportability*, *easy recognizability*, and *scarcity* in relation to its demand (high marginal utility). Many objects have functioned as money in the history of man. Cattle, precious metals, salt, shells, and even women have served as units of account. (Divisibility has always been a problem with women; half a woman is worse than none at all.) Money must serve as a unit of common account. It is often referred to as a "store of value," although the terminology is misleading, since it has overtones of fixed objective value apart from value-imputing men operating in competitive markets. We might better say that money is a valuable thing to store. Most important, money has *historic* value. It was valuable yesterday, or perhaps centuries ago, and traders can assume that a particular form of money will therefore be valuable in the future. It is this *continuity of value over time* which is paramount in establishing a particular commodity as an acceptable monetary unit.

There is a theoretical problem with this analysis. If money is valuable as money today because it was valuable as money yesterday, how can we explain the origin of money? This was a problem answered by Prof. Mises' "regression theorem" in his 1912 book, *The Theory of Money and Credit*. At some point in the history of a particular monetary unit, it must have been valuable for its other properties. Perhaps its beauty was central. Possibly it was used as an ornament or as a sacred object. Acting men must have imputed value to the metal or other object for reasons other than its previous service as a means of exchange. Mises' argument is plausible, but it is still a form

University Press, [1912] 1953), p. 32. Reprinted by the Foundation for Economic Education, Irvington-on-Hudson, New York. Writes Mises: "In the marketability of the various commodities and services there prevail considerable differences. . . . It is these differences in the marketability of the various commodities and services which created indirect exchange. A man who at the instant cannot acquire what he wants to get for the conduct of his own household or business, or who does not yet know what kind of goods he will need in the uncertain future, comes nearer to his ultimate goal if he exchanges a less marketable good for a more marketable one. It may also happen that the physical properties of the merchandise he wants to give away (as, for instance, its perishability or the costs incurred by its storage or similar circumstances) impel him to wait no longer. Sometimes he may be prompted to hurry in giving away the good concerned because he is afraid of a deterioration of its market value. In all such cases he improves his own situation in acquiring a more marketable good, even if this good is not suitable to satisfy directly any of his own needs. . . . Money is a medium of exchange. It is the most marketable good which people acquire because they want to offer it in later acts of interpersonal exchange." Mises, *Human Action* (3rd ed.; Chicago: Regnery, 1966), p. 401.

of "conjectural history." We can only speculate concerning the origins of money.

What we *do* know is that God calls attention to the special position of gold and the precious stones of Havilah. He expects men to recognize the special nature of His gift to mankind of assets that are almost universally recognized as valuable. Their beauty in men's eyes—an indication of universal standards of beauty among men—and their scarcity (high marginal utility) in relation to this universal demand for beautiful jewels or gold ornaments, result in the creation of what appears to be an objective value for gold and jewels. This is the closest that we should come to attributing "objective" or "intrinsic" value to gold, silver, or some other universally recognized form of money. The almost universal acceptability of gold in voluntary exchanges between men has produced *historic* value of such long standing for the metal, that men speak of gold's intrinsic value. But this supposed "intrinsic value of gold" is better understood as an *almost intrinsic desire to own gold among mankind*. Even so, this desire is never a fixed emotion, irrespective of time and place. There is no fixed market value for gold, no "innate price" of gold. Gold is not a universal fixed economic reference point for all market exchanges. However, God provided high quality gold for Adam, and Adam and his heirs were (and are) expected to recognize God's generosity in this regard. The gift of gold was a fine one indeed. It still is.

The use of gold and silver as ornaments is a fact recorded by the Bible. *Strong's Concordance* lists three columns of fine-printed entries of verses that refer to silver, and three and a half that refer to gold. Unquestionably, the Bible records the long history of both metals as primary forms of wealth. "And Abram was very rich in cattle, in silver, and in gold" (Gen. 13:2). Gold and silver were convenient units of account because they could be weighed in terms of a standard unit of weight, the shekel (Gen. 24:22). King Asa paid out the gold and silver of Judah's treasury to Benhadad as tribute money (I Ki. 15:18). The fact that this payment was perfectly acceptable to Benhadad indicates how universal these metals were in exchange.

How valuable is gold? When making an estimation of the incomparable value of God's judgments, David uses gold as a representative standard of comparison, albeit a dim approximation. But gold is the highest earthly standard by which we can compare God's judgments (Ps. 19:9-10). Gold is desirable; how much more desirable

is the righteous judgment of God! This same comparison is used repeatedly by biblical writers (Ps. 119:72, 127; Pr. 3:14; 8:10, 19; 16:16; etc.). Even the New Jerusalem, God's final and most glorious physical gift to redeemed mankind, is referred to as pure gold (Rev. 21:18). From the garden of Eden to the New Jerusalem, gold is wealth.

Monopoly and Dross

It is when men as citizens or government officials tamper with the gold and silver content of the currency that disaster results. When men's hearts are dross, they risk the production of dross currency and dross consumer goods (Isa. 1:22). The boom-bust business cycle is one of the disastrous consequences of currency debasement. Kings and central bankers have practiced this monetary deception for as long as there have been kings and central bankers. They pour less expensive (base) metals into the silver or gold used to cast ingots, or coins; they substitute paper notes or checks or computer entries on magnetic tapes for the precious metals, and then they multiply the notes, checks, or computer entries. Money multiplies, prices rise, and the redistribution of wealth through deception increases. The civil government fosters fraud, either directly (debasement, printing press money) or indirectly (central and commercial banking). When the authorities of the civil government stamp a coin or bill with a seal testifying that a particular quantity and fineness of a precious metal is contained in a coin (or a specific quantity of this metal is on reserve for immediate exchange of the paper note), and subsequently they debase the coinage or print more bills than there is metal on reserve, they thereby act fraudulently. They first create a monopoly of money issue, and then they misuse this government monopoly. They spend the fiat money into circulation, buying up the market's scarce economic resources. The State thereby increases its consumption by levying the "invisible tax" of monetary inflation.

The monopoly of money is fraught with danger for all but the most alert private citizens and the beneficiaries of State favors. The authorities cannot long resist the temptation of levying the invisible tax of price inflation. It is true that Byzantium was blessed with a gold coinage for 800 years, but this was unique in man's history.²

2. Charles Weber, "A Closer Look at Gold," *The Freeman* (Sept., 1972), pp. 337-38.

This is why inflation of the money supply has been a feature of human history from the beginning of our records. Governments cheat.

Honest civil governments are not the creators of money; they are, at most, the certifiers of money. This is why the Bible again and again warns about the sin of fraudulent weights and measures.³ When Jeremiah bought the field from his kinsman, he “subscribed the evidence, and sealed it, and took witnesses, and weighed him the money in the balances” (Jer. 32:10). The money in this case was seventeen shekels of silver (Jer. 32:9). The debasement of the currency is nothing less than tampering with the weights and measures, whether done by private coin clippers, counterfeiters, or State officials. The universal abolition of the gold standard in the twentieth century after World War I led directly to universal inflation, revolution, and boom-bust trade cycles in the same historic period. There is no escape from the moral laws of God, whether or not the hired professional economists recognize such a moral order’s existence. The gold coin or silver coin standard, or multiple coin standard of freely exchangeable currencies, is the direct result of biblical law. The abolition of honest weights and measures, through the creation of fractional reserve banking, printing press money, coin debasement, or coin clipping, must inevitably result in unpleasant social and economic repercussions. When someone issues a receipt for metal of a certain fineness and weight, he must have just exactly that on reserve. To issue more warehouse receipts (bank notes) than there is metal on reserve is nothing less than tampering with the scales, for the results are identical to coin debasement. It is the same sin; it must result in the same judgment. We live in a universe which is personal and governed by moral law. Economic crises are the built-in self-regulating devices—built into man and the creation—that restrain men in the pursuit of evil. Dishonest weights, dishonest money, dishonest authorities, and dishonest cultures go together. And with them go disasters.

Conclusion

Though the Roman Empire is dust today, its gold and silver coins still can be exchanged for scarce economic resources. The

3. R. J. Rushdoony, *Institutes of Biblical Law* (Nutley, New Jersey: Craig Press, 1973), pp. 468-72. See Lev. 19:35ff.; Deut. 25:13, 15.

Caesars have been in their graves for millennia, their authority long defunct, but the coins bearing their likenesses can still buy goods and services. Men impute value to precious metals long after they have ceased imputing value to political regimes. Precious metal currencies outlast civil governments. Gold is money. Silver is money. So it has been since the beginning of recorded history, and so it shall be at the end. The gold of Havilah was good. It was high quality gold. It was desirable gold. But most of all, it was not easily counterfeitable gold, especially by lawless civil governments.⁴ This is more than we can say about banknotes, credit cards, and unbacked, fiat currencies.

4. Gary North, *Honest Money: The Biblical Blueprint for Money and Banking* (Ft. Worth, Texas: Dominion Press, 1986).

SUBORDINATION AND FULFILLMENT

And the LORD God took the man, and put him into the garden of Eden to dress it and to keep [guard] it (Gen. 2:15).

Cosmic personalism affirms that all things have their being and meaning in terms of the person and plan of God (Acts 17:28). It absolutely denies the possibility of autonomy—self-sufficiency—for any aspect of the universe. All the creation is subordinate to God. There is also a hierarchy within this created order. Man is under God; nature is under man.

The world was created good. God had already affirmed the goodness of the creation when He assigned the tasks of dominion to man. Despite its God-derived and God-proclaimed goodness, nature was not fully developed. The earth's surface was not yet under man's dominion. God created a garden eastward in Eden as a place of initial testing and training for man. Adam was not yet ready for the full task of worldwide dominion. He was ready to learn, however.

The earth was never designed to be autonomous. Neither was the garden. Though the creation was able to function without man's immediate presence, it could not achieve its full flowering apart from man. This is equally true in the post-Fall era. The natural world needs guidance and care from man, especially covenantally faithful man. For nature to flower, it must be subordinate. Nature is fundamentally *passive*, despite the active competition of the species within the framework of nature's law-order. But nature was designed; it has a goal; God has a purpose for it. Natural processes are not fully self-correcting, for without man's care, nature cannot independently achieve its purpose. The so-called balance of nature is insufficient to produce a developed, mature nature. Nature apart from man is God-sustained and God-restrained. Under covenantal dominion, cursed nature's restraints are progressively lifted.

Nature was allowed to operate briefly without man for five days. Man was allowed to operate briefly without woman for less than one day. Neither could be fully comfortable without its complement. Nature needed subordination under man. Man needed subordination under God. Man was unable to achieve the fullness of dominion alone. *Dominion requires a division of labor*, so he received his helper fit for him. The familiar phrase "helpmeet" has distorted the meaning of the original words. Eve was a helper "meet" or *fit* for Adam. She was the product of design. Adam knew he could not perform his tasks efficiently without another person to assist him. Like nature, he had been created good but incomplete. He knew from the very beginning that he was not self-sufficient.

Man's Calling

God assigned Adam an initial task to be completed by himself. He was to name the animals of the field and the birds. This meant that he had to classify them, intellectually integrating their functions into an overall design. The "many" were to be arranged in terms of the "one," meaning the plan of God as perceived and interpreted by Adam, God's image. We are not told whether this classification involved all the beasts of the earth, or whether it was limited to the field of the garden. If it involved all animals, the task is barely conceivable in retrospect. We cannot imagine how such a task could have been completed by one individual in a few hours. Even if the assignment involved only the beasts and birds of the garden, it would have been an awesome task. Yet Adam completed it in a few hours. His mind, prior to the Fall, was efficient beyond anything we can imagine. Modern man, with the aid of enormous capital, the division of labor, and the modern computer, has only begun to match the skills of the first man in the garden.

Adam worked before he married. His definition of himself was set in reference to his subordination to God and the covenant of dominion. *Man's work is fundamental to his very being*. Eve was given to him within the framework of his calling or vocation before God. The family has its meaning in terms of the covenant of dominion. The individual family is influenced overwhelmingly by the particular calling of the husband. Wives are to be selected in terms of the man's calling. They are to help their husbands fulfill their callings (Prov. 31:12, 23, 27). By departing from this interpretation of the meaning of marriage, we find that religions, cultures, and individual families

have neglected their callings before God, and the tasks of dominion have not been achieved in a systematically biblical manner. The family structure has been designed for a purpose, and by neglecting the husband's calling as the central feature of the family, rebellious men have compromised the family.

The tree of the knowledge of good and evil also testified to the impossibility of autonomy. It was a visible and constant reminder of man's subordination to God and his total dependence on God for his power and knowledge. Knowledge is a prerequisite of power. God set a tree before them that promised a special form of knowledge to man. Then He declared the tree "off limits." They could not enjoy its fruit. They had to acknowledge a zone of knowledge, and therefore power, which was ethically forbidden. They had to live in terms of a *seeming imperfection* in their very being. They were told that they and the creation were good, yet they were forbidden access to the tree. They had to work out their task of dominion in a cooperative effort, as man and wife, and as a family before God. Were they imperfect metaphysically? Was some fundamental aspect of their being, their humanity, lacking? God said no. They were perfect as beings, though they had a life-long task of dominion and celebration before them. They were perfect as creatures, but they were not autonomous. The tree reminded them of their necessary dependence on God, for there was knowledge which was closed to them as metaphysically complete, ethically perfect humans. Their authority would always be derivative.

They were not to eat of the tree. To do so meant that they were dissatisfied with their position as subordinate, dependent creatures. To do so meant that they believed they could capture forbidden knowledge and therefore forbidden power. Satan recognized this in his tempting words, that they would become as gods (Gen. 3:5). In effect, they would be criticizing God for the imperfection of His creative acts. He had left them *metaphysically incomplete*, they would be asserting, devoid of a crucial aspect of "true humanity." Therefore, to eat of the tree they had to proclaim that they, as autonomous beings, could decide for themselves to capture their "full humanity" by an act of ethical rebellion. They would determine for themselves whether or not they would die, although God had promised them that they would. They would, as sovereign experimenters, *test* the word of God. But it would not really be a test, for by eating of the tree, they were already asserting that God's word could not possibly

be what God said it was, namely, absolutely authoritative. To test God's word meant that the testing agents already had denied the absolutely authoritative nature of God's revelation. By assuming that God's word could be tested, they would be asserting that *chance*, not God's word, is authoritative. It *might* be that they would not die. Therefore, it *had* to be that God's word is not sovereign. Chance, not God, is therefore the sovereign of the universe, and man might overcome impersonal chance or impersonal fate by gaining sufficient knowledge. The first step towards total knowledge would be the quest for a specifically forbidden form of knowledge.

Would God test man's capacities in the garden? Then man would test God's word in the garden. Who was dominant? Who was subordinate? Would man find his fulfillment in terms of his God, his wife, and the covenant of dominion? Or would God find *His* fulfillment in terms of man, man's plans, man's tests? The tree was a symbol of the real test, which was ethical, not intellectual or metaphysical. Adam could learn the tasks of dominion as a subordinate. Or Adam could attempt to become autonomous, a self-directed sovereign who might achieve total dominion over the creation through the exercise of his own autonomous knowledge and power. He could find fulfillment in terms of subordination under God and dominion over nature, or else he could attempt to find fulfillment in terms of a struggle against God, nature, and chance, with chance as the present reigning sovereign, under which God also operates, trying to make His word authoritative. The tree stood as a symbol of man's ethical and *metaphysical subordination* as a created being. Ultimately, Adam could not test his metaphysical position, for God made him what he was. The tree was a test of his *ethical position* before God.

Training for Dominion

God gave Adam almost free rein in the garden. Only one pathway was forbidden. Adam was supposed to have learned the skills of dominion in the garden, and from thence he and his family were to have gone out as dominion-exercising subordinates under God. He was not supposed to stay in the garden forever. The garden was a training ground, one which God had declared good but incomplete (undeveloped). Adam's task was to bring the earth under control for the glory of God and in terms of God's law-order. His special task was to make nature fulfilled as well as good. In doing so, he himself would become complete, as a creature who had fulfilled his God-

appointed purposes. ("Completion" refers to *historical* fulfillment, not an advance in "being.")

It is not generally understood by Christians that *paradise*, as represented by the garden or heaven, is *impermanent*. Adam was to use the beauty of the garden as a temporary resting place, a place of joy, almost in the same way that Western cultures regard the honeymoon. It was a place of learning and training. Like the honeymoon, the garden experience was to serve as a preliminary blessing which would lead to fulfillment in dominion. Marriage, not the honeymoon, is central to dominion, just as the world, not the garden, was to have been the focus of Adam's concern. But Adam wanted paradise on other terms. He wanted instant knowledge, not the progressive knowledge which is the fruit of dominion, first in the garden and subsequently in the whole earth. He wanted a "higher consciousness" apart from the labor of dominion. He wanted special knowledge, instant knowledge, not the knowledge of experience as a subordinate. His eyes turned to the tree in the midst of the garden, rather than outward toward the world, which would remain unfulfilled apart from his active dominion. He subsequently abandoned his calling under God. Rather than spread the zone of paradise from the garden to the world, turning the world into a paradise, he decided to choose instant illumination through a prohibited action, in defiance of God.

As Adam discovered to his consternation, God would not allow him to abandon his calling, for this calling is central to all humanity. He was cast into the world prior to the completion of his training. He was still responsible before God. He still had to exercise dominion. Nature deserves its fulfillment. Adam would not be allowed to abandon nature. He could not remain in the garden, that most pleasant of training camps, seeking higher consciousness. He had to work. So do his heirs.

Conclusion

God will achieve His goals. Man will achieve dominion over nature. Nature will become fully fulfilled (Rom. 8:19-23). But the long process of dominion is now cursed. Having failed in our pain-free training, we are now forced to learn painfully "on the job." This was not the case in the garden. Adam rejected pain-free training.

It is a mistake for Christians to focus their long-term hope on the joys of heaven. Heaven is paradise (Luke 23:43; II Cor. 12:4). It,

too, serves as a training ground. It is a good place, but it is not our final resting place, any more than the garden was intended to be our final resting place. It is an "intermediate" state. We are still to exercise dominion over the earth. Heaven is a place which, like the garden was before the Fall, is essentially unfulfilled. Men in heaven are separated from their eternal bodies (I Cor. 15:35-55). They cry out constantly: "How long, O Lord, holy and true, dost thou not judge and avenge our blood on them that dwell on the earth?" (Rev. 6:10). The focus of their concern, even in heaven, is the earth. It is to be our concern as well. *We are required to extend the paradise of heaven to the earth.* Heaven has replaced the paradise of the garden. Each was designed to be temporary. Our goal is heaven on earth, to be completed after the final judgment; we are to dwell in the New Heavens and New Earth (Rev. 21:1). Revelation 22:2 describes a developed paradise: the fulfilled city. Ours should be the same concern which was supposed to have been Adam's concern in the garden, the initial paradise. The dominion covenant is eternal.

Because of Adam's transgression, we are receiving our training in time and on a cursed earth. We are supposed to be improving our skills of dominion. We are working out the terms of the dominion covenant, but we labor under a curse. Our work has meaning, both now and in eternity. We will receive our rewards in heaven (I Cor. 3), but these are not our sole and final rewards. Heaven's rewards are like military medals or the prizes of the athletic field (I Cor. 9:24; Phil. 3:14; II Tim. 4:7-8). They are things worth competing for, again and again, if long life permits. Heaven's rewards are a legitimate goal of human action. But these rewards are the starting point, like Adam's successful classifying of the animals. Heaven's rewards are given in response to a *preliminary* task well done. They are our graduation diplomas, which we will receive on judgment day (Rev. 20). *Then we will go forth into the world to work.* Men and the created realm will at last find completion, ethically speaking, under the sovereignty of God. The curses on man, man's labors, and nature will be permanently removed (Rev. 22:3). With ethical perfection as the foundation, the creation will be subdued and cared for, throughout eternity. The *battle* with nature will at last be over. The *labor* over nature will never end.

THE GOD-DESIGNED HARMONY OF INTERESTS

And Adam gave names to all cattle, and to the fowl of the air, and to every beast of the field; but for Adam there was not found an help meet for him. And the LORD God caused a deep sleep to fall upon Adam, and he slept: and he took one of his ribs, and closed up the flesh instead thereof; and the rib which the LORD God had taken from man, made he a woman, and brought her unto the man. And Adam said, This is now bone of my bones, and flesh of my flesh: she shall be called Woman, because she was taken out of Man (Gen. 2:20-23).

Adam had demonstrated his competence by naming the animals, his first completed assignment. He had begun to work out the commandments of God. By engaging in specific labor, he had begun to extend his control over the creation, thereby beginning the historical fulfillment of his own nature. He was asserting his legitimate, subordinate sovereignty over the creation. Only after he had demonstrated skills in his calling was he provided with a wife. The husband's *calling* is therefore basic to marriage. It is supposed to be *antecedent* to marriage.

This point cannot be overstressed. The animals were simultaneously created male and female from the beginning. Sexual reproduction and the multiplication of each kind's numbers were the product of the male-female division. But Adam was created before the woman. The assignment of cultural dominion was given to a representative head of the family of man, even before there was an historically existing family. *The heart of man's being is not his sexuality; it is his calling before God.* He is fundamentally different from the animals. Where sexuality is made the foundation of marriage, rather than the calling, cultural development will be retarded. The male-female relationship, in the case of mankind, is not based on the fact of biological reproduction; it is not, in some evolutionary sense, the

product of competitive biological pairings of previously existing species. Animals and humans are to multiply (Gen. 1:22, 28); man is uniquely assigned the tasks of dominion. The male-female relationship among human beings is based on the prior planning of God and His specific call to the first man, Adam. God called Adam to a series of tasks; only when he had completed one assignment did God present him with his wife and assistant, Eve. Marriage was originally intended to be grounded in the covenant of dominion, not in the mutual attraction of men and women, and not even on the need of human beings to reproduce. *Marriage is intended to be subordinate to the covenant of dominion.* Marriage finds its purpose within the dominion covenant. This is the distinguishing feature of human sexual pairings, in comparison to animal pairings.

Marriage has numerous subordinate purposes: the lawful extension of the race, mutual comfort, personal development of its members, the provision of cultural stability, social welfare functions (including education), sexual fulfillment, and capital accumulation. Nevertheless, the Genesis account gives us the central focus of marriage: *the division of labor*. Eve was provided as "an help meet" for Adam, meaning *an assistant specially designed to complement his skills*. God designed Eve to fit Adam's needs in his tasks of dominion. This means that God assumed that the *harmony of human interests* is compatible with, and inescapable from, the *hierarchy of the creation order*. God is sovereign over all things; man is under God and sovereign over his wife (and children); the family of man is sovereign over the creation. Prior to the Fall of man, this hierarchy was in no way contradictory to the ultimate harmony of interests in the creation. Adam's very nature as a creature required the presence of a subordinate assistant; without her, his tasks, and therefore his very being, could not be fulfilled. As Paul puts it: "For the man is not of the woman; but the woman of the man. Neither was the man created for the woman; but the woman for the man" (I Cor. 11:8-9). But there is *unity* as well as hierarchy: "Nevertheless neither is the man without the woman, neither the woman without the man, in the Lord. For as the woman is of the man, even so is the man also by the woman; but all things of God" (I Cor. 11:11-12). A *mutuality of dependence*, biologically and especially in terms of the division of labor, is affirmed by Paul. It is significant that Paul's comments appear within his discussion of the division of labor within the church (I Cor. 11-12).

The hierarchy of authority in the creation cannot be evaded. There can never be anything approaching total equality. The *ideology of equality* is inevitably nothing more than the substitution of a *different form of inequality* for an existing one. Consider the lure of equality given to Eve by the serpent. "Ye shall be as gods, knowing [determining] good and evil" (Gen. 3:5b). Yet this was not what the serpent believed. By promising them equality before God, the serpent was asking them to worship him as superior to God. After all, whose word was truly authoritative? Was it not the serpent's? They should disobey the explicit command of a sovereign God, confident that they would be protected from death by the sovereign word of the serpent. They would then become *ethically subordinate to Satan*.

It is instructive to observe the response of Adam and Eve to God's questions. God came first to Adam, whom He had placed in authority over the woman. Adam immediately blamed his wife. He had deferred to her authority in the matter of deciding whether or not to eat the forbidden fruit. He had been commanded to exercise authority over her, and with her, over the creation. His sin, clearly, was to reverse the order of God's designed hierarchy, in the name of achieving equality with God. Then God came to the woman. Why had she done such a thing? Immediately, she blamed the serpent. She, who was supposed to be a co-servant with her husband over all creation, had instead worshipped a part of the creation. She had accepted as sovereign the word of a creature—a rebellious creature at that. She had inverted the hierarchy. She had worshipped the serpent and then had asserted dominion over her husband. And when caught in their rebellion, both she and Adam had blamed the environment for their condition: Adam blamed the woman *God* had given to him; Eve blamed the serpent. God's environment, they seemed to argue, was in some way to blame for their condition. Though He had declared it perfect, nevertheless it supposedly had brought them to this disaster.¹ In the quest for equality, they had only affirmed an inverted pyramid of authority; seeking to be gods, they decided that they might safely test the word of the Creator.

A society which pursues equality as a goal will of necessity destroy the harmony of interests, for that harmony of interests was created within a framework of hierarchy. Women are designed to be functionally subor-

1. R. J. Rushdoony, "The Society of Satan," (1964); reprinted in *Biblical Economics Today*, II (Oct./Nov. 1979). This bi-monthly newsletter is published by the Institute for Christian Economics, P. O. Box 8000, Tyler, Texas, 75711.

dinate to men in marriage. This is *no* way implies that women are *ethically inferior* to men in marriage. It is the error of egalitarian humanism to equate functional subordination and ethical inferiority. Where there is a hierarchy of wealth, power, or knowledge, some humanist can be found who will call for the total reconstruction of society and the creation of an undefined social egalitarianism. The harmony of interests among men and women is assumed to be operable only where all signs of inequality are smashed. The Bible affirms the opposite. The harmony of interests throughout human society, and even the entire creation, can be attained only within a *theocentric* and *hierarchical* framework.

The Division of Labor

The division of labor is required by God for the effective extension by man of the covenant of dominion. The first human couple provide archetypes of the division of labor system. *First*, they were both *fully human*. As image-bearers of God, they had comparable goals and interests, compatible talents and responsibilities. This shared humanity made cooperation possible. *Second*, they were *inherently different*. These differences are by nature and design fully productive. Each had a different perspective, since each was biologically a separate creature, with different tasks to fulfill within the hierarchy of responsibility. Eve was designed to fit Adam, biologically and in terms of his tasks. The “biological fit” was less important than the “help fit for him” that she would provide, and far less important than the “biological fit” of females to males in other species. Eve was like a missing piece in a cosmic puzzle, the final piece which brought the potential for harmony and a sense of wholeness to the creation. (The next-to-the-last piece was Adam’s naming of the animals.) Her innate difference complemented his gifts; together they might more efficiently extend the covenant of dominion. What he lacked, she provided, and vice versa.

The division of labor rests on two fundamental facts of nature. *First*, the *innate differences among human beings*. They have different desires, different skills, and different roles to play in the cosmic plan. *Second*, there are *differences of geography*. Different areas offer different raw materials, different weather patterns, and different problems to those who would extract wealth from the environment. Therefore, Adam and Eve were designed to be different. Cloning—the endless reproduction of identical members of a species through genetic

manipulation—is absolutely hostile to the principle of the God-ordained division of labor. It limits the variety of a species within the bounds of created limits placed on each “kind.” Each man or woman is supposed to contribute unique efforts to the historical process of dominion. The *multiplicity of skills and contributions* is to be ordered through *competition and cooperation*. Each person is therefore a “help fit” for others, given the harmony of interests; the archetype of this God-designed fitting process is the creation of Eve.

Each person has specific personal obligations before God and society. There is a day of judgment (Rev. 20). Nevertheless, all men are told to cooperate. They have *collective responsibilities* in various social organizations, precisely because of the *wholeness of God’s original design*. This design fitted Eve to Adam, yet it preceded her creation in time. Human beings are *specifically designed to cooperate* within the dominion covenant (Gen. 1:26). This design is not the product of planning human beings, nor is it the product of a randomly evolving universe.

Free Market or Collectivist Monopoly

It must be understood that the biblical doctrine of the harmony of interests is not the same as the one which has been used in the past by humanists in their defense of the free market. Actually, modern defenders of the market do not use such an argument, although socialists and Marxists sometimes attribute such an argument to them. A few economists of the nineteenth century, most notably the pamphleteer, Frederic Bastiat, argued along these lines, but not many economists have.² It is the willingness of free market economists to recognize the innate *disharmony* of interests that has led them to extol the benefits of the market as a system of coordination. Wilhelm Röpke responded to the intellectual attacks on free market economists by those who would discredit market competition. Market economists in the tradition of nineteenth-century liberalism are not naive about the disharmony of interests, Röpke argued. “Such attacks conveniently ignore the fact that it is the liberal economic philosophy which recognizes the latent disharmony between consumer and producer and which sees in competition the means of mitigating this disharmony and thus of safeguarding consumers’

2. Cf. Joseph A. Schumpeter, *A History of Economic Analysis* (New York: Oxford University Press, 1954), p. 500. Most surveys of the history of economic thought, if they even mention the topic, devote most of their pages to a consideration of Bastiat.

interests. Piquantly enough, the enemies of competition answer this argument by saying that it was liberalism, after all, which developed the doctrine of the *harmony* of economic interests. Thus we find the real advocates of disharmony engaging with high glee in the task of obstructing those who seek to mitigate the evil by ridiculing them as naive adherents of outworn doctrines of 'harmony.' *But our economic system can remain viable only if this disharmony is redressed by effective and continuous competition.*"³

Röpke concerned himself with the problems of society, not just with the more narrow sphere of economics. He was convinced that it is naive and misleading to base one's defense of the market on the hypothetical ability of the market to cleanse itself of all fraud, monopoly, and coercion. He did not believe that the market economy is, in his words, "a self-dependent cosmos," or a truly "natural order."⁴ Producers want the highest prices possible for their goods or services, while the buyers want the lowest prices. There is a disharmony of interests apart from the mediating influence of the competitive free market, he concluded. Beware of those seeking monopolistic power. But the easiest way to achieve monopoly, he knew, is to gain the assistance of the civil government. If you wish to release the underlying disharmony of interests, he said, all you need to do is unleash the monopolistic powers of the civil government. What he described as the enemy of the harmony of interests, the enemy of a market-produced, competition-produced harmony of interests, is precisely the statist system which has been constructed by those who ridicule the market's form of competition, who ridicule the idea of a competition-produced harmony of interests. They say that they want to produce true harmony by means of State intervention into the economy. What, in fact, does such intervention produce in the real world? The twentieth century has witnessed such intervention first-hand. "An economic system where each group entrenches itself more and more in a monopolist stronghold, abusing the power of the state for its special purposes, where prices and wages lose their mobility except in an upward direction, where no one wants to adhere to the reliable rules of the market any more, and where consequently nobody knows any longer whether tomorrow a new whim of the legislation will not upset all calculations, an economic system

3. Wilhelm Röpke, *Economics of the Free Society* (Chicago: Regnery, 1963), p. 69.

4. Röpke, *Civitas Humana* (London: Hodge, 1948), p. 49.

in which everyone wants to live exclusively at the expense of the community and in which the state's budget finally comes to devour half the national income: a system of this kind is not only bound to become unprofitable and thus bound to intensify the scramble for the reduced total profit, but it will moreover in the end suffer a complete breakdown. This is usually called the crisis of capitalism and is used as an occasion for new and revolutionary interventions which complete the ruin and corruption and finally present us with the inexorable choice of either returning to a reasonable and ethical market system or of plunging into the collectivist adventure."⁵

What happens to us if we make the wrong choice? Do we find that we have been successful in reducing the disharmony of interests under collectivism? Will we at last find our harmony of interests? "On the contrary, there they conflict even more violently than ever before, laboriously and for an uncertain period curbed by the authority of the state, within which the struggle for power and influence fluctuates by means of bribery, intrigues and executions. It is obvious that a question of ethics cannot be solved mechanically by a change of organization, and if society, the state, legislation, the courts and politics have so far been unable to make the competitive system work, why should we believe that they will be able to cope with the infinitely more difficult task of a collectivist system?"⁶

Will we find the harmonization of interests under collectivism? F. A. Hayek provides some answers in "Why the Worst Get on Top," a chapter in his *Road to Serfdom* (1944). One answer is that there will be few opportunities to harmonize human interests, precisely because the control of the scarce economic resources available to members of the society must be lodged at the very top of the hierarchy. The least-common-denominator principle reigns, since it is impossible for a political organization to integrate the hopes and plans of large numbers of people, especially people whose educations have provided them with widely divergent tastes, plans, and goals.⁷ The party must appeal to the primitive instincts held by the masses, especially negative instincts, such as vengeance against a hated minority.⁸ "Once you admit that the individual is merely a means to

5. Röpke, *The Social Crisis of Our Time* (London: Hodge, [1942] 1950), p. 130.

6. *Idem.*

7. F. A. Hayek, *The Road to Serfdom* (Chicago: University of Chicago Press, 1944), p. 138.

8. *Ibid.*, p. 139.

serve the ends of the higher entity called society or the nation, most of these features of totalitarian regimes which horrify us follow of necessity. From the collectivist standpoint intolerance and brutal suppression of dissent, the complete disregard of the life and happiness of the individual, are essential and unavoidable consequences of the basic premise, and the collectivist can admit this and at the same time claim that his system is superior to the one in which the 'selfish' interests of the individual are allowed to obstruct the full realization of the ends the community pursues."⁹

What kind of person functions well in such a regime? Not the person who is best suited to production within a competitive free market. Or certainly, not with the same outcome of his actions, even if the same person could perform well under both systems. The restraining hand of market competition—open entry for his rivals to meet the needs of consumers—is now strictly political in nature. And in a centralized regime, this is not much restraint. "To be a useful assistant in the running of a totalitarian state, it is not enough that a man should be prepared to accept specious justification of vile deeds; he must himself be prepared actively to break every moral rule he has ever known if this seems necessary to achieve the end set for him. Since it is the supreme leader who alone determines the ends, his instruments must have no moral convictions of their own. They must, above all, be unreservedly committed to the person of the leader; but next to this most important thing is that they should be completely unprincipled and literally capable of anything. They must have no ideals of their own which they want to realize; no ideas about right and wrong which might interfere with the intentions of the leader."¹⁰ The quest for power impels them.

The more powerful the State, the more concentrated the control of economic resources available to State administrators, the more opportunities for economic control through monopolistic economic manipulation, the more ruthless will be those who satisfy their quest for power. The bigger the stakes, the more likely the least moral, most unscrupulous people will claw their way to the top. Why, then, should we expect to see the flourishing of the harmony of interests in a socialistic society in which central power is enormously strengthened by the fact that the administration of scarce economic resources is monopolized through public ownership of the means of produc-

9. *Ibid.*, p. 149.

10. *Ibid.*, pp. 150-1.

tion? Why should we expect to see the peacemakers succeed in attaining supremacy in a political order in which the quest for total power is the obvious inducement to enter the political process?

Conclusion

The harmony of interests is unquestionably a biblical standard. It is that social standard which existed in Eden, exists for the institutional church (I Cor. 12:12-17), exists now in heaven, and shall exist in the New Heavens and New Earth (Isa. 65:17-25). The entrance of sin into the world disrupted this world, but God has provided institutions that restrain such disharmony. The free market is one of these institutional arrangements that promote cooperation, even among those who do not agree on first principles. Class warfare, which is the ideological foundation of Marxism and the modern trade union movement, is foreign to biblical standards of morality. All things are reconciled in Christ (Col. 1:20; Eph. 2:11-16; Jas. 2:1-9), including the supposed eternal struggle between classes. The opening words of Marx's *Communist Manifesto* (1848) are familiar to most students of the history of socialism: "The history of all hitherto existing society is the history of the class struggles."¹¹ Marx never did succeed in defining just what a class is. He never completed the third volume of *Das Kapital*, the last three paragraphs of which are devoted to the consideration of this crucial topic, "What constitutes a class?"¹² But even if he had succeeded in defining "class" accurately, within the framework of his own work, he would have been incorrect. The history of all societies is not class warfare, but *ethical warfare against a sovereign God*, and the working out of men's salvation and damnation over time. The history of mankind is the history of the extension of the covenant of dominion. *History is theocentric*, not humanistic. Bloody warfare of man against man began with Cain and Abel; the origin of such warfare is man's ethical rebellion against God. As James put it: "From whence come wars and fightings among you? Come they not hence, even of the lusts that war in your members?" (Jas. 4:1).

Redemption eventually will triumph over rebellion, and the

11. Karl Marx and Frederick Engels, *Manifesto of the Communist Party* (1848), in *Marx-Engels Selected Works* (Moscow: Foreign Languages Publishing House, 1962), I, p. 34.

12. Marx, *Capital: A Critique of Political Economy* (Chicago: Charles H. Kerr & Co. Co-operative, 1909), III, *The Process of Capitalist Production as a Whole*, p. 1031.

harmony of interests shall be restored. It is man's task to extend the kingdom of God on earth, and to begin to reduce the effects of the sin-based disharmony of interests. It is this extension of God's kingdom which serves as the down payment (earnest) of that future and final restoration of the full harmony of interests. Until then, all that we can hope to accomplish is to minimize the disharmony of interests by extending the rule of biblical law, which provides the social framework of the harmony of interests.¹³

The free market is, in the realm of economics, the most important institutional arrangement that has resulted from the application of biblical law to society. This is why we must affirm that *free market economics is biblical economics*, and why all forms of socialism or collectivism are the products of anti-biblical economics. This is why the free market order is an important institutional means of reducing the disharmony of interests by encouraging people voluntarily to *mesh their individual plans* by means of private property, freely fluctuating prices, and profit-and-loss statements.

13. It is important to understand that the division of labor within the family was designed to extend men's dominion over nature. The family unit was to be broken with each generation, even before the Fall of man. Speaking of marriage, Adam said: "Therefore shall a man leave his father and his mother, and shall cleave unto his wife: and they shall be one flesh" (Gen. 2:24). The harmony of the family before the Fall was never to be intended to keep sons and daughters in the same immediate household. They were to leave, to bring the whole earth under dominion. After the Fall this pattern became even more important for the preservation of both harmony and dominion. In the mid-seventeenth century, the Massachusetts town of Sudbury was split between the older generation, which wanted to control access to common lands in the town, and younger men, who wanted freedom. Eventually, the younger men simply walked out of town, moved a few miles away, and established the town of Marlborough. This was the dominion aspect of the nuclear family in action. (See Sumner Chilton Powell, *Puritan Village: The Formation of a New England Town* [Middletown, Connecticut: Wesleyan University Press, 1963]). Isaac did not live with Abraham; Jacob did not live with Isaac. The so-called nuclear family of the Christian West is the biblical standard. The hierarchical patriarchy of Central European cultures, where sons remain under the immediate jurisdiction of the father, or grandfather, even to the point of dwelling under the same roof, is a non-biblical alternative to the nuclear family—an alternative which reduces harmony and geographical dominion. It is the nuclear family, not the clan order of classical civilization and other cultures, which is sociologically normative. It is also interesting to note that when immigrants from Central European cultures settle in Western Europe or North America, the patriarchal family orders are abandoned within a generation or two. They simply cannot compete with the biblical family pattern. Young men who are not compelled to put up with patriarchal authoritarianism choose the nuclear family. And on this point, their wives are in total agreement. They prefer to be subordinate to one man, not two, plus another woman. It is difficult to serve two (or more) masters. The nuclear family provides maximum harmony.

COSTS, CHOICES, AND TESTS

And when the woman saw that the tree was good for food, and that it was pleasant to the eyes, and a tree to be desired to make one wise, she took of the fruit thereof, and did eat, and gave also unto her husband with her; and he did eat (Gen. 3:6).

Eve had already made a series of crucial assumptions about the nature of reality before she offered the fruit to her husband. She had already renounced the system of interpretation which God had given to her husband. God's revelation of Himself and the creation no longer impressed Adam and Eve. They had decided to test the validity of God's word against the validity of the serpent's. In fact, they had already decided that God's revelation could not possibly be true, since He said that His word is true, and that they would be punished for sure if they ate of the tree. God had revealed an all-or-nothing universe, for it did not permit them the option of eating the fruit without punishment. They concluded that this all-or-nothing proposition could not possibly be true, for if it were true, they would surely perish. By affirming the hypothetical possibility that they might not perish, they were simultaneously affirming that God's denial of such a possibility had to be false. There was simply no possibility that they might eat of the fruit and retain the *status quo ante*. Everything would change. They hoped things would change for the better. They miscalculated.

All value is subjective, meaning personal. This does not mean that no value is ever objective. When we speak of subjective valuation, we simply mean "economic valuation made by a person." God is a personal being. He imputed value to His creation, calling it good, thereby confirming the goodness of His handiwork. The creation was not good in itself, meaning autonomously good or intrinsically good, irrespective of God's work and evaluation. God, not the

creation, is sovereign. His word is determinative.

Man, as the image-bearer of God, also imputes value to the creation. He can impute value to the word of God itself. Man determines for himself the value of the choices he must make. This does not make his choices objectively correct. He can and does deviate from God's standards of value. God, being omniscient, knows exactly how much a person should give up in order to gain some item or achieve some goal. Men, being rebellious and unwilling to adhere to the law of God, frequently pay too much or try to pay too little for the things in life they pursue. They are unable to impute value according to the warning given by Jesus: "For what shall it profit a man, if he shall gain the whole world, and lose his own soul?" (Mark 8:36). If they cannot correctly value *this* key transaction in terms of its cost-effectiveness, how can they make accurate judgments concerning the true value of any other transaction? Yet they are required by God to do so.

Man imputes value to anything in terms of a *hierarchy of values*. He makes choices in terms of this set of priorities. Is it worth giving up *this* in order to attain *that*? It depends upon one's value scale. This value scale is constantly shifting, since tastes change, external conditions change, and men's first principles sometimes change. Every value scale is connected to some concept of *authority*. *This* is preferred to *that* because of the perceived correctness of one's value scale. The very idea of *correctness* implies the concept of *authority*. So man makes his choices within the framework of some sort of authority structure. Choice requires basic standards of preference, and standards imply authority, meaning a source of ultimate sovereignty. Man never finds himself in a position of choosing in terms of one authority or no authority; it is only a question of *which* authority. Rushdoony has stated this forcefully: "For a man to live successfully, he must have an ultimate standing ground; *every philosophy is authoritarian*, in that, while it may attack savagely all other doctrines of authority, it does so from the vantage point of a new authority. This new authority is a basic pretheoretical presupposition which is in totality religious and which rests on a particular concept of infallibility. Every man has his platform from which he speaks. To affirm that foundation without qualification is an inescapable requirement of human thought."¹

1. R. J. Rushdoony, *Infallibility: An Inescapable Concept* (Vallecito, Calif.: Ross House Books, 1978), p. 4.

Adam and Eve made a religious decision. For Adam, who was standing with Eve throughout the discussion, as Genesis 3:6 makes clear, it involved the decision not to exercise marital leadership, not to step in and interrupt the proceedings; his wife made the initial decision, and he followed her lead.

Their decision was also an economic decision. It involved: a choice between two alternatives (eating vs. not eating); an assessment of expected future returns (tasty meal vs. numerous other possible tasty meals); an assessment of time requirements (instant special knowledge vs. conventional accumulated knowledge over time); and an evaluation of expected future costs (death vs. burdens of newly attained special knowledge). Obviously, they bore extremely heavy risks; in fact, they bore absolutely certain penalties. It was a no-win decision, unless God's grace might intervene to give them life. They did not accurately assess the true extent of these risks because they did not impute absolute infallibility to God's word. In fact, they valued God's word so little that they defied Him and ate. This indicates that they must have assumed that their risk was almost infinitesimal, for with the threatened penalty so awful, they must have discounted radically the possibility of that penalty's being imposed. Eve valued the risk inversely to her valuation of the serpent's word: trusting his word, she discounted the risk, while overestimating his promise that they would become as gods. In other words, *she made a disastrous error in forecasting*. She estimated the future cost of eating as being far lower than God had said, and she then made a terrible choice. She, Adam, and their heirs have paid the price ever since. Only because of God's common grace have men escaped the full penalty, in time and on earth, of their rebellion; and only because of special grace have some escaped the eternal penalty beyond the grave. The price was high.

Whose Communion Feast?

How little did Adam and Eve value God's word? We can get some idea by reflecting on what they could have done before they went to the forbidden fruit, but what they neglected to do. God had placed two crucially important trees in the garden: the tree of life and the tree of the knowledge of good and evil (Gen. 2:9). The tree of life was open to them prior to their rebellion. They could have gone to that tree, eaten its fruit, and then gone to the forbidden tree. Why did they ignore this seemingly obvious possibility? The tree of life

would have protected them from death. Even in their fallen state, the tree of life would have given them eternal life, which is why God drove them out of the garden (Gen. 3:22-23).

To have taken God's word so seriously that they could have foreseen the likelihood of their destruction as a result of their rebellion, they would have had to recognize the extremely high stakes in their gamble. If man needed the protection of God's tree of life in order to protect him from God's wrath, then man was indeed dependent on God's grace. If man can trust God's word regarding the basis of eternal life, then man can trust God's word concerning the basis of eternal death. In order for Adam truly to have reduced the risk of rebellion, namely, by eating from the tree of life, he would have been forced to acknowledge the sovereignty of God over life, and the absolute reliability of God's word regarding life. Had he taken God's word *that* seriously, Adam would not have rebelled. It was only because he regarded himself as the arbitrator between God's word and Satan's, and therefore the true source of judgment, that Adam discounted God's word. Adam had to assume that God's word could not possibly (or very, very improbably) be true in order to make the risk of rebellion worthwhile. To have gone first to the tree of life would have meant that man *did* take God's threat seriously, and that man needed the promised protection of God's tree of life. To have relied on the tree of life for protection would have meant the end of man's pretended claims of autonomy.

Adam had a choice: to choose life or to choose death. By the very nature of man's rebellion, he could not have deliberately chosen life first, since he would have been acknowledging ritually what his rebellion implicitly was denying: that the source of life is man's conformity to God's promises. His calculation of costs and benefits had to be made as covenant-keeping man or covenant-breaking man. As a covenant-keeping man, he would have reasoned as follows: "God's word is reliable, so I had better eat from the tree of life first, in order to protect myself. Protect myself from what? From the reliability of God's word concerning eating from the forbidden tree. But if His word is reliable regarding life, then His word is reliable concerning death. I had better not consider eating from the forbidden tree." Covenant-keeping man protects himself by adhering to God's word, by taking God's word seriously. He does not make calculations (in his state of innocence, anyway) concerning the odds for or against God's word. To choose God's way to eternal life necessarily involves

the rejection of God's way to eternal death.

Covenant-breaking man in the garden would have reasoned as follows: "God's word is not reliable, so I need not protect myself from any hypothetical effects of eating from the forbidden tree. His word is not reliable concerning death, so His word is not reliable concerning life. The odds against His word coming true are astronomically high, so it would be a denial of my own sovereignty, my own assessment of the low reliability of God's word, for me to eat from the tree of life as a calculated way of reducing the risk of disobedience. I have already determined that there is virtually no risk in disobedience. I had better not consider eating from the tree of life." Covenant-breaking man builds up his own self-confidence by adhering to his self-proclaimed autonomous word. To choose God's way to eternal death necessarily involves the rejection of God's way to eternal life.

After the Fall, of course, man knew experimentally how wrong his assessment had been. Then he would have been willing to eat from the tree of life. But the tree was closed to him. To eat of it now would have been theft. Adam would not be permitted to gain access to eternal life on his own terms, as a proven covenant-breaker. He had made his choice. His choice was the way to death.

The presence of two special trees in the garden, one leading to life and the other leading to death, offers us a solution to an interesting question: "How long was Adam's period of probation to be?" Adam could do three things, essentially. First, he could go straight to the forbidden fruit, thereby ending the period of testing in the garden. Second, he could go straight to the tree of life, thereby removing the threat of eternal death, but only by affirming God's word and by subordinating himself to God as a covenant-keeper. Third, he could postpone a choice between the two trees, concentrating his attention on other trees or other tasks in the garden.

There is no revelation concerning a specified period of testing. The Bible does not tell us that Adam had a day, a week, or a millennium to make up his mind. This should tell us that the period of testing involved the tree of life. If the test had been simply "the tree of the knowledge of good and evil" vs. "dressing the remainder of the garden," then the temptation would have been before him forever, or until God stepped in to tell him that it was over, that his refusal to eat the forbidden fruit for all this time proved that he was serious about obeying God. At that point, God would have granted him

eternal life, and invited him to eat from the tree of life.

The Bible's words are more specific than this: "And the LORD God commanded the man, saying, Of every tree of the garden thou mayest freely eat: But the tree of the knowledge of good and evil, thou shalt not eat of it" (Gen. 2:16-17a). The words are not only clear; they are inescapable: *Adam had legal access to the tree of life*. To conclude anything different is to deny the plain teaching of the text. To eat of the tree of life, however, required that Adam affirm God's word of promise concerning the way to eternal life. Indefinite temporal extension was what he had as a garden-dresser. Eternal life was more (and is more) than mere temporal extension, for it is definite, guaranteed eternal temporal extension, without the possibility of eternal death, without the presence of the forbidden tree before man. In other words, Adam's own assessment of the reliability of God's word determined the period of probation. When he had made up his mind, one way or the other, to eat of one tree or the other, in terms of how much he trusted God's word of promise, the period of probation would end. He would choose life or death, sacramentally, by eating from one of the two trees.

By viewing the test as a choice between eating or not eating from the forbidden tree, and nothing else, we implicitly deny man's ability in the garden to affirm ritually God's word of promise. Adam would then have had to say to himself, moment by moment, "I will not eat of that forbidden fruit because I believe in God's word. I will content myself to putter around in the garden doing other tasks. I shall wait on the Lord. Behold, today is not the day of the Lord. Behold, today apparently is not the day of salvation. But when that day comes, I will ritually affirm my commitment to Him. When God finally says to me that the period of probation is over, I will be found spotless. Then I will ritually affirm my commitment to His word by eating of the tree of life."

Yet throughout Scripture, the message is plain: ". . . behold, now is the accepted time; behold, now is the day of salvation" (II Cor. 6:2b). God awaits man's affirmation of His word of promise. He encourages it. He does not tell man to delay in making such an affirmation. He does not ask man to remain in a condition of suspended judgment. He also does not ask us to affirm our faith in Him, and then leave us without a communion feast.

By placing the tree of life in the midst of the garden, God made available to Adam a *sacrament of life*. The forbidden fruit was Satan's

sacrament of death. Both God and Satan call us to communion feasts. Paul warns us: "Ye cannot drink the cup of the Lord, and the cup of devils: ye cannot be partakers of the Lord's table, and of the table of devils" (I Cor. 10:21). *Adam's period of probation would end in a communion feast*: at the tree of life or at the tree of the knowledge of good and evil.

Adam was given time in the garden — all the time he chose to take — to make up his mind. The garden was a battlefield of faiths, a battlefield of ideas. Adam faced a decision, every moment of every day, the same decision that Elijah placed before the people of Israel on Mt. Carmel: "How long halt ye between two opinions: if the LORD be God, follow him: but if Baal, then follow him. And the people answered him not a word" (I Ki. 18:21). Every day that Adam spent in the garden, torn between two views of God's word, he would spend as the Israelites spent time: answering not a word.

The garden experience, of course, was to teach him. He was to learn about God's reliable word, God's eternal blessings, and God's dominion covenant. But that learning experience was to bring him to the tree of life, to affirm his faith in God's word sacramentally.

Revelation and Costs

The word of God is given to men for many reasons, but one of these is to enable them to reduce their costs of economic action. This enables them to fulfill the terms of the dominion covenant with minimal expenditures of scarce economic resources. In other words, the word of God is given in order to *prevent waste*. Since God is the sovereign owner of the world (Ps. 50:10), it is understandable that He should expect us to work efficiently, as honest, hard-working, and smart-working stewards of His property. *God's revelation of Himself and His law-order is our primary cost-cutting device*. This revelation comes from a wholly omniscient God who controls all events, yet it is divinely designed to match the capacities of man, a creature. God's revelation fits the mind of man, even as it fits the total creation. It offers us a tool of dominion. Men are offered a capital asset which reduces the cost of the most expensive and crucial of all scarce economic resources: *information*. Revelation reduces information costs, and in doing so, it thereby frees up other scarce capital assets — time, effort, money — that otherwise would have to be expended in testing. In fact, God's revelation offers us a way of action without having to test certain aspects of reality that are, by design, beyond the ability of

man to test accurately (Deut. 29:29). God's revelation frees us from the demonic pursuit of exhaustive knowledge—a knowledge that must be totally perfect if it is to be reliable, since any aspect of creation could conceivably influence the operation of any other aspect of creation. The self-proclaimed autonomous man must therefore master all of the universe in order to be confident concerning his mastery of any small fragment of it. The covenantally faithful man does not have this burden over him; his God is omnipotent, and his God has provided him with the revelation of Himself and the rules of order necessary for prosperity and success in man's enterprise of dominion.

Eve, however, rejected this marvelous gift of revelation. She rejected this revelational tool of dominion. She decided that the conflicting interpretations of the rules concerning the forbidden fruit, the serpent's vs. God's, might be testable propositions. She believed herself capable of designing and executing a neutral empirical test between the word of God and the word of the serpent. She, as the arbitrator of truth, could determine who was correct. Of course, she preferred to have her husband share in the responsibility of executing this cosmic test. But the risks seemed minimal, statistically remote, even insignificant. The odds against God's word were assumed, from the beginning, to be astronomically high, given the magnitude of the promised costs. They played a kind of cosmic lottery. The prize: "to be as God." The cost of the "ticket": the risk of eternal punishment. By imputing so little value to God's word, they imputed little cost to their rebellion. They would become instant gods.

There are costs associated with our choices. There are "real" costs, meaning objective costs, meaning costs imputed by God to each acting individual (Luke 12:48). God's subjective (personal) imputation of cost is the equivalent of a truly objective cost. Every act of man therefore has eternal implications; every idle word must be accounted for on the day of judgment (Matt. 12:36-37). There is no escape from the objective costs of our actions.

Nevertheless, as responsible beings, there are also subjective costs imputed by acting men to their own and others' actions. Men make choices in terms of imputations and estimations, both concerning the present and the future. They are constantly searching for better, less costly, more accurate ways of imputing costs and benefits to the choices that confront them. They act in order to benefit themselves

as they interpret benefits. Sometimes they make accurate ones, in the face of universal opposition, as Caleb and Joshua did when they voted to spy on the people of Canaan (Num. 14). But they must make estimations and make decisions in terms of these estimations when confronted with choices over which they have the power of action.

There are many possible *intellectual defenses of the free market economy*, but none so strong, from a biblical point of view, as this one: *it provides men with an institutional and legal framework for making choices in terms of each man's expected benefits and each man's expected costs*. The free market economy closely links choice, costs, and benefits. It makes each acting man responsible for his own actions in a direct fashion. It decentralizes the decision-making process, making possible the effective use of more and more specialized information—the division of intellectual labor. In other words, it allows each man to work out his own salvation (or damnation) with fear and trembling (Phil. 2:12b). It forces each man to bear the burdens of responsibility for his own actions. If he imputes accurately, and plans successfully, then he reaps the rewards. If he fails in his task, then he bears the burden of failure. The “carrot and stick” both stand before him as motivation devices. The market provides a forum for testing the economic validity of his decisions, namely, price signals that can be used to estimate profit and loss. The *subjective economic imputations* of acting men, along with the registration of their actual decisions through a price system, combine to produce *objective results*. Men are taught to respect objective economic knowledge, even though that knowledge is the product of millions of subjective imputations. Their enterprises turn a profit or a loss. Their subjective imputations come face to face with hard, objective reality.

Another benefit of the free market is the *rapid transmission of economic data*. Men are taught to respond to the real world in an efficient manner, meaning rapidly. They are told whether or not they need to change their imputations and actions. They are told in a forceful manner: profits or losses. The faster they learn of their errors, the faster they are likely to alter their practices. The more forcefully the costs of their errors are registered, the faster they are likely to alter their practices.

Adam and Eve made the most expensive transaction in human history. We measure cost in terms of the most important or valuable use which we have to *give up* when we choose another economic (scarce) good or service. *Cost* is best defined as *the most beneficial*

alternative which we must forego. Adam and Eve did receive instant special knowledge, but they paid a heavy price. They learned about good and evil, but from the standpoint of evil. They gave up ethical perfection, eternal life, and the opportunity to extend dominion only after they had received training in the curse-less garden. So horrendous was the price they had to pay, that Christ alone was capable of paying it in full (Isa. 53:5; Rom. 5:8). Christ became a ransom for many (Matt. 20:28). What Adam and Eve did was to make a decision which made them less than paupers, and Christ's actions restored wealth to the remnant: "Though he was rich, yet for your sakes he became poor, that ye through his poverty might be rich" (II Cor. 8:9). The costs were so high that Adam and Eve could not have calculated them successfully. They were not supposed to calculate the costs of rebellion to the last coin. They had God's command to guide them. They overestimated their estimating abilities.

The Bible affirms the reality and validity of *God's law*. It is our standard of action. Therefore, *it is our primary tool for cost-benefit analysis*. It is a cost-cutting device because it provides us with universal guidelines that can be relied upon whether or not we have designed empirical tests to verify the benefits associated with a particular law, or the costs associated with disobedience. Men who reject the law of God are acting as Adam and Eve did. They are discounting the omniscience of God, the omnipotence of God, and the reliability of His word. The rejection of God's law is the first step of the would-be autonomous man in his quest to become as God, and ultimately to replace God. *The rejection of God's law is the most expensive rejection of a capital resource that any man or any society can make.* It substitutes for reliable knowledge the unreliability and astronomical costs of constant, universal, and eternal empirical testing—the testing of every fact in the universe. Autonomous man first tests God's word, and then must test all other words, and all other facts, constantly and eternally. He departs from the paradise of reliable law and enters the barren land of universal testing. The more autonomous he becomes, the more fascinated with tests, and the more despondent that the tests can ever produce reliable results. In the words of one 1960's critic of IQ (intelligence quotient) tests: "IQ tests test what IQ tests test." In short, that favorite screening test of 1930's humanistic educators was falling into disfavor, especially after certain racial minorities failed to perform well when taking them. The

test was no longer assumed to test anything relevant.² Yet humanists need screening devices, and quantitative tests have for centuries been the primary humanistic substitute for earlier screening devices, such as family name, moral character, or profit-and-loss performance. Losing faith in tests, modern man has no universally agreed-upon substitute for tests. The proliferation of testing, statistical surveys, data-gathering, sampling techniques, mathematical economic models, and similar supposed shortcuts for human decision-making has been the direct result of the philosophy of human autonomy and the systematic rejection of biblical revelation. *Testing man* has replaced covenantal man, yet it is man, not God, who has systematically failed the tests, even those devised by the experts in the field. We have imputed great value to our ability to test, and the costs of this error have been astronomical.

2. Allan Chase, *The Legacy of Malthus: The Social Costs of the New Scientific Racism* (New York: Knopf, 1977), chaps. 10-13, 18-20.

SCARCITY: CURSE AND BLESSING

And unto Adam he said, Because thou hast hearkened unto the voice of thy wife, and hast eaten of the tree, of which I commanded thee, saying, Thou shalt not eat of it: cursed is the ground for thy sake; in sorrow shalt thou eat of it all the days of thy life. Thorns also and thistles shall it bring forth to thee; and thou shalt eat the herb of the field. In the sweat of thy face shalt thou eat bread, till thou return unto the ground; for out of it wast thou taken: for dust thou art, and unto dust shalt thou return (Gen. 3:17-19).

The starting point of all modern economics is here: the question of scarcity. *At zero price*, there is greater demand for most things than there is supply to fill the demand. For some goods, such as air to breathe, there is normally no price, so air is not an object of purposeful human action. Of course, air in a submarine, or on top of a high mountain, or in a space ship, will command a price; so will heated, filtered, or cooled air. But most resources are scarce most of the time, meaning simply that *they command a price*. We have to give up something in order to get something else. Even in the case of a free gift, the person who gives us the item had to give up something.

Was scarcity the product of rebellion? The explicit evidence of the Bible seems to favor this interpretation. We must speculate about conditions in the garden. Prior to the rebellion, the residents of the garden did not think that time might be a problem, or so their actions indicated. They did not immediately eat of the tree of life, so God banished them from the garden to keep them from attaining cheap eternal life (Gen. 3:22). They acted as though they thought they had endless life. If they could do as they pleased, thinking God's thoughts after him, naturally choosing exactly the food that was necessary or pleasing to them, refusing to worry about time, it is

possible that they had no concept of scarcity. If a person knows exactly what he wants, and he has all the resources he needs to achieve his goals, and he is under no time constraints, and all "second-best" choices can be dismissed as irrelevant, then the cost of achieving his goals is zero. After all, whatever he gives up is worth nothing to him in comparison to the value of attaining his present goal. He is following God's will for him, and he is in perfect ethical communion with God. It may be possible to imagine that Adam operated in a zero-cost world. The day he rebelled, however, he paid the total price for something that seemed to be an inconsequential decision. He went from zero cost—acting in conformity with God's will in a totally abundant environment—to total cost. He lost his life and his zero-cost environment.

On the other hand, it is also possible to imagine that Adam did bear costs. He had choices to make. Perhaps he was not absolutely certain in each case just what he should do. Ethical perfection may not have implied such comprehensive knowledge of God's will that his every step in applying God's mandate to dominion was instinctively known to be exactly what God hoped for him at that instant. If he did have to give up the benefits of one course of action in order to achieve the benefits of some other course of action, then he faced scarcity. He paid a price for his actions. This seems more likely than a zero-cost world.

We do not know what kind of mental or instinctual relationship joined God and Adam in the garden, so we cannot say for certain whether his was an environment marked by scarcity. If a person wants one, and only one, thing at a particular instant, and has all that he wants at that instant, he does not face a scarce environment at that instant. It is a question of supply and human demand.

There is no question that God's curse of the ground created a new environment. From that point on, the earth has resisted man. Thistles that interfere with man's ability to extract what he wants from the ground have grown up to increase man's costs of attaining his goals. Man must sweat in order to eat. His labor is now unpleasant and burdened, or at the very least it is often frustrated and discouraging, unlike the labor in the garden. The labor in the garden was entirely pleasant. Man was simply fulfilling his purpose and exercising his God-given talents. "To labor is human," but in the garden, it was without a curse. God added vast new costs to labor, reducing its efficiency, while simultaneously reducing the psycholog-

ical pleasure and incentive attached to labor. Man would now be *compelled* to labor by his *environment*; no longer would his mere humanity be relied on by God in order to encourage man to fulfill the terms of the dominion covenant.

God had created an environment which allowed man the option of linear economic and personal development. Adam would receive basic training in the garden, and from there he was to have gone into the world, with his heirs, to subdue it, spreading paradise across the face of the earth. Adam's rebellion broke this linear development. God's curse in response to Adam's rebellion brought death into the cycle: birth, growth, and death. Man was placed under the bondage of this cycle ("dust to dust"), as was the creation, which longs to find release (Rom. 8:18-23). In terms of the standards of the garden, this cycle was *unnatural*. There had not been death in the garden, at least not of animals; vegetarianism prevailed. Man and the animals ate the seeds of herbs and trees for meat (Gen. 1:29-30). Isaiah's language indicates that the blessings of restoration also involve an eventual return to vegetarianism, where the wolf and lamb shall feed together, and the lion shall eat straw (Isa. 65:25). This is not confined to the post-judgment world; it takes place in time and on earth, for the serpent is still cursed, still eating dust (Isa. 65:25).¹ But the curse of the gound brought the animals under the rule of "tooth and claw."

The curse would of necessity slow down the fulfillment of the dominion covenant, simply because of the restraints placed on animal multiplication. The animals would now eat each other, and their

1. It is possible that Isaiah's language is allegorical, and that he was referring to political tranquility rather than a world of vegetarianism. It is interesting, however, that so many religions of the East, and pseudo-religions of the West, have proclaimed the ethical requirement of vegetarianism. They want a return to vegetarianism prior to the total transformation of culture through regeneration and the extension of biblical law. Paul warned against these calls to a "premature" establishment of mandatory vegetarianism: "Now the Spirit speaketh expressly, that in the latter times some shall depart from the faith, giving heed to seducing spirits, and doctrines of devils; speaking lies in hypocrisy; having their conscience seared with a hot iron; forbidding to marry, and commanding to abstain from meats, which God hath created to be received with thanksgiving of them who believe and know the truth" (I Tim. 4:1-3). The eating of flesh was basic to the ritual celebrations of Israel (Deut. 12:15, 20). Parts of certain offerings belonged to the priests, the right shoulder going to the priest as a heave offering, and the breast going to Aaron and his sons (Lev. 7:31-32). The idea that the Bible teaches vegetarianism as a mandatory way of life is unquestionably heretical. As an ideal for a period of external kingdom blessings, during a millennial reign, it appears to be valid, though voluntary.

numbers would be limited by the thorns and thistles that clogged up the formerly abundant productivity of the land. The fulfillment would of necessity be linear, but the new law of nature was cyclical. To overcome this cyclical restraint, covenantally faithful men must apply the principles of biblical law. Linearity of economic growth, of the growth of both human and animal populations, is now a product of ethically faithful societies (Ex. 23:26). Linear development is not natural in the post-Fall world. *Linear development is the product of a philosophy of life, a religious outlook, and few cultures in history have maintained anything like it.* Paganism promotes a cyclical view of life, using the regularities of the cursed, post-Fall agricultural world as its standard of human development. Cursed cyclical nature has become normative for pagan social thought.²

Common Curse, Common Grace

We generally focus our attention on Adam's plight and the ground's curse. We see mostly wrath in both. Nevertheless, there was also grace in both curses, since we define grace as an unearned gift of God to man or the creation. As in all manifestations of God's common wrath, there was also common grace. This grace-curse produced special curses for the rebellious and special benefits for God's elect.

Adam, by rebelling, deformed the nature of man. Men would no longer naturally cooperate with each other in the tasks of dominion. Because of the murder in their hearts, they would search for ways of stealing from their fellow men and killing them. Man had rebelled against God; man's descendents would normally seek to destroy all those made in God's image. Mankind therefore needed external and internal restraints in order to survive. Men were now alienated from each other because they were alienated from God. Something was

2. Stanley Jaki, the historian of science, contrasts the cyclical views held by the Chinese, Hindus, Greeks, Babylonians, Mayans, and Arabs with the linear view of orthodox Christianity. Why did science develop only within the intellectual framework of the Christian West? As he writes: "Needless to say, many factors—geographical, social, economical, and political—played a part in the stillbirth of the scientific enterprise in the various ancient cultures. The only common factor in all cases seems, however, to be the commitment to the cyclic world view." Jaki, "The History of Science and the Idea of an Oscillating Universe," in Wolfgang Yourgrau and Allen D. Breck (eds.), *Cosmology, History, and Theology* (New York: Plenum Press, 1977), p. 140n. He develops this idea at considerable length in his book, *Science and Creation: From Eternal Cycles to an Oscillating Universe* (Edinburgh: Scottish Academic Press, [1974] 1980).

needed to heal this alienation. God provided a new incentive for men to be civil, cooperative, and helpful: *self-interest*.

Once the earth brought forth abundantly. Now it brings forth thorns and thistles. From the curse onward, men would have to cooperate in order to dig wealth out of the cursed ground. *The division of labor is now an imperative for successful, efficient, low-cost production.* There are no free lunches in a cursed, scarce world. There are also no free murders. Every man's labor can be useful to others in the marketplace. Murder a man, and you remove a source of productivity from the marketplace. You remove someone who might have made your work easier or your wealth greater. Battling an uncooperative nature, men need the division of labor more than they did prior to the rebellion. They need each other if each is to enjoy the full potential of his productive capacities. The curse of the ground is a sign of God's grace: given the perverse nature of man, a less productive world is a necessity.

Having to work is also a way of draining energy that might have been put to perverse ends. Men have less free time to scheme and pillage. They have less strength. Part of the energy of nature was rechanneled by God into avenues that would thwart men's evil plans. An expenditure of time, capital, and energy in increasing the productivity of the land could not be used simultaneously in order to commit murder and mayhem. The curse of the ground helped to produce a zone of safety for men from their fellows. *Man was made to sweat in order that he might not have to bleed.*

Poverty for the ungodly is a special blessing for the godly, even when the godly share in the poverty. Why should this be? Precisely because hungry ungodly men are compelled to beat swords into ploughshares in order to survive. Wealth-provided leisure time will eventually be spent in perverse ways, most often in lust, warfare, arson, and rape. Rebellious rich nations can use a greater portion of their wealth to construct even more efficient (fearsome) weapons.

It must also be pointed out that the curse of the ground is also a blessing for the ground. Men in a scarce world must treat the creation with care if they wish to retain the productivity of the ground. This is one of the important reasons why private property has so often been a means of preserving the ground from pollution and soil erosion. Where private property is compromised or unenforcible—"free" air, "free" streams, "free" oceans, "free" land—we tend to find

ecological disturbances.³ Men rush in to get "their" share of the "free" goods, with little thought of the future, simply because they have little or no control over the future use of public property. They can control the future use of private property, and the costs come out of their capital resources, which provides a great incentive to use the resources in a cost-effective manner—one which regards the future expected benefits of the resources.⁴ There is a strong tendency, though not an invariable law, for men to take better care of the creation when they are allowed to take possession of the fruits of their labor on their parcel of the creation.⁵ Again, it is scarcity which pressures innately lawless men to respect the laws of God concerning the creation.

The curse of the ground is a form of grace to the godly, for it allows them to work out their faith with less fear and trembling concerning the actions of the ungodly. It is also a form of grace—unearned gift—to the ungodly, for it allows them to work out the implications of their antichristian faith in ways that are less harmful to other ungodly men, godly men, and the creation: grace leading to destruction (Luke 12:47-48). The ungodly are given life. They are given power. They participate in history—a kind of stay of execution. Their labors increase the wealth of the believers, since all share in the blessings of greater productivity. Common curse (sweat, death, and thistles), common grace (time, incentives to cooperate), special curse (final judgment), and special grace (salvation): all are involved in God's retaliation against evil.

Conclusion

The goal of a godly man is to overcome the curse of the ground and the curse of his own flesh. He is to accomplish this through applied faith. Biblical law is to serve as the tool of overcoming the curses. The cycles of nature are to be overcome through godly agri-

3. Garrett Hardin, "The Tragedy of the Commons," *Science* (13 Dec. 1968); reprinted in Garrett de Bell (ed.), *The Environmental Handbook* (New York: Ballentine, 1970).

4. C. R. Batten, "The Tragedy of the Commons," *The Freeman* (Oct., 1970).

5. Edwin G. Dolan, *TANSTAAFL: The Economic Strategy for Environmental Crises* (New York: Holt, Rinehart and Winston, 1971); J. H. Dales, *Pollution, Property and Prices* (University of Toronto Press, 1970). T. D. Crocker and A. J. Rogers, *Environmental Economics* (New York: Holt, Rinehart and Winston, 1971). On the disastrous, State-enforced and State-subsidized pollution in the Soviet Union, see Marshall Goldman, *The Spoils of Progress* (Cambridge, Mass.: MIT Press, 1972).

culture (greenhouses and hydroponics are examples), life is to be greatly extended (Isa. 65:20), thistles are to be minimized, and full production achieved (Deut. 8:7-9). Linear growth is to overcome long-term cyclical stagnation.⁶ But it takes *covenantal faithfulness of entire cultures* to begin to achieve such goals over the long run. Without special (saving) grace, success becomes arrogance, and arrogance is visited with destruction (Deut. 8; 28).⁷

Scarcity is therefore to be regarded as a curse, but not an unmitigated curse. It has its blessings in a world of corrupt, lawless, ethically rebellious men. It must be overcome through biblical law, not through revolution, or humanistic social planning, or communal living, or the abolition of private property. It is to be overcome by a systematic, universal, long-term application of biblical law to every area of human life. It is only in cultures made up of predominantly (though not exclusively) godly men that this kind of long-term reduction of grinding poverty, meaning excessive scarcity, can be expected.

6. Gary North, *Dominion and Common Grace: The Biblical Basis for Progress* (Tyler, Texas: Institute for Christian Economics, 1987), ch. 5.

7. *Ibid.*, ch. 6.

THE BURDEN OF TIME

And the LORD God said, Behold, the man is become as one of us, to know good and evil: and now, lest he put forth his hand, and take also of the tree of life, and eat, and live forever: Therefore the LORD God sent him forth from the garden of Eden, to till the ground from whence he was taken. So he drove out the man; and he placed at the east of the garden of Eden Cherubims, and a flaming sword which turned every way, to keep the way of the tree of life (Gen. 3:22-24).

Adam was thrown out of the garden paradise. The garden was to have served as his training ground, the base of operations for the conquest of the world. His rebellion made it necessary to remove him from the garden. He was not to achieve eternal life simply by eating the fruit of a tree, for this would provide him with mere temporal extension. He had already abandoned life as a God-fearing subordinate under God. Life is not simply conscious existence, for if it were, we would have to conclude that there is life in hell. But the Bible says that life is to be contrasted with death, and eternal existence without God is the second death (Rev. 2:11; 20:6). Paul writes that "to be carnally minded is death" (Rom. 8:6). Adam surrendered to the principle of death on the day he rebelled; his body survived for centuries thereafter, since he died at age 930 (Gen. 5:5). Physical death is a curse imposed by God to remind men of their rebellion and the fact that they are spiritually dead as a result of that rebellion. Therefore, paradise was closed to Adam. He could not escape the burden of physical death—the first death—by eating of the tree of life, since paradise was no longer accessible to him or his heirs. He had to look forward to the establishment of the New Jerusalem, beyond the grave and beyond the bondage of sin, where the tree of life once again is accessible (Rev. 22:2). Not by the works of man's hands, not by swallowing a particular fruit, can man regain his

ethical standing before God. The *essence of life is right standing ethically before God*, and Adam had forfeited life.

The burden of time was placed on his physical body. His years would now be limited. He would be given a fixed amount of time to work out either his salvation or damnation with fear and trembling. Infinite time, apart from regeneration, was forbidden to him, for God knew that Adam would prefer the burden of eternal time rather than eternal judgment, where none of God's unmerited temporal gifts is available. Without judgment at the end of his days, man is not motivated to face the full implications of his ethical rebellion against God.

Time is therefore central to any philosophy of life and death. Men desperately wish to escape the burdens of time, yet they fear death's cessation of temporal existence. The *meaning of time* is an inescapable concomitant to any consideration of the *meaning of life*.

The ancient world, apart from the Hebrews, believed in some version of historical cycles. Nature's seasonal changes were regarded as normative. The world continues through endless cycles. Hesiod's poem, *Works and Days*, which was written at about the same time that Isaiah's ministry began, was one Greek's speculation about the rise and fall of civilizations and even the creation itself. It began with the age of gold, degenerated to the age of silver, and continued through the age of brass.¹ Ours is the dead age of iron, he said. His language was similar to the visionary dream of King Nebuchadnezzar: the great image which was made of gold, silver, brass, and iron mixed with clay. But the end of that image was total destruction by the stone cut without hands, which smashed the image, and then grew into a great mountain which filled the earth (Dan. 2:31-35). The kingdoms of man will be replaced by the eternal kingdom of God (Dan. 2:36-45). History in the biblical outline is linear, not circular.

The ultimate uniformity in all pagan systems of thought, whether cyclical in nature, or evolutionary development, or the static and fundamentally unchanging structure of "pure being," cannot be challenged successfully by any pagan deity. The central uniformity is the sovereign; gods and men must conform themselves to this fundamental sovereign. Both the gods and mankind are in bondage to it. Man must submit to its power. *Time is the god of paganism*, and chance is his throne.

1. Hesiod, *Works and Days*, lines 109-201.

The Genesis account is hostile to the concept of uniformitarian temporal processes. Rates of change are not constant over time. In the garden of Eden, Adam did not bear the burden of time, in the same sense that he did not bear the burden of alienated, cursed labor. He worked and passed through time, but time was no threat to him. Rather, time meant *opportunity*. The curse was still in the future. The constraints of time did not weigh him down as they do his heirs. He named (classified) the animals of the garden (and perhaps all animals) in a portion of one day. His mind must have worked with the speed of a modern computer, but analogically (thinking God's thoughts after Him) rather than digitally, for he was a full personality under the sovereignty of God. His handling of the facts of nature was completely in terms of the categories given to him by God as God's image-bearer. He worked rapidly, just as God had worked rapidly to create the universe in six days.

This indicates that the processes within time prior to the Fall were explicitly unlike those of today. God is not bound in the straitjacket of fixed rates of change which now seem to bind fallen mankind. His fiat word determined the speed of creation, not the needs of random evolutionary processes. God did not need huge quantities of time to accomplish the creation. Therefore, it should not be difficult to imagine that Adam, made in God's image, should exhibit the capacity to deal mentally with the universe which God had created. Adam's mind was analogous to God's; it was precise, comprehensive, and rapid in its operations.

Prodigies

Every generation has numerous individuals who can perform prodigious feats of mental computation. These gifted individuals can solve various kinds of problems, frequently mathematical, with seemingly impossible speed. Consider the Dutch mathematician, Willem Klein. He performs the following calculation in front of audiences. He is assigned a number of 499 digits by a computer. This number is the product of another number multiplied by itself 73 times. His task is to calculate this 73rd root in his head. In two minutes and 43 seconds, he solves it. The number is 6,789,235.² Shakuntala Devi, an Indian prodigy, is not quite so impressive, but she can find cube roots of six-digit numbers faster than students can

2. *People* (Sept. 27, 1976).

find the answer on hand-held calculators, or she can find the cube of 777. She can instantly tell you what factorial 13 is, which is 13 times 12 times 11, and so forth, down to one: 6227020800. "Never use commas," she says. "They'll only confuse you." She can tell you what day of the week it was on say, Nov. 3, 1949. But she cannot tell you how she accomplishes these feats.³ Eric Jablow taught himself how to read by the age of 20 months, or possibly sooner, and he taught himself calculus at age 6. He graduated from Brooklyn College with highest honors at age 15. He had attended graduate school lectures in mathematics as early as age 7.⁴ These people are obviously abnormal, yet they are common enough in every generation to remind us of what we have lost since the Fall.

A question could legitimately be raised concerning the source of these abnormal powers of mind. Is it possible that demonic, occult forces are behind them? In some cases, it is not only possible but probable. But no universal generalization can be made with complete confidence. A case of one occultist who developed extraordinary mathematical powers as a result of his family's trafficking with demonic forces was the great Indian mathematician, Ramanujan, who died at the age of 32 in 1920. His biographer, S. R. Ranganathan, devotes several pages to a discussion of Ramanujan's occult background. He reported having a dream as a young man. The family goddess, Namagiri, "wrote on his tongue. Thereafter his precocity developed suddenly. It has been stated by his mother that he was born after her parents had prayed to the Goddess to bless her with a son. There is another piece of information current in Ramanujan's family. His maternal grandmother was a great devotee of Goddess Namagiri. She would often go into a trance and speak as Goddess Namagiri. In one such trance, before the birth of Ramanujan, she is said to have uttered that, after her own death, the Goddess would speak through the son of her daughter."⁵ His mother was an astrologer, and she predicted her son's death a month before it happened. She consulted another professional astrologer about her son's horoscope, without revealing whose it was, and he confirmed her fears.⁶ The mathematician would narrate occult experiences to

3. *Washington Post* (Oct. 4, 1976).

4. *Washington Star* (May 22, 1977).

5. S. R. Ranganathan, *Ramanujan: The Man and the Mathematician* (Bombay: Asia Publishing House, 1967), p. 13.

6. *Ibid.*, pp. 13-14.

his friends in India.⁷ He possessed (or was possessed by) powers of precognition; he would foresee future events in visions.⁸ "Ramanujan and his family were ardent devotees of God Narashimha (the lion-faced incarnation [*avasara*] of God), the sign of whose grace consisted in drops of blood seen during dreams. Ramanujan stated that after seeing such drops, scrolls containing the most complicated mathematics used to unfold before him and that after waking, he could set down on paper only a fraction of what was shown to him."⁹

It must not be supposed that Ramanujan was some obscure, though talented, Indian mystic. He was brought to Cambridge University by Prof. G. H. Hardy, who long after regarded the young man as one of the most talented mathematicians of his era. He was elected a Fellow of the Royal Society, a major honor. Nor is his biographer an obscure mystic; he was the official biographer for Ramanujan's *Collected Papers*, and he included some of these details of Ramanujan's occult background in that biography.

Hardy himself provided an example of Ramanujan's remarkable abilities. He had visited the young man at a sanatorium.

HARDY: I came in the taxi-cab 1729. It is rather a dull number. I hope it is not an unfavorable omen.

RAMANUJAN: No, it is a very interesting number.

HARDY: How?

RAMANUJAN: It is the smallest number expressible as the sum of two cubes in two ways. ($1729 = 1^3 + 12^3 = 9^3 + 10^3$).¹⁰

Time and Modern Science

The bondage of time came after the Fall. Like the curse of the ground, it was both a curse and a blessing. It set limits on men's ability to work out the implications of their rebellion from the beginning, and as men nevertheless tried to develop their capacities for further rebellion, God placed additional limits on them, such as shorter life spans, death through the Noachic flood, and the division of their language and their scattering abroad at the tower of Babel (Gen. 8-11). The curses restrained their evil, and therefore served as blessings for the godly. The ethical benefits outweighed the loss of longevity and the scattering abroad.

7. *Ibid.*, pp. 13-14.

8. *Ibid.*, pp. 88-89.

9. *Ibid.*, p. 87.

10. *Ibid.*, p. 113.

Also, like the curse of the ground, the bondage of time is to be lifted progressively. As men conform themselves increasingly to the laws of God, human society is to be restored to something approaching the garden paradise, and even beyond. That paradise, after all, was a training ground for dominion. The preliminary manifestations of the new heavens and new earth that are described in Isaiah 65 serve as down payments on the final restoration beyond the day of judgment. But these days of external blessing are to be worldwide in scope, not confined to a tiny strip of land a little east of Eden. This earthly triumph will not be perfect, for sinners will still do their work (Isa. 65:20). Nevertheless, it will be a world more like paradise than hell.

The passage describes the end of conflict between carnivorous animals and their prey (Isa. 65:25). It also describes the lengthening of mankind's days on earth. These words do not refer to the post-judgment New Heavens and New Earth, for in that period there will be no sinners mingling with saints, and no death whatsoever. Isaiah announced: "There shall be no more thence an infant of days, nor an old man that hath not filled his days: for the child shall die an hundred years old; but the sinner being an hundred years old shall be accursed" (Isa. 65:20). God can permit longer lives, even of sinners, since their influence in this period will be minimal compared to the influence of the godly. This will be in time and on earth. The curses of time will be progressively diminished in response to the creation of godly institutions and the preaching of the gospel. Longevity, which is a gift of God for ethical obedience (Ex. 20:12), will be restored, indicating that time will have had its curse aspects minimized.

It might be possible to interpret Isaiah 65:20 in terms of modern rates of economic and cultural change. Rather than taking the words literally, we might argue that compound annual rates of economic growth of 2%, 4%, or even 6% have produced such extraordinary changes in the modern world in such a brief period of time—one average human lifetime—that the typical Western, industrial nation's citizens live the equivalent of several lifetimes of those living in Isaiah's day. In effect, the modern West has developed an economy which permits people to "pack" several lives into one. Therefore, we might conclude, Isaiah 65:20 has been fulfilled allegorically or symbolically in today's growth-oriented economies.

There are several problems with such an interpretation. First, the

words of the passage speak of "an hundred years old" as a child's age. Second, today's high rates of economic growth have not been the product of spiritual renewal. What we have seen is an inverse relationship between Christian orthodoxy and economic growth: the worse their spiritual condition, the more material possessions modern men receive. We are viewing conditions analogous to those described in Deuteronomy 8:12-17, where men attribute their wealth to their own autonomous efforts. *Today's wealth appears to be a prelude to God's judgment.* Per capita wealth is rising in the West, but population growth is declining. A major blessing of God is being withheld: children.

Today's rates of economic growth cannot be sustained for centuries. The compounding process at 2% per annum, let alone 6%, creates astronomically high per capita wealth in a few centuries. We will run into the limits of growth eventually. Humanism may be nearing the end of its rapid economic growth rates, at least in terms of industrial growth. This century has been a radical historical aberration: large-scale mass production, financed by monetary inflation, accompanied by mass pollution, compounding annually, decade after decade. This is not the culmination of Christian orthodoxy but of arrogant secular humanism which is steadily consuming its moral foundation, namely, the cultural veneer of Christian orthodoxy. If anything, modern industrialism is a demonic imitation of Isaiah 65:20, the substitution of historically unprecedented economic and cultural change for long-term social progress and increased life expectancy through the application of biblical law to society. It is "eat, drink, and be merry, for tomorrow we die." What a biblical social order offers is longer life spans and slower, less radical social change which can be sustained by the environment—social, ecological, and psychological—over centuries.

The emergence of modern science and technology came in response to the establishment of godly rule on a far wider basis than ever before. Prof. Lynn White, Jr., has chronicled the important technological developments of the Middle Ages.¹¹ Medieval Catholic culture was far more productive than the pagan cultures that it replaced. But it was the Protestant Reformation which unleashed the forces of modern science.¹² Loren Eiseley, the anthropologist-

11. Lynn White, Jr., *Medieval Technology and Social Change* (New York: Oxford University Press, 1962).

12. For an introduction to this question, see the two articles that appeared in *The*

historian who was so successful as a popularizer of Darwinian evolution in the mid-twentieth century, understood this more clearly than most of his fellow scientists: "The experimental method succeeded beyond men's wildest dreams but the faith that brought it into being owes something to the Christian conception of the nature of God. It is surely one of the curious paradoxes of history that science, which professionally has little to do with faith, owes its origins to an act of faith that the universe can be rationally interpreted, and that science today is sustained by that assumption."¹³

Christianity was instrumental in producing the beginnings of applied science. Applied science and technology stemmed from the understanding of the world which affirmed its orderliness and man's access to knowledge of its processes. The fact that the mind's logic, especially mathematical logic, conforms to the operations of the external world, is nothing short of a miracle—an unexplainable coincidence from the standpoint of post-Darwinian science.¹⁴ Yet Christian writers have always provided an explanation: man is made in the image of God, the Creator. Applied science has now produced tools of dominion that enable man to approximate the lost skills of Adam in the garden. Even Willem Klein was finally replaced by a computer at the European Center for Nuclear Research (CERN). When the Center hired him in 1958, he was more efficient than their computer in many areas. Simple men with inexpensive calculators can perform mathematical computations that the early computers of the late 1940's could not perform as rapidly, and no tools could perform rapidly prior to 1945. There is a problem with such devices, however: they have almost allowed rebellious man back into the

Journal of Christian Reconstruction, VI (Summer, 1979): "Medieval Speculation, Puritanism, and Modern Science," by Charles Dykes, and "The Role of Puritan-Calvinism in the Rise of Modern Science," by E. L. Hebden Taylor. See also Robert K. Merton, "Puritanism, Pietism, and Science," in his book, *Social Theory and Social Structure* (Glencoe, Illinois: The Free Press, 1967), ch. 17; R. Hooykaas, *Religion and the Rise of Modern Science* (Grand Rapids, Michigan: Eerdmans, 1972); and E. M. Klaaren, *Religious Origins of Modern Science* (Grand Rapids, Michigan: Eerdmans, 1977).

13. Loren Eiseley, *Darwin's Century* (Garden City, New York: Doubleday Anchor, [1958] 1961), p. 62. See also Stanley Jaki, *The Road of Science and the Ways to God* (Chicago: University of Chicago Press, 1978).

14. Eugene P. Wigner, "The Unreasonable Effectiveness of Mathematics in the Natural Sciences," *Communications on Pure and Applied Mathematics*, XIII (1960), pp. 1-14. Cf. Vern S. Poythress, "A Biblical View of Mathematics," in Gary North (ed.), *Foundations of Christian Scholarship* (Vallecito, Calif.: Ross House Books, 1976), ch. 9.

"garden" apart from saving faith and biblical dominion. Men may wish to find an escape from the bondage of death, thereby allowing them access to infinite temporal extension for the purpose of indulging their lusts. Yet their tools of dominion now threaten all of civilization, for the tools of dominion can produce and have produced mighty weapons, allowing us to turn ploughshares into swords more efficiently.

Time and Economics

Unquestionably, technology has permitted us to make more efficient use of our time. Time is the resource, above all, which men seek to conserve, if only to waste it in unfulfilling leisure activities. *Time is mankind's only absolutely irreplaceable environmental resource.* It is the human resource which confounded the attempts of Solomon to deal with in terms of the logic of autonomous man (Eccl. 1-3). Time's limitations led the psalmist to declare: "My days are like a shadow that declineth; and I am withered like grass" (Ps. 102:11). Time is in short supply—only one earthly life per customer!

Time is the fundamental component in all economic planning. It is the foundation of a proper explanation of the phenomenon of the *rate of interest*. The interest rate stems from the rational distinction in each person's mind between an economic good enjoyed in the present and the same good enjoyed in the future. Goods to be used in the future are less valuable than the same goods used in the present (other things being equal, as the economist always says). Some men value present consumption very highly. They will therefore sacrifice the use of a presently owned resource only for large quantities of scarce economic resources in the future. These people will loan their assets only at high rates of interest. The premium of present goods over future goods is very high; some economists call this "high time-preference."¹⁵ This *present-orientedness* is a crucial factor in slum communities and in underdeveloped (backward, primitive) nations.¹⁶

15. Ludwig von Mises, *Human Action* (3rd ed.; Chicago: Regnery, 1966), pp. 483ff., 499ff.

16. Edward Banfield, *The Unheavenly City* (Boston: Little, Brown, 1970), argues that one's class position is a function of one's attitude toward the future, with lower-class people being present-oriented. In Mises' terminology, they have high time-preference. See pp. 47ff., 62, 72, 163ff. The ghetto suffers from massive present-orientedness. Sociologist Helmut Schoeck has pointed out that envy in primitive cultures prevents people from sharing their views of the future, and the economic

In contrast are those who are distinctly *future-oriented*. They have low time-preference, and consequently they are willing to forego the present use of a scarce economic resource for relatively small increases in the future. These people will loan resources at low rates of interest. Compared with backward cultures, future-oriented cultures place a high premium on future income. The low interest rates make it possible for entrepreneurs to borrow resources (money) in order to expand the supply of future goods and services. Their profit margins can be lower because the rate of interest they have to pay is low. More projects can therefore be undertaken than would have been possible had interest rates been higher. These people do not feel the burden of time so heavily as those who are present-oriented. They see the future as a world to be overcome. They see time as a tool of dominion, not a means of escape. *Time is seen as an opportunity for future dominion*. The Puritan work ethic went (and goes) together with future-orientation. Both serve to increase economic productivity. When this faith erodes, economic growth is bound to slow down.

People buy in the market what they desire and can afford. High time-preference people want instant gratification, and they pay high interest rates for loans that enable them to buy today's consumer goods. They want present goods more, compared to future-oriented people, than they want future goods. So investment opportunities dry up, since entrepreneurs cannot generally afford to pay the high interest rates that present-oriented people demand on their loaned funds. Therefore, output stagnates or declines. The supply of future goods drops. *But this is exactly what the high time-preference people wanted*. They discounted the value of future goods so much that potential producers of future goods decided not to produce them. They placed a low value on future goods, and the market responded accordingly. On the other hand, low time-preference societies have high rates of savings and investment. They place a high value on future goods. They are not nearly so present-oriented. Consequently, they lend money at low rates of interest, which stimulates the output of those

possibilities of the future for their own families, with those outside the immediate family unit. "No one can even begin to have rational aspirations for the future unless he has a realistic view of what that future may be; but no such prognosis can be made so long as each member of the group carefully keeps hidden *his* view of the future." Schoeck, *Envy: A Theory of Social Behavior* (New York: Harcourt, Brace & World, 1970), p. 46.

future goods that they value so highly. People get what they pay for, and future-oriented societies demand far more future goods than present-oriented societies do. They want economic growth in the future, and this is exactly what they buy by giving up present goods. This is a major factor in economic development.

It is a familiar aspect of the human condition to desire a return to paradise. After all, paradise is what God originally intended for us. But the flaming sword was to remind Adam and his heirs that the return to paradise must be in terms of God's saving grace and His law-order, not in terms of man's autonomous labors. Godly men are to strive, through faith and labor, to *conquer* the burdens (curses) of time and scarcity. It is when men try to *escape* these burdens altogether, or to conquer by means of statist tyranny (the Moloch State), that their quest for paradise is illegitimate. There are numerous ways that men have devised to escape from time and its burdens, but all are illegitimate: drunkenness, drugs, nudity, primitive chaos festivals (Carnival, Mardi Gras), mystical union with a monistic god through asceticism, Marxian revolution, and so forth. The numerous books written by Mircea Eliade are accounts of these various attempts to escape time's bondage.¹⁷ The Christian answer is hard work in terms of biblical law, and low interest rates that are the product of a religiously based future-orientation. These are the fruits of personal and cultural maturity.

It is important to understand, however, that *low interest rates must be the products of voluntary exchange*. They are not to be legislated by a civil government which is seeking to play God by increasing productivity through legislative fiat. When men are honest, ready to repay loans at any cost, the risk premium in any interest rate will drop. When governments refuse to inflate the currency, the price inflation premium disappears, or even becomes negative, also keeping interest rates down. When men are future-oriented, interest rates will be low. But when the State attempts to legislate the benefits of godly social order apart from these three features—low risks, low or no price inflation premium, and low time-preference—then bureaucrats merely succeed in drying up the supply of loanable funds on the free market. They impose a price ceiling on loans, and as always, the result is a shortage of the price-controlled good, which in this

17. On Eliade's works, see Guilford Dudley III, *Religion on Trial: Mircea Eliade and His Critics* (Philadelphia: Temple University Press, 1977), chaps. 2-4.

case is loanable money. A black market for loans springs up, with high interest rates to compensate the lenders for the risks of breaking the law. Interest-rate ceilings (usury laws) succeed merely in misallocating scarce economic resources.¹⁸

Economic growth is the product of covenant-conforming human action: thrift, honest dealing, hard work, future-orientation, care for one's calling (vocation), etc. The function of civil government is to enforce biblical law, including modern applications of Old Testament law (such as traffic laws). There are no long-term fruits apart from biblical roots. The cheap imitations of paradise that have been created by modern Marxism, socialism, and Keynesian interventionism-inflationism are leading not toward a New Heavens and New Earth, but toward a new hell on the old earth.

Modern man believes that time has been operating for at least ten billion years. He sees the processes of time as essentially unchanging, or uniformitarian. What man is today, for better or worse, has come as a result of slow, continual changes over time, through the process of evolution through natural selection. Time is seen as a burden to be overcome through science, through economic manipulation, or through some sort of new evolutionary leap which will at last speed up the process of evolution.

The Bible tells us that the processes of time have changed radically in the past, as a result of man's Fall. Men in the post-Fall period lived long lives, but steadily man's life span was shortened after Noah. Yet as a result of ethical conformity to God, men's lifetimes will once again be lengthened. Time is a constant, as far as we know, but *the processes of time vary in terms of man's ethical relationship to God and His law-order.*

Temporal extension is to man what eternity is to God. Temporal extension makes it possible for man to accumulate knowledge and power, for good or evil. Time also makes human freedom possible: as each man moves into the future, he makes choices among options, which is what is meant by freedom. God's freedom, of course, is immediate, timeless, and eternal.

Time, therefore, is a true blessing and opportunity for regenerate men. It is not absolutely without burdens this side of the new

18. Murray N. Rothbard, *Power and Market: Government and the Economy* (Menlo Park, Calif.: Institute for Humane Studies, 1970), pp. 25-26; Armen A. Alchian and William R. Allen, *University Economics* (3rd ed.; Belmont, Calif.: Wadsworth, 1972), p. 471.

creation, but it is not fundamentally a burden, as it is for the rebellious. Those who wish to escape time altogether are rebellious. They choose occult methods of achieving secret knowledge, mystical illumination, or some secret formula to give them perfect power or perfect protection. Work-in-time was an opportunity for Adam. Work-in-time-under-the-curse is a burden for sinful man. The unregenerate hope to escape work and time by becoming omniscient and omnipotent, and even eternal, like God. The godly man hopes to escape the *curse* of time by overcoming sin and working in time, directed by the guidelines provided in God's law.

Conclusion

Time, matter-energy, and space appear to be constants in the creation. Certainly, we do not delay the coming of God's day of judgment by manipulating the universe in some way. Time does not change, but the processes within time's fixed limits do change, and so do men's attitude toward those processes. Men may view time's processes as opportunities to be used to the glory of God, or as burdens to be overcome through autonomous scientific techniques, or through magic, or mystical illumination. But time remains man's theater of response to God.

It is therefore understandable that the modern State should attempt to seek control of the processes of time, as well as to seek to control those features of the economy that are the product of a particular religious perception of the meaning of time. The secular humanist State seeks to attain the benefits of low interest rates by imposing usury laws that force down the legal, visible rates of interest in the various loan markets. The bureaucrats try to promote economic growth by lowering short-term interest rates by increasing the money supply, in a vain attempt to increase long-term production. They attempt to stimulate economic growth in the ghetto, or in backward foreign nations, through humanistic, tax-supported schools, or through tax-financed welfare programs of all kinds. They do not deal with *the central problem of the ghetto and the underdeveloped nation*, namely, the present-orientation of those who make up the bulk of the backward or poverty-stricken population. Indeed, "poverty-stricken" is a phrase indicating that poverty is an active force that suppresses the innate creativity of man—a hypothetical universal creativity. But men's time perspective can overcome all the foreign aid funds that any government agency might send into a high time-

preference culture. What men *believe* has more relevance than the goods that men receive from messianic, humanistic civil governments.¹⁹ If time is seen as a burden, welfare funds can do little to lower the pressure of this perceived burden. And where time is seen as an opportunity for conquest, the funds for expansion will be generously provided by private loans from people who want to invest in productive cultures that are marked by future-oriented entrepreneurs. *Capital flows toward those who believe in the future, who accept the burdens of time as an opportunity for personal growth and personal profit.* To gain access to the capital assets of unwilling investors, the messianic State confiscates the funds of the productive in order to divert the normal flow of capital toward time-conquerors and away from the time-conquered. The State shifts capital toward the time-conquered in the hope that the mere possession of capital, apart from a new vision of time, will be an effective substitute for a change of time perspective—a sort of mechanical alternative to regeneration. The bureaucrats speak of inducing a “take-off into self-sustained economic growth.”²⁰ The results are almost uniformly negative.²¹ Manipulation through coercive wealth-redistribution is not an effective alternative to a culture-wide shift in people’s perceptions of time and its burdens.

19. P. T. Bauer, *Dissent on Development: Studies and Debates in Development Economics* (Cambridge, Mass.: Harvard University Press, 1972), pp. 78ff., 87, 202ff. See also Bauer, *Equality, The Third World and Economic Illusion* (Cambridge, Mass.: Harvard University Press, 1981).

20. Walt W. Rostow, *The Stages of Economic Growth* (Cambridge: At the University Press, [1960] 1971). For extended critiques of Rostow’s “take-off” hypothesis, see the published debates of the International Economic History Association, edited by Rostow: *The Economics of Take-off into Sustained Growth* (New York: St. Martin’s Press, 1963). Rostow still was clinging to his take-off thesis in his extraordinarily detailed book, *The World Economy: History and Prospect* (Austin: University of Texas Press, 1978), where he still speaks of a “post-take-off stage, the drive to technological maturity,” p. 59. As a one-volume introduction to the known details of economic history in the West, and an introduction to the secondary sources of the discipline as of the mid-1970’s, this book is very useful. It is marred, as are all of Rostow’s books on economic history, by a lack of any integrating market theory, other than the “take-off” hypothesis, which he has tended to de-emphasize in recent years.

21. P. T. Bauer has argued that Rostow’s stages are simply another variation of the fallacy of historicism. See his critical essay, reprinted as chapter 18 of his book, *Dissent on Development*. As Bauer says, “Growth can never be self-sustaining in the sense of continuing irrespective of the maintenance or evolution of appropriate attitudes and institutions and the pursuit of sensible policies,” p. 485.

PRIMITIVE NOMADS

And Abel was a keeper of sheep, but Cain was a tiller of the ground (Gen. 4:2).

There has been no myth cherished more in twentieth-century anthropological scholarship than the mid-nineteenth-century hypothesis concerning primitive man, the nomad. According to widely varying but ever-lengthening estimates, man—or some animal quite close to man genetically—first appeared on the earth about three million years ago. No doubt this estimate will be woefully conservative in future years, given the fact that this estimate grew from 500,000 years at the absolute outside (and probably closer to 250,000 years)—the standard account in the late 1950's¹—to 1.5 million years in 1961 (Louis Leakey's African discoveries) to 2.5 million years in 1974 (Richard Leakey)² to as much as 3.5 million years in 1976 (Richard Leakey).³ It startled archeologists when 150 bones from a group of "manlike individuals" who lived together in a family or troop were discovered in Ethiopia in the mid-1970's, for they seemed to have perished about three million years ago. Anthropologists had always believed that human social groups were relatively recent, dating back only 60,000 years.⁴

However long ago it may have been, these creatures supposedly roamed alone or in packs, eating wild berries or other plants that grew wild, hunting animals, and drifting with the productivity of nature. Then, about 10,000 years ago, men in the fertile crescent region of the Near East discovered the skills of animal husbandry and agriculture. Shepard Clough's evaluation is representative: "Here was one of the major technological revolutions of all time,

1. Loren Eiseley, *The Immense Journey* (New York: Vintage, 1957), pp. 115-18.

2. *Newsweek* (July 15, 1974).

3. *Newsweek* (March 22, 1976).

4. *Idem.*

for only in settled societies is man able fully to meet Western culture's criteria of civilization. At least no nomadic society has ever done so."⁵ This narrative account assumes the validity of evolutionism's presuppositions concerning society and its origins: from animal to human being to social being. Nomadism evolved into civilization by means of certain technological discoveries.

The Bible informs us that from the very beginning, Adam knew about both agriculture (dressing the garden) and animal husbandry (naming or classifying the animals). His two sons received sufficient training from their father to embark on their respective careers. One was a husbandman, and the other was a farmer. The division of labor had already manifested itself, with each man concentrating on his own specialty. Evolutionary anthropologists and social historians have assumed that the simpler tasks of hunting animals and picking wild berries necessarily preceded the more complex tasks of domestication, both of animals and plant life. Yet the covenant of dominion explicitly states the reverse: covenantally obedient men are required to subdue the world—domesticate it—to the glory of God. It is only when men seek to *abandon* the requirements of this dominion covenant that nomadism becomes a factor in human history.

The division of labor which we see in the case of the two brothers had been an explicit part of human life from the beginning. Eve was given to Adam in order to assist him in his tasks (Gen. 2:18; I Cor. 11:8-9). The division-of-labor principle was acknowledged by their sons. Presumably, this specialization of their skills was mutually beneficial to each of the men, since each could concentrate his time, capital, and knowledge on one area of the economy, while enjoying the fruits of the other man's calling through voluntary exchange. Each wound up with more agricultural produce and sheep products than would have been possible had each of them tried to produce both products. The costs of dominion were reduced.

The dominion covenant is also referred to as the *cultural mandate*. This phrase is appropriate, for apart from the combined efforts of individuals, acting cooperatively through market competition, the

5. Shepard B. Clough, *The Economic Development of Western Civilization* (New York: McGraw-Hill, 1959), p. 22. It is interesting that this statement critical of nomadism was dropped from a later edition of this standard textbook: Clough and Richard T. Rapp, *European Economic History: The Economic Development of Western Civilization* (New York: McGraw-Hill, 1975), p. 18. The revised sentence ends where the clause critical of nomadism began: "Here was one of the major technological revolutions of all time."

subduing of the earth would become far more difficult to coordinate, and far more expensive to regulate. Culture, the product of cooperative human action, is vital to the tasks of domestication. Men are expected by God to set down roots, build for the future, establish permanent institutions, and increase in wisdom. From the beginning, men formed communities. Cain built a city (Gen. 4:17). Civilized men have always feared the life of nomadism. Cain pleaded with God that the life of a vagabond was more than he could bear as a punishment, and God graciously reversed this condemnation (Gen. 4:12-15). It was too great a curse.

The advent of nomadism, especially the individualistic form, is a sign of social devolution. Chronologically, nomadism came later than civilization in human history, contrary to the religion of evolutionism. Nomadic tribes are often fierce warriors, but they leave few records of their own and no culture. The Huns, for example, left almost no trace of their years of conquest. The major history of the Huns written in the twentieth century was a lifetime research project which was never fully completed by its author.⁶ He had to master many languages in order to reassemble the story of the Huns, since there were only fragments available, in many geographical regions, written by the victims and enemies of the Huns. Victorious on horseback, they were eventually swallowed up by the cultures they conquered, leaving no literature of their own to testify to their importance.

The wandering tribe which operates in terms of the stripped earth policy (the North American plains Indians, for example) or theft (the gypsies) is clearly rebellious. Like the years of wandering in the wilderness by the Israelites, nomadism is a curse of God. Men who try to escape from the ethical burdens of laboring under the terms of the dominion covenant are often tempted to escape into this form of cultural rebellion. Hitchhiking in the United States has always been the practice of the poor, the hobos, the criminals, and the rootless young.⁷ Police departments and other crime-fighting organizations have long warned drivers not to pick up hitchhikers, since there are so many criminals or disturbed, dangerous people among their ranks. It was no coincidence that in the years of the counter-culture,

6. Otto Mänchen-Helfen, *The World of the Huns*, edited by Max Wright (Berkeley: University of California Press, 1973).

7. See the "classic" document of the so-called "beat generation," Jack Kerouac's *On the Road* (New York: Viking, [1957] 1974).

1965-72, there were millions of teenaged youths on the roads of the Western nations, all looking for a free automobile ride to nowhere in particular. The nomad's life is a life of few responsibilities, which is why nomadism increased so rapidly when the counter-culture appeared.

There is little question that the most universally recognized American figure is the cowboy. Celebrated in the movies, books, and television shows, the romantic figure of the lone cowboy, the ultimate rugged individualist, has been a favorite one since the actual era of the cowboy in the 1870's and 1880's. The bulk of the stories are fictional, as is the romantic framework within which the legend of the cowboy operates. They were men of little capital, no vision, and no future.⁸ Those who became successful generally ceased being cowboys and became entrepreneurs who hired cowboys at low wages. The American cowboy was a phenomenon of one generation of economic expansion. He survived mainly in legend and fantasy, but there he survived tenaciously. It is revealing to consider the fact that the television show, "Gunsmoke," was the longest-running, prime-time dramatic series on American television, surviving two decades from the mid-1950's to the mid-1970's. It is also revealing to understand that the show lasted about as long as the actual era of the cowboy did, especially if we consider the extra years that the show ran on radio, prior to the television series. If we consider the likelihood of reruns of the series—which are expected to continue into the twenty-first century—it will long outlast the era of the cowboy.

The popularity of the American television series of the early 1960's, "Route 66," also testifies to the widespread acceptance of nomadism as a fantasy idea just prior to the advent of the counter-culture. Two young men roamed the country in an expensive sports car, a Chevrolet Corvette, which was apparently traded in each year for the latest model (the show was sponsored by Chevrolet), despite the fact that neither man had any visible signs of employment. "Then Came Bronson," a one-year series in the late 1960's, featured a nomad on a motorcycle. Each show was introduced by a scene where Bronson was stopped at a traffic light, and a man in a station

8. On the cowboy as nomad, see the autobiographical books by Will James: *Lone Cowboy* (Barrington, Illinois: Peter Wolfe, [1930]), and *Smokey* (New York: Scribner, [1926]). The title of a third James book is appropriate: *The Drifting Cowboy* (Barrington, Illinois: Peter Wolfe, [1925]).

wagon, the symbol of family responsibility in America, looks at him and says, "Where are you going?" "Nowhere special," Bronson answers. "Boy, I wish I were you," the man replies. "Well, hang in there," says Bronson, and zooms away as the light turns green. Here was the heart of the message of romantic nomadism: the lure of low-responsibility existence, the lure of the road. The cowboy nomads of American fiction brought law and order with them, though they themselves may have been on the fringes of the Establishment's law. The modern fictional nomad lives on the fringes of culture and brings existential alienation. The real nomads of the counter-culture brought (and bring) disease, such as venereal disease and lice. The counter-culture, shortly after its inception, was literally all loused up.

There is no question that nomads are primitive. They are not future-oriented. They do not build for the future. Whether in the African veldt, the Australian back country, the pre-Columbus American plains, the post-Civil War American plains, the wastes of the Arabian desert, or on Route 66, the nomads cannot build a civilization. God paralyzed the people who attempted to build the tower of Babel by scattering them. The wanderer is culturally impotent. But what must be understood is that *primitivism is primarily a religious and ethical outlook*; it is not some hypothetical steppingstone in man's upward evolution. It is a religion opposed to civilization.

Rootless men are not long creative. It is not surprising that modern American corporations are finally questioning the practice of moving executives from city to city every few years. They have encountered increasing opposition from their employees, who now understand better the strains that such nomadism creates for the family. (Differentials in housing costs, city to city, in the late 1970's also became an important factor encouraging some families to stay put; they could not afford the mortgage debt in cities like Los Angeles, San Francisco, and Washington.) In the long run, the large American corporations will find that stronger community and family ties will benefit the companies, since productivity will increase in higher management.

The autonomy of modern urban life, with its atomized life styles, has built-in limits. Unstable neighborhoods, in which few people know more than one or two families on the block, are easier targets for burglars and other criminals. The requirements of self-defense, especially since the race riots of the mid-1960's, have prompted some

neighborhoods in large American cities to establish "neighborhood watches," in which people will look out for the property and homes of others on the block, or even create "citizen's patrols," with a car full of residents who patrol the street nightly, looking for suspicious signs and radioing to a neighborhood "home base" if they think the police should be called to investigate. Invariably, crime drops in such neighborhoods; it is cheaper for the criminals to work in more atomized neighborhoods.

An advertisement appeared in the *TV Times* supplement to the *Los Angeles Times* on Sunday, July 22, 1971. Television guides are read primarily by women, as the advertising reveals. In this case, however, the appeal was made to the needs of the whole family. It was an advertisement for a Karate school, in which students would learn the martial arts of the East. The headline reads: "My Sons and I. . . ." In smaller type, we read: "Morris Stapler of Torrance says, through our training in Karate, my sons and I have drawn closer. The few hours a week we spend together training does more for our father-son relationship than camping once a year." Here is an ad that would warm a mother's heart. At last, a way to get the boys together with their father! And while they are communicating together, they will be learning how to punch out the backbones of muggers and potential rapists. The advertising agency had sensed the multiple needs of the families of the notoriously rootless region of southern California.

The quest for community can become pathological, of course. Twentieth-century totalitarian regimes have used the language of community to gain the commitment of the urban rootless, as well as the rural peasantry who have had their religions and institutions shattered by the intrusions of the West. The conservative American sociologist, Robert A. Nisbet, has written that "The greatest appeal of the totalitarian party, Marxist or other, lies in its capacity to produce a sense of moral coherence and communal membership to those who have become, to one degree or another, victims of the sense of exclusion from the ordinary channels of belonging in society. To consider the facts of poverty and economic distress as the causes of the growth of communism is deceptive. To say that the well-fed worker will never succumb to the lure of communism is as absurd as to say that the well-fed intellectual will never succumb. The presence or absence of three meals a day, or even the simple possession of a job, is not the decisive factor. What is decisive is the frame of reference. If, for one reason or another, the individual's im-

mediate society comes to seem remote, purposeless, and hostile, if a people come to sense that, together, they are victims of discrimination and exclusion, not all the food and jobs in the world will prevent them from looking for the kind of surcease that comes with membership in a social and moral order seemingly directed toward their very souls.⁹ It is significant that the book in which this statement appears, *The Quest for Community*, went almost unnoticed when it was first published in 1953. A few conservative scholars knew its theme, but other intellectuals ignored it. Its title was changed to *Community and Power* in the 1962 paperback version. But it was changed back after 1965; the counter-culture explosion brought the theme of the quest for community before the eyes of the intellectuals. Nisbet's career made a quantum leap only after the counter-culture's advent, when the book became very popular. (Also, as he once admitted, it helped when *Commentary*, the Jewish intellectual monthly, began to shift rightward, using his articles to help buttress the case for less radical politics and more conservative traditions. Jews, he said, buy a lot of books and read them, especially serious books.¹⁰)

Conclusion

Like Cain, who feared the vagabond's existence, men cannot long bear the burdens of total rootlessness. Nomads will always be in the minority. Still, modern culture, with its philosophical and moral rootlessness, can conceivably become a temporary blessing. It provides a zone of freedom for Christians to begin to rethink and rebuild the foundations of culture. But this reconstruction must always be in terms of an *ideal of permanence*. The intellectual and cultural nomadism of modern urban secularism is a temporary phenomenon. Christians have an obligation to gain skills now, in every field of life, so that they will be prepared to replace the world's leadership, at every level, when secularism's cultural nomads wander off into the wilderness of drugs, retreat, totalitarianism, or suicide. We must move forward culturally, not in a static, nomadic circle. The static cycles of nomadism are demonic.

9. Robert A. Nisbet, *The Quest for Community* (New York: Oxford University Press, [1953] 1965), p. 37.

10. Nisbet made this statement to me in the late 1960's, although I cannot remember exactly when. I studied social theory under his guidance during the late 1960's.

TO KEEP A BROTHER

And the LORD said unto Cain, Where is Abel thy brother? And he said, I know not: Am I my brother's keeper? (Gen. 4:9)

The reason for my decision to include an exegesis of this passage in an economic commentary on the Bible has nothing to do with the meaning of the passage, its implications, or its economic content. The context of the passage has very little to do with economics as such, except possibly the lawlessness of using coercion and violence against one's fellow man. Unfortunately, the passage has become a familiar one in liberal political and liberal theological circles. "My brother's keeper" has become a catch phrase. More to the point, "*your* brother's keeper" has become the shibboleth of shibboleths of the so-called Social Gospel movement, second only to "love thy neighbor as thyself."

The standard explanation of this passage—completely out of context—is that each man owes his neighbor a great deal. Specifically, we all collectively owe each other life, liberty, and property, especially property, and most important, *property confiscated from the rich through political action*. We are supposedly the legal guardians of the poor, the infirm, and the feeble-minded. We have this responsibility, not as Christian individuals, or members of churches, or contributors to voluntary charities, but as members of the body politic. We become our brother's *legally responsible keeper* for these two reasons: first, he is poor and we are not poor; second, both the poor and the rich are under the sovereignty of civil governments. We are all brothers because of our shared humanity under the universal Fatherhood of God, but more importantly, because of *our shared humanity under the sovereignty of the State*. It matters less to advocates of the Social Gospel what kind of God men believe they are sons of, than

what kind of State men believe they are subordinate under. Their frame of reference is far more political than theological.

What was the context of Cain's response to God? First, he was a rebel whose sacrifice before God had been rejected by God (Gen. 4:5). Second, Cain had murdered his brother (Gen. 4:8). At this point, God approached Cain with a question concerning his brother's location. Cain answered with a lie: he did not know. Then he justified this lie to an omniscient God by asking a rhetorical question: Am I my brother's keeper?

What did this phrase mean? It should be obvious, but it is not obvious to the defenders of the socialistic Social Gospel. Cain sought to justify his supposed lack of knowledge concerning his brother's whereabouts. How was he supposed to know where Abel was? After all, was he Abel's keeper? We have to ask ourselves, what is the meaning of "keeper"? The Hebrew word that is used for Cain's rhetorical question is transliterated *shomer*, meaning "guard, guardian." It is used specifically in I Samuel 17:20 to refer to guarding sheep, although strictly speaking, *shomer* is not normally translated as "shepherd." But the very nature of Cain's response indicates that "shepherd" was one meaning Cain had in mind. Cain was being very clever. Was he the guardian (shepherd) and Abel an incompetent, like some sheep? Of course not. Abel was in fact the shepherd (*ro'en*, "keeper" or "shepherd"), not Cain. Abel was an independent, responsible man, not some helpless, stupid beast. Why, then, should God imagine that he, Cain, should have any knowledge about Abel's whereabouts? Did Abel report to Cain concerning his daily schedule, as a prisoner might report to a guard? Was Cain his brother's keeper? Of course not. Abel was the shepherd, not Cain; sheep are kept, not humans.

Cain asked this rhetorical question in a vain attempt to justify his supposed lack of knowledge concerning his brother's whereabouts. Yet it was precisely this knowledge that Cain possessed. He was unquestionably not his brother's keeper; he was his brother's *murderer*. He was not a protector of the helpless, but rather a murderer of the responsible. He was being interrogated by his own Creator. Somehow he deluded himself into believing that his questioner, God, would accept as meaningful evidence the "obvious" fact that there was no reason for him to have any knowledge concerning his brother's location. After all, they were both independent men, these brothers, and neither was his brother's keeper.

The meaning of "keeper" here implies the relationship between a controlling shepherd and a flock of docile, stupid, incompetent, wandering, helpless, and very profitable sheep. The primary economic function of sheep is, after all, to be *sheared*. They are to serve the financial (and sometimes gastronomical) desires of their masters. Anyone who begins discussing the State's supposed function to serve as a "keeper," meaning either "shepherd" or "guard," had better understand that the word "shepherd" implies "sheep," and the word "guard" implies "inmates," or at the very least, it implies "wards."

This fact was understood by Herbert Bird when he wrote: "For to be one's brother's keeper implies just what Cain insinuated that it does—to supervise, in greater or lesser measure, another's life; to take it upon oneself to determine what is good for someone else; to override his liberty, and even his personality, in the interests of a social theory. To be one's brother's keeper is to control him."¹ Anyone who misinterprets Cain's words, using the phrase "my brother's keeper," or some similar phrase, is saying that others are not responsible for themselves and their own affairs, and they have a moral and legal right to part of the property of their neighbors. Having a legal right to his property thereby brings the coercive State into the picture. "We," meaning the State, meaning those who control the State, meaning the politicians and especially the bureaucrats, are supposedly responsible for the welfare of others. The State therefore has the obligation to serve as the official keeper of the unfortunate, the ignorant, the infirm, the lazy, the rebellious, the intoxicated, the unemployed, the extravagant corporations that are inefficient enough to go bankrupt and large enough to create worries about the economic and political effects of the impending bankruptcy, the banks that have made too many uncollectable loans to too many insolvent debtors, and all the other people who, from time to time, get into economic trouble and begin to clamor for tax-supported government aid. "We" become full-time keepers, except when we become full-time sheep. And the tax costs of being full-time keepers increasingly convince people that they are not much better off than sheep, who at least do not have to do anything in order to be fed, clothed, housed, and entertained. *The State becomes the keeper, and*

1. Herbert Bird, "Am I My Brother's Keeper?" *The Freeman* (May, 1966), p. 56. Rev. Bird was an Orthodox Presbyterian Church missionary to Eritrea for many years.

productive citizens are sheared of their wealth, while the welfare recipients are sheared of their self-respect, their independence, and their incentive to work.²

God's answer to Cain's lie and his rhetorical question: He knew where Abel was, Cain knew where Abel was, and judgment had now arrived. In short, He paid no attention at all to Cain's rhetorical question. Cain was a murderer, not a keeper. Abel had not been a sheep. He had been a man. Judgment had arrived.

Some of those who parrot the "brother's keeper" phrase may be nothing more than ignorant, misled, goodhearted people who know little about the Bible and less about responsible living apart from coercive wealth redistribution. But those who first made the phrase popular were not ignorant about the Bible. They knew very well what the Bible said, and they rejected its testimony. They were determined to rewrite the Bible, misinterpret the Bible, and create a new secular humanist religion in the name of the Bible. They knew the power of the pulpit in the United States, and they sought to capture the seminaries, religious publishing houses, and religious newspapers in every denomination. With few exceptions, they had achieved their goals by 1940 in the North, and by 1965 in the South. The seminaries had become liberal by the 1930's in most of the denominations, so it was just a matter of time. Commenting on the career of Walter Rauschenbusch, perhaps the most influential defender of the Social Gospel in his era (around 1910), Singer writes: "Rauschenbusch was keenly aware of the necessity of a policy of deception in introducing his brand of Christian Socialism into the churches of this country. He thus gave it a name that was designed to make it seem evangelical in character and not revolutionary at the same time. Calling for the Christianization of the social order for the realization of the kingdom of God, Rauschenbusch avoided demanding the government ownership of the railroads and other public utilities. He simply called for governmental controls of various kinds, confident that such a program would eventually bring the kind of socialism he wanted. He was willing to uphold a policy of gradualism in his program of social and democratic revolution."³

The statist theology of "my brother's keeper" is consistent, though its advocates are deeply involved in the deception of Christians

2. Gary North, "The Hidden Costs of Free Lunches," *The Freeman* (April, 1978).

3. C. Gregg Singer, *The Unholy Alliance* (New Rochelle, New York: Arlington House, 1975), p. 24.

and others who do not recognize it for what it is. It is a *theology of substitution*: the State for the God of the Bible. It has been enormously successful in confusing twentieth-century American Christians. It has helped to convince them to promote political actions that are diametrically opposed to those recommended in the Bible. Believing Christians have been convinced, at the minimum, that there is nothing in the Bible to counter the message of social improvement through State action. Some have even gone so far as to claim that there is no such thing as Christian economics, and therefore the dominant ideology of wealth redistribution through State coercion should not be challenged biblically. Yet the proponents of the so-called Social Gospel have almost universally been advocates of a rival religion, the religion of secular humanism. Singer put it well when he concluded: "The development of liberalism in the twentieth century pushed the God of the Scriptures further into the background of human affairs and gave an increasingly important role to man himself so that God, to the extent to which he was considered at all, was benignly regarded as an ally of progress and democracy. He could cooperate with the human race should he desire to do so, but any refusal on his part would not be taken too seriously by those in control of the situation in this country. . . . For many leaders the very term 'God' had ceased to symbolize much more than the vague yearning of humanity for a better life on earth and the realization of the 'best that was in the human race.'"⁴

Conclusion

"I am not my brother's keeper, nor am I a sheep to be kept by my brother, or my neighbor, or the political representatives of either my brother or my neighbor. I am my brother's *brother*." This is the proper answer to the misused phrase, "Aren't you your brother's keeper?" Rhetorical questions, whether used by murderers like Cain or socialists in the pulpit, are nonetheless rhetorical. They are supposed to silence the opposition. God answered Cain's rhetorical question with the truth, calling him a murderer and, by implication, a liar. This is the proper response to destroyers who misuse the words of men, let alone misuse the word of God. A rhetorical question should call forth a straightforward response. When men misuse the word of God,

4. C. Gregg Singer, *A Theological Interpretation of American History* (Nutley, New Jersey: Craig Press, 1964), p. 287.

their judgment is at hand. Let us be on the side of the Judge, not at the side of the collectivist keepers.

All of this is not to deny in any way our moral responsibilities toward brothers in need. However, we must not expect to find guidelines for brotherly charity in this passage of Scripture. All that we learn about brotherhood in this passage is that we are not to murder our brothers. It has nothing to do with the hypothetical charity of professional "keepers."

THE ECOLOGICAL COVENANT

And God blessed Noah and his sons, and said unto them, Be fruitful, and multiply, and replenish the earth. And the fear of you and the dread of you shall be upon every fowl of the air, upon all that moveth upon the earth, and upon the fishes of the sea; into your hand are they delivered (Gen. 9:1-2).

The dominion covenant given to Adam and Eve by God (Gen. 1:28) was reaffirmed between mankind and God after the great flood. God made it clear to them that the dominion covenant was not limited to the garden of man's pre-Fall condition, but that it applies wherever men work out the implications of their faiths. *There can be no lawful escape from the comprehensive responsibilities associated with the dominion covenant.* Any attempt to deny its binding nature, or to eliminate any of its features, must be regarded as antinomian—a denial of the law of God. Man is unquestionably the legitimate dominant creature on earth, under the jurisdiction of God. Man is responsible for the enforcement of his Lord's covenants, even as he himself is bound by them.

The whole earth was placed under a curse as a result of man's rebellion (Gen. 3:17-19). The animals of the dry land perished as a result of man's sin and God's response in sending the great flood. As subordinate to man, the creation necessarily shares in some of the blessings and curses brought upon man. This is basic to covenantal life: *subordinates participate in the successes and defeats of their superiors*, in much the same way that low-level military troops are victors, prisoners, or corpses, depending upon the decisions made by their superiors in the chain of command. *The fact that nature suffers because of man's rebellion is evidence of nature's subordinate position under man, and therefore evidence of man's position of dominion over nature.*

God showed grace to Noah's family. Through Noah, God also

demonstrated His grace to the animals that were carried into the ark. A remnant of mankind preserved a remnant of the animals. God's covenant structure obviously extends beyond the mere salvation of individual souls: "And I, behold, I establish my covenant with you, and with your seed after you; And with every living creature that is with you, of the fowl, of the cattle, and of every beast of the earth with you; from all that go out of the ark, to every beast of the earth" (Gen. 9:9-10). The sign of this covenant of peace between God and man, and therefore between God and the animals under man's dominion, is the rainbow, which apparently was unknown prior to the great flood. As long as the rainbow survives, God proclaimed, His covenant with the creation, both man and beast, will survive.

Noah's ark stands as the greatest single implement of ecology in the history of the creation. God had Noah select pairs of some animals, and seven pairs of the "clean" animals (Gen. 7:2). These would be preserved with food provided by Noah, and by the ark itself (Gen. 6). Man was the mediator of God's common (preserving) grace to the animals. Christ also mediated between God and the animals, as well as between God and man, though not in the sense of mediating regeneration for the animals. His grace will eventually lead to the abolition of the curse on the animal world (Rom. 8:21). Man's role is therefore ministerial under Christ, who in turn mediates between God the Father and mankind.

Men have responsibilities beyond their own species. The covenant of Genesis 9:1-17 places man in covenantal authority over the animals. This is why God put the fear of man in them. Animals feared Noah and his family, making it easier for Noah and his heirs to subdue the earth, for the long life spans granted to earlier generations were about to be removed (Gen. 6:3b). The ability of men to master the laws of creation in a single lifetime was also going to be steadily removed. The degeneration of culture prior to the flood unquestionably resulted in reduced knowledge of the biblical principles of law, presumably including the laws of nature. Noah and his sons would not have the same ability to dominate nature that previous long-lived and covenantally faithful generations possessed, and God acknowledged man's weakened condition by placing the fear of man in the animals.

God holds back His final judgment in order to give men sufficient time to work out their salvation or damnation with fear and trem-

bling (II Pet. 3:9; Phil. 2:12). He will see all His plans fulfilled, in time and on earth. He has guaranteed man that there will never again be a universal flood, and the rainbow is the token of His promise. But this sign also means that man is under the terms of the ecological covenant. The dread of man in the animals was put there in order to protect man, but also to provide him with additional authority over the animal kingdom. Authority is supposed to be used lawfully. Our *lawful authority* is supposed to call forth our *covenantal service*.

Men are therefore supposed to serve the realm of nature analogously to the way that Noah served it. His own service in preserving the lives of the animals also benefited himself and his heirs. The clean animals that were preserved could then serve as a means of sacrifice before God (Gen. 8:20) and for food (Gen. 9:3). God's creation is therefore to be respected. Men have been given power over it; they therefore have a full responsibility to prune it and care for it. The earth is not supposed to run wild in terms of its own nature, any more than mankind is supposed to run wild in terms of man's fallen nature. Nature, like man, is to be governed lawfully. Nature must not be allowed to remain autonomous and idle forever; neither is it to be destroyed by men in *their* pretended autonomy. Responsible pruning must not become irresponsible destroying. The rainbow reminds us: nature is under man, not over him, because God is over man, and His grace preserves man. We are to be husbandmen, loving and disciplining that which has been entrusted to us for our personal development and enjoyment, and also for the benefit of nature itself.

The ecological covenant of Genesis 9 is a recapitulation of the dominion covenant of Genesis 1:28. To fulfill the terms of the ecological covenant, men need all their intellectual and cultural skills, including the implements of science, just as Noah needed knowledge and his great implement of ecology, the ark. Subduing the earth involves just that, the subduing of all the earth. It is not simply an agricultural covenant, for man's life is intertwined in a total division of labor. We cannot artificially separate "agriculture" from "business" and "science" and "technology." Each man's efforts are supposed to be complementary with the efforts of his neighbor. This fact of economic life was ignored by the Bible Presbyterian Church, a small American denomination, which in 1970 rejected the concept of the cultural mandate. The delegates to the 34th Synod unanimously

capitulated to their ecclesiastical director, Rev. Carl McIntire, concluding that God's requirement that we subdue the earth in no way refers to the broader aspects of culture. All God had in mind was maximum biological reproduction and agriculture. Commenting on Genesis 1:28, the Synod declared: "This same command was renewed to Noah (Genesis 9) after the flood without any reference to the word 'and subdue it.' Furthermore, the verse has nothing to do with culture, in the present sense of the word. The so-called 'cultural mandate' is based entirely on one word of the verse, the word that is translated 'and subdue it.' Like all words of Scripture, this word should be interpreted in context. Here the context is that of filling the empty earth with people. It says that the earth should be brought under cultivation, to enable these people to survive and multiply. That, and that alone, is what it means."¹ So cut and dried! "That, and that alone, is what it means." But what does "that, and that alone" actually involve? How can we separate modern agriculture from the whole fabric of modern science, modern economics, and modern culture? How can any developing society segregate agriculture into some immediately post-flood context, telling farmers that they, and they alone, are responsible for the fulfillment of this mandate, and that the dominion covenant refers to nothing outside the borders of the farm? One word suffices to categorize such biblical exegesis: *ludicrous*.

The Synod did not stop there. Having accepted one preposterous conclusion, it could not resist asserting another: "We oppose the 'cultural mandate' also because it gives a false idea of the place of the Christian in this age of sin, and cuts the nerve of true missionary work and evangelism." Missionary work and evangelism, in this framework, are truncated operations. They involve calling men to repentance from their sins, but then they leave them without concrete, specific guidelines for godly action in their day-to-day lives — in the arts (why not pornography?), in business (why not false advertising?), in government (why not socialism?), in military affairs (why not a sneak attack?), and on and on. What are men to repent from? And once converted, what are they to do about the evils from which they have been converted? Should they go back "into the world" (as if conversion somehow removes us from this world) and

1. Cited in R. J. Rushdoony, *Institutes of Biblical Law* (Nutley, New Jersey: Craig Press, 1973), p. 724.

practice the same things? Should newly converted pornographers continue reaping a fortune from selling pornography? Does the conversion, so-called, of the pornographer somehow baptize all future pornography published by "converted" publishers? Why is the task of evangelism so narrowly defined? If the Synod had been consistent, at least the preaching of the dominion covenant would have been understood as valid for agricultural pursuits. But then the requirements for preaching the whole counsel of God would necessarily spread from agricultural pursuits to agricultural equipment manufacturing, and government land policy, and so forth, right back into the fearful world of reality, from which twentieth-century fundamentalism has been fleeing for two generations or more. Prior to 1980, twentieth-century fundamentalists did not wish to be bothered with the hard discipline of providing guidelines in every area of human life—distinctly Christian guidelines—so they constructed a theology of zero or little social responsibility in order to justify their own laziness and lack of competence in the world outside the sanctuary.²

Conclusion

The ecological covenant of Genesis 9 cannot be separated from the dominion covenant of Genesis 1. The ecological covenant is simply a corollary to the more comprehensive dominion covenant. Every man operates under the terms of this ecological covenant, whether he acknowledges the fact or not. No man can escape being judged in terms of his responsibilities before God to adhere to the terms of this covenant. Any theology which in any way mitigates or denies the existence of this covenant is antinomian, meaning that it is in direct and flagrant opposition to the revealed will of God. Such a theology must be avoided at all costs.

2. See George Marsden, *Fundamentalism and American Culture: The Shaping of Twentieth-Century Evangelicalism, 1870-1925* (New York: Oxford University Press, 1980), especially chapter 10. See also Douglas W. Frank, *Less Than Conquerors: How Evangelicals Entered the Twentieth Century* (Grand Rapids, Michigan: Eerdmans, 1986). On the legitimacy of Christian social action see *The Journal of Christian Reconstruction*, VIII (Summer, 1981): "Symposium on Social Action."

THE WORLD TRADE INCENTIVE

Go to, let us go down, and there confound their language, that they may not understand one another's speech. So the LORD scattered them abroad from thence upon the face of the earth; and they left off to build the city (Gen. 11:7-8).

The builders of the tower of Babel were attempting to construct a symbol of their unity—religious, cultural, linguistic, and political. Their symbol was to be a great tower, probably a Babylonian zigurat, which was a multi-tiered structure that resembled stepping stones to heaven from whichever direction a person approached it. Men sought to “make us a name,” that is, to define themselves and their existence autonomously. Like Adam, who had named—defined, classified—the animals in the garden, these men also had the power of naming. They wanted to build a symbol of their unity in order not to be scattered (Gen. 11:4). They needed political and religious unity in order to enforce the unitary power to define mankind. They feared disunity, which would compromise the ability of a unitary name-giver to enforce its names and definitions. As Rushdoony has commented: “In all religious faiths one of the inevitable requirements for logical thought asserts itself in a demand for *the unity of the godhead*. Hence, since humanity is god, there can be no division in this godhead, humanity. Mankind must therefore be forced to unite.”¹ Humanism demands a unified god, namely, humanity.

What was the agency of this unitary aspect of mankind? It was the political order. Again, citing Rushdoony: “The Tower of Babel was an attempt to force this apostate thesis of ultimate oneness and equality onto all mankind. There was to be no division among men, and no separation or discrimination, only an absolute unity. The

1. R. J. Rushdoony, *This Independent Republic: Studies in the Nature and Meaning of American History* (Fairfax, Virginia: Thoburn Press, [1964] 1978), p. 142.

religion and virtue or ethics of Babylon was to be the fact of humanity, and community was simply in the common fact of humanity. In the City of God, community is through the Redeemer in God; in the City of man, the Society of Satan, the ground of communion is a common humanity irrespective of any religious or moral differences. All differences must be suppressed in favor of the anonymity of union. The good life and the full life are in and through the State. The theological requirements for the unity of the godhead require this faith in the unity of humanity, its one true god. Hence, 'Let us build us a city,' a one-world order, and usher in paradise apart from God." He continues: "In terms of all this the meaning of the proclamation 'Let us make us a *name*,' becomes clear: let us be our own blessing, our own Messiah, saviour and god. Let us be our own creator, our own ultimate source of meaning and definition. Let there be no value above and beyond us; let man be the source of the definition, not the subject of it. Let man be beyond good and evil, and beyond meaning, since he is himself the source of all definition."² The seemingly innocuous words, "Let us make us a name," are crucially important.

They had hoped to build a tower in order that they might not be scattered. Yet in attempting this project, they guaranteed their future scattering. They stood against God, and those who do not gather with God are scattered abroad (Matt. 12:20). God scattered them in order to restrain the outworking of their evil imaginations (Gen. 11:6). The quest for total unity in terms of principles other than those laid down in the Bible is a perverse quest. *Unity* is to be *ethical*, not egalitarian or humanistic. There are always distinctions in any community, different functions, different responsibilities, different skills (I Cor. 12). The attempt therefore to construct a one-world order was doomed from the start, for the nations survive throughout Bible history and into the very city of God (Rev. 21:24-26). Such a one-world order has to involve extensive political centralization and therefore the loss of personal freedom and personal responsibility. By confounding their language, God removed the threat of totalitarian rule over the whole face of the earth. Secular totalitarian regimes are necessarily limited in geographical scope. The larger the geography of tyranny, the more resources must

2. R. J. Rushdoony, "The Society of Satan," *Christian Economics* (Aug. 4, 1964); reprinted in *Biblical Economics Today*, II (Oct./Nov. 1979). Copies available from Institute for Christian Economics, P. O. Box 8000, Tyler, Texas 75711.

be wasted to maintain control. Productivity drops.

As always, there was an element of grace within God's external judgment. While He stymied the pagan's centralized religious-political order, with its pretensions of autonomy and absolute sovereignty, He simultaneously gave men conditions that were more favorable to political freedom. *Localism*, the criterion of a decentralized free order, could then be infused with another requirement of a free society, biblical faith.

Second, God tied this decentralization to the existence of separate languages. Apart from religion and direct family ties, there are few bonds, if any, that are culturally more binding than a shared language. When a language ceases to be spoken, it is because the society in which the language once flourished has either been destroyed, scattered, or died out. God provided men with a key factor in the creation of a sense of community, without which human society cannot survive.

Third, God scattered them geographically. Economically, this was a very important aspect of God's judgment. Prior to the great flood, there seems to have been a common climate. Mammoths found in the Arctic still have semi-tropical foliage in their stomachs, indicating a rapid cooling (otherwise the contents of the animals' stomachs would have rotted inside the stomachs before the frozen outer bodies had time to pass the cold to the inner parts). One estimate has placed the necessary external temperature at minus 150° Fahrenheit—in the middle of the "arctic" tropics!³ The change was widespread and rapid. After this cataclysmic alteration of the earth's tropical or semi-tropical climate, the mammoths no longer munched foliage in Siberia; a jungle no longer bloomed beneath the new ice of Antarctica. Men would now live in differing climates and on land with varying agricultural resources. They could specialize their economic production, which was a necessity in order to increase output per

3. The most sophisticated estimates of the temperatures required to quick-freeze a Siberian mammoth are found in Joseph C. Dillow, *The Waters Above: Earth's Pre-Flood Vapor Canopy* (Chicago: Moody Press, 1981), pp. 383-96. His book provides an extensive bibliography of the source material, including Henry H. Howorth's out-of-print classic, *The Mammoth and the Flood* (London: Sampson Low, Marston, Searle & Rivington, 1887); Charles Hapgood, *The Path of the Pole* (Philadelphia: Chilton, 1970); Bassett Digby, *The Mammoth: And Mammoth-Hunting Grounds in Northeast Siberia* (New York: Appleton, 1926). Dillow's book is the best, to date, on the universal climate before Noah's flood, and the catastrophic climatic changes that the flood produced.

unit of resource input.

Men desire more wealth. To attain their goals, they are forced to cooperate economically, through voluntary exchange. Self-interest restrains the lust for blood, destruction, and rebellion in the hearts of men. God added the diversity of climates to the curse of the ground as an additional means of restraint on men's lawless activities. It was probably in Noah's time that the diversity of climates came, due to the breakup of the watery firmament above the earth. The linguistic separation came at Babel. God was dividing men, scattering them, yet he also saw to it that men had incentives to trade, for the curse of the ground still restrained men's productivity. It is likely that climatic differences, then as now, forced some nations into trade before others, but most eventually traded. Men would pursue increasingly specialized, and therefore increasingly productive and efficient, callings before God.

The scattering at Babel was therefore part of a two-fold process. First, it restrained the creation of a rebellious one-world political tyranny. God's response pointed to the illegitimacy of any political order based exclusively on the idea of monism, the ultimate One. Second, by providing teachable languages to the scattered populations, He restrained the creation of total anarchy and total nomadism. Family heads were divided from other family heads, but it was not a question of one language per person. A balance between *individualistic anarchy* and *totalitarian monism* was established by God in the politics and cultures of rebellious men. Families persevered.

The scattering, given the curse of the ground and the post-flood diversity of climate, provided two important factors in an economic framework. First, it restrained the creation of a centralized socialistic bureaucracy. Second, it gave men an incentive to trade, in order to gain access at low costs to the fruits of other cultures and other climates. Again, the one and the many were simultaneously recognized, this time in the economic realm: the *unity of trade amidst international and cultural diversity*.⁴

The relationship between Genesis 11 and world trade has been understood by scholars since at least the fourth century, A.D. Libanius, the pagan instructor of St. Basil and St. John Chrysostom, held to the "scattering-trade" outline. Libanius was a defender of the legit-

4. On the philosophical problem of unity and diversity in Western thought, see R. J. Rushdoony, *The One and the Many: Studies in the Philosophy of Order and Ultimacy* (Fairfax, Virginia: Thoburn Press, [1971] 1978).

imacy of international trade. In his *Orationes*, he wrote: "God did not bestow all products upon all parts of the earth, but distributed His gifts over different regions, to the end that men might cultivate a social relationship because one would have need of the help of the other. And so he called commerce into being, that all men might be able to have common enjoyment of the fruits of earth, no matter where produced."⁵ Basil and Chrysostom picked up this idea and placed it within a Christian framework.⁶ Theodoret, the fifth-century Bishop of Cyrus, a town about two days' journey west of Antioch, held this view. We know he was influenced by the writings of Chrysostom.⁷ Finally, St. Ambrose took up the idea, whose *Hexameron* was an adaptation in Latin of Basil's Greek title of the same name (six days).⁸ Not all the church fathers were equally favorable to trade, but at least a tradition was established, one which found adherents throughout the middle ages. As Jacob Viner stated in his lecture before the American Philosophical Society in 1966—which sadly he did not live to put into final, fully documented form as a full-length book, as he had planned to do—"I have the impression that there are few ideas of comparable age, subtlety, and prevalence with the idea whose history I have been commenting on, which have so often been received by modern scholars who encounter them in a text as being both important and novel. The origin of the idea of the interest of providence in commerce has been attributed by scholars to Bodin, to Calvin, to an English scholastic of the fourteenth century, Richard of Middleton, to an Italian Renaissance writer, L. B. Alberti, to Grotius, and to any number of others."⁹ For all we know, it may be found in the writings of someone even earlier than Libanius, but Viner had not discovered it earlier.

While it is not universally true that "where goods do not cross borders, armies will"—that old nineteenth-century slogan¹⁰—it is

5. Cited by Jacob Viner, *The Role of Providence in the Social Order: An Essay in Intellectual History* (Philadelphia: American Philosophical Society, 1972), pp. 36-37.

6. *Ibid.*, p. 37.

7. "Theodoret," in John McClintock and James Strong (eds.), *Cyclopaedia of Biblical, Theological, and Ecclesiastical Literature* (New York: Harper & Bros., 1894), X, p. 320.

8. Viner, *Providence*, p. 37.

9. *Ibid.*, pp. 37-38.

10. "If men and commodities are prevented from crossing the borderlines, why should not armies try to pave the way for them?" Ludwig von Mises, *Human Action* (3rd ed.; Chicago: Regnery, 1966), p. 832.

true that free trade will make more obvious the real economic costs of cutting off such exchange through military conquest, or attempts at conquest. It is built into post-Babel society that men, though scattered abroad, though divided by language and culture, though heirs of very different historic traditions, will always be faced with an economic lure to increase their productivity by trucking and bartering. Those who refuse to trade thereby reduce the size of their market, and as Adam Smith said so long ago, the division of labor is limited by the extent of the market. By reducing its own national division of labor, a society reduces its per capita income, for it has necessarily reduced its per capita output. No society can choose to trade less without bearing the costs of forfeited per capita income. Trade brings added wealth.

Conclusion

The dominion covenant impels men to extend their control over the earth. The curse of the ground limits the productivity of solitary, autonomous men. The scattering of Babel has reduced the ability of central planning bureaucracies to substitute socialist allocation for voluntary exchange. The unity of mankind can be expressed through trade, but the diversity of cultures and environments prevents this economic unity from becoming the foundation of a bureaucratic one-world State. Unity and diversity are held in balance, or at least not tipped so far as to allow either to become totally destructive of society. The subduing of the earth can continue, therefore, by the operation of all these factors: the dominion covenant, the curse of the ground, the scattering of mankind, and free trade. When Viner chose as the title for his lectures, "The Role of Providence in the Social Order," he had the right idea.

INVESTMENT AND CHARACTER

Now the LORD had said unto Abram, Get thee out of thy country, and from thy kindred, and from thy father's house, unto a land that I will shew thee: And I will make of thee a great nation, and I will bless thee, and make thy name great; and thou shalt be a blessing . . . (Gen. 12:1-2).

It was not to some poor man that God came with His command; it was to Abram, a wealthy man who was "very rich in cattle, in silver, and in gold" (13:2). These three commodities were basic signs of wealth throughout Old Testament times, and all three served as money, especially the two precious metals. Abram's wealth was mobile, which is understandable, given the fact that he had already been uprooted once before, when his father left Ur of the Chaldees, heading for the land of Canaan, stopping in Haran and settling there (11:31). Now he was being called upon to move again, to continue the journey begun by his father.

Abram's nephew Lot, who was also wealthy, decided to accompany Abram. The two families held their wealth in the form of cattle, and so great were the herds that the land in any particular area of Canaan was not capable of sustaining all of them (13:6). The result was conflict between herdsmen of the two families (13:7). The original patriarchs—Abram of the Israelites and Lot of the Moabites and Ammonites (Gen. 19:37)—were men possessing great capital resources. God in no way questioned the legitimacy of their wealth. He did not call them to redistribute it to the people of Ur of the Chaldees, of Haran, or of Canaan.

Each man had a capital base to work with. The history of the two men illustrates a fundamental aspect of biblical economics, namely, the strong relationship in the long run between character and wealth (Prov. 13:22). More precisely, there is a relationship between the

preservation of capital (and even its great expansion) and investment decisions based on principle. Lot lost what he had, while Abram multiplied his capital.

By the standards of his day, the 75-year-old Abram was in the prime of his life. Sarah was ten years his junior (17:17), yet she was sufficiently attractive that Abram devised a scheme of deception, calling himself her brother (he was, in fact, only her half brother: 20:12), implying that he was not her husband, on two different occasions (12:11-20; 20:1-18). In this later incident, Sarah must have been in her nineties, unless Genesis 20 is a recapitulation of a journey earlier than the period in which God established His covenant with Abraham (Gen. 17). So Sarah was able to maintain her good looks well into her later years. Abram himself lived until age 175 (25:7), which the Bible describes as "a good old age" (25:8). He had over half his lifetime before him when he was called by God to leave Haran and enter the land of Canaan. He wandered for many years without finding a place of permanent settlement.

At first, he dwelt in a mountain, along with Lot (12:8). He waited 24 years for God to establish His covenant with him. He was circumcised at age 99 (17:24). Thirty-seven years after his circumcision, Abram purchased a final resting place for his wife and family, the burial field for Sarah. Even then, he proclaimed to the children of Heth, "I am a stranger and sojourner with you" (23:4). Though he was no primitive nomad, he nevertheless wandered through Canaan for many decades. It was not the sort of life that would commend itself to a patriarch, or a long-term investor, or a man who had been promised the whole territory (12:7). He was a *pilgrim*—a wanderer with a destination.

In stark contrast to Abram, his nephew Lot was a man who seemed to possess solid, reliable economic instincts. He understood the value of land. When strife between his shepherds and Abram's convinced them both that a geographical parting of the ways had become a necessity, Abram gave Lot his choice of settlement. Lot chose the land in the plain of Jordan, for "it was well watered every where, before the LORD destroyed Sodom and Gomorrah, even as the garden of the LORD, like the land of Egypt, as thou comest into Zoar" (13:10). He decided to dwell in the cities of the plain, pitching his tent toward Sodom. The Bible informs us that "the men of Sodom were wicked and sinners before the LORD exceedingly" (13:13). Lot chose good land and poor company. He assumed that the ultimate

form of capital is productive land.

Abram gave Lot his choice. He therefore agreed to go into the land of Canaan, less desirable property in those days than the well-watered lands of the plains of Jordan. Lot found himself in economically desirable circumstances from the point of view of externally measurable capital resources. Those whose company he was to keep, however limited his contacts with them, always constituted a threat to his integrity and even his safety. He surrounded himself with evil men, and in the final days of his residence among them, they surrounded him (19:4). When God's judgment finally came upon his former neighbors, Lot found that members of his own household had been polluted by the perverse environment. His sons, his sons-in-law, and his married daughters all refused to believe his dire warnings of imminent destruction, so they were left behind to perish. His wife defied God's command and looked back at the city, suffering a unique judgment herself, leaving him a widower (19:26). Lot paid dearly for his decision to live among members of a rebellious, perverse pagan society, just for the sake of some productive land, a place where not even ten righteous men could be found (18:13). He wound up dwelling in a mountain in his old age, exactly as he had when he had entered the land with Abram, but this time he had no cattle or other assets, and no future. All he had were his two unmarried daughters (19:8), who proved to be morally corrupt and totally pragmatic. They deceived him, causing him to commit incest in his drunkenness (19:32-35). His descendents from these two women became the Moabites and the Ammonites (19:37-38), and so vicious were those cultures that God stipulated that anyone from either tribe who chose to join the congregation of Israel would not see his descendents become full citizens until the tenth generation (Deut. 23:3-4). They were an extension of the culture of Sodom, and in time they partook of the same destruction as the cities of the plains (Zeph. 2:8-10). From great wealth to life in a cave: such was the fate of Lot's "investment portfolio."

Because of the ethical perversity of Sodom's residents, the land itself was put under a curse. It was burned, covered with salt, and thereby destroyed for future agricultural use (Deut. 29:23). So great was the destruction, that afterward, the surrounding land of Canaan, by comparison, became known as the land flowing with milk and honey.

Lot had ignored the lessons of Adam and Noah: *prosperity, in the*

long run, is the blessing of God to those who are faithful to His laws. The investment of one's capital should be made with this fact in mind. Lot invested in terms of visible wealth, the seeming permanence of the value of the land. At the end of his days, he saw his investment burned. What turned out to be a very impermanent store of value had lured Lot into a disastrous investment decision.

Freedom and Economic Growth

Character, human freedom, and long-term development of human capital are all more important than physical resources. Access to free markets is also very important. It has been a continuing error of modern scholars to focus on natural resources in their discussions of economic growth. Professor P. T. Bauer is one economist who has not made this mistake. "Physical natural resources, notably fertile soil or rich minerals, are not the only or even major determinants of material progress, though differences in the bounty of nature may well account for differences in levels and ease of living in different parts of the underdeveloped world. It has always been known that physical resources are useless without capital and skills to develop them, or without access to markets. And the diminishing importance of land and other natural resources in production are also familiar. But the recent rapid development of such underdeveloped countries poorly endowed with natural resources has come as a surprise, though perhaps it should not have done so, in view of the Japanese experience. A recent but already classic case is that of Hong Kong, which has practically no raw materials, very little fertile soil, no fuel, no hydroelectric power, and only a very restricted domestic market, but which in spite of these limitations has progressed phenomenally."¹ As he says elsewhere, "Throughout the western world severe barriers have had to be erected [Bauer is speaking of political necessity, not economic necessity, since he is an advocate of free trade—G. N.] to protect the domestic industries of the United States, Great Britain, Germany and France against imports from the unsubsidized competition of the industries of Hong Kong, an underdeveloped country, eight thousand or more miles away. This rapid progress has occurred in spite of the presence in Hong Kong of three features often said to reinforce the vicious circle of poverty, namely lack of natural resources, extremely severe popu-

1. P. T. Bauer, *Dissent on Development: Studies and Debates in Development Economics* (Cambridge, Mass.: Harvard University Press, 1972), p. 297.

lation pressure, and a very restricted domestic market."² Those accounts of economic growth which have focused so narrowly on natural resources have too frequently been undergirded by a philosophy bordering on environmental determinism, and in some cases this intellectual presupposition has been openly admitted.

On the other hand, Hong Kong is not an unquestioned case of superior morality. Its commitment to the free market and international free trade is too comprehensive. Hong Kong has become, since World War II, one of the major centers of the drug traffic. One of the reasons why Communist China allows Hong Kong to exist is because Hong Kong serves as a funnel for opium, heroin, and other illegal drugs that are produced in China and in Southeast Asia. This traffic serves a dual purpose for Communist China: it provides much-needed foreign currency, and it is part of China's systematic war against the West in general and the United States in particular. In 1965, at the beginning of the escalation of the war in Vietnam, China's prime minister and foreign affairs specialist Chou En-lai met with Egypt's leader, General Nasser. Speaking of the U. S. troops then stationed in Vietnam, Chou said: ". . . some of them are trying opium. And we are helping them. We are planting the best kinds of opium especially for the American soldiers in Vietnam. . . . Do you remember when the West imposed opium on us? They fought us with opium. And we are going to fight them with their own weapons. We are going to use their own methods against them. We want them to have a big army in Vietnam which will be hostage to us and we want to demoralize them. The effect this demoralization is going to have on the United States will be far greater than anyone realizes."³ Hong Kong is an important part of Communist China's war against the West.

There is also considerable evidence that Hong Kong's drug traffic is now, as Shanghai's was before it, part of the multi-billion dollar operation financed at least in part by international banking agencies, especially those that make their headquarters in the City, that unique free banking center located in the heart of London.⁴ Free trade is therefore no guarantor of human morality.

2. *Ibid.*, p. 37.

3. Quoted by Mohammed Heikal, *The Cairo Documents* (Garden City, New York: Doubleday, 1973), pp. 306-7. Heikal heard Chou say this.

4. This is the thesis of the informative, though erratic book, *Dope, Inc.: Britain's Opium War Against the U. S.* (New York: New Benjamin Franklin House, 1978). The

Conclusion

Godly men are instructed not to put their faith in earthly treasures (capital), where thieves break in and rust corrupts (Matt. 6:19-21). Men are to build in terms of Christian character and biblical law. Their decisions are not to be guided primarily by the land in front of them but by the human capital at hand. An investment in terms of character may not reap immediate rewards. After all, Lot settled down in temporary comfort, while Abram wandered. But Abram became Abraham—"father of nations"—and his children and grandchildren were buried with him (Gen. 49:28-31; 50:13), while the burial location for Lot and his daughters is not mentioned. Abraham's commitment to character, and his reliance upon the covenantal promises, brought him visible blessings and rest in his old age. Lot, though a just man (II Pet. 2:7), dwelt where his spirit was endlessly vexed (tormented) (II Pet. 2:8). He had left Haran with great wealth; he would leave Sodom with only the items he could carry away in an emergency retreat. He had traded internal peace for the seeming promise of external blessings, and he ended his life with neither peace nor external blessings.

God may, for a time, preserve the wealth of a rebellious culture for His own purposes. He may preserve it for the sake of a few godly men who dwell within the culture (Gen. 18:23-33). Nevertheless, when He brings down His wrath upon a culture, the faithful may have to make a grim and hasty retreat. (Forms of mobile capital, such as gold, silver, and precious stones, are sensible investments for Christians in times of social disintegration for this very reason. We should not look back, but it is wise to take something for the future along with us as we make our escape.)

book was written and published for the U. S. Labor Party, a strange splinter group with populist-Marxist leanings. Some of its claims, especially concerning the total economic profits derived from the drug trade, are preposterous. The documentation is not always reliable. Nevertheless, it provides a needed revision and exposé of dozens of neglected topics in recent British and Asian history. It is unlikely that conventional, tenured historians will follow through on the many leads provided by this book, which is why such books have to be published by obscure, subsidized presses, and written by innovative, but erratic, researchers. Paths are broken by energetic, enthusiastic, innovative, and sometimes crackpot people who have no academic reputations to risk, and few fears about getting some of the facts mixed up. The tenured scholars come in later to lay down the asphalt and keep the sides of the road trimmed neatly, and even beautifully. But without the pathbreakers, the gardeners would seldom expand their intellectual horizons.

THE GROWTH OF HUMAN CAPITAL

And he [God] brought him [Abram] forth abroad, and said, Look now toward heaven, and tell the stars, if thou be able to number them: and he said unto him, So shall thy seed be. And he believed in the LORD; and he counted it to him for righteousness (Gen. 15:5-6).

The word of the Lord came to Abram in a vision, saying: "Fear not, Abram: I am thy shield, and thy exceeding great reward" (Gen. 15:1). Abram's response is illuminating. After learning of his covenantal protection (shield) by God and his reward from God, Abram immediately asked for more. What is significant is that he asked about his lack of children. "And Abram said, Lord God, what wilt thou give me, seeing I go childless, and the steward of my house is this Eliezer of Damascus? And Abram said, Behold, to me thou hast given no seed: and, lo, one born in my house is mine heir" (15:2-3).

Abram's candid response reveals that he knew a great deal about biblical covenants. He knew that the protection and favor of God accompany a calling before God. This meant that Abram's capital assets would now be administered within an explicit covenantal framework. Who, then, would be the heir of these assets? Who would carry on the faithful administration of Abram's capital? Abram clearly understood the long-term nature of property under a covenant. Capital is to be used faithfully, expanded, and directed into the hands of one who will continue the faithful administration of the assets. Capital is primarily familistic capital. This trans-generational responsibility required that someone else in Abram's house would have to be trained for long-term capital management—management in terms of a theocratic covenant. Who should it be? Eliezer, the Damascan? Was this the person God had chosen to continue the faithful administration of Abram's capital?

Abram was already a man of great wealth (Gen. 13:2) and leadership abilities (14:13-24). Nevertheless, he was not yet a Patriarch, in a culture which placed high esteem on family authority. For any future-oriented Old Testament saint, the office of father was a cherished one indeed. As far as Abram was concerned, his lack of an heir was cause for great concern. What was the meaning of God's covenant with his household if he had no son or daughter?

God answered his question with a promise: his seed would be as numerous as the stars visible in the heavens (15:5). Abram believed God, and it was counted to him for righteousness (15:6). The promise also involved the future acquisition of land to serve as a home for his heirs (15:16). Both promises were fulfilled in Joshua's day. Seventy of his direct descendants, plus their servants, went into Egypt, and 600,000 men, plus their families, emerged at the exodus (Ex. 12:37). Moses was specifically told that this was the fulfillment of God's promise to Abraham concerning the expansion of his seed, for the Israelites were "this day as the stars of heaven for multitude" (Deut. 1:10; cf. 10:22).

The promised land was also significant in terms of the covenant. Abram's heirs would not always be strangers in another land, as Abram was, nor would they forever live as pilgrims. Strangers seldom exercise long-term dominion over whole cultures, except in cases of military conquest, and empires inevitably fragment when the centralized political sovereignty can no longer enforce its decisions at the extremities of the empire, or even inside the capital city. Nomads do not build civilizations, either, and God did not intend His people to remain pilgrims forever. They had a final destination, a land to subdue.

Children were important to Abram, not merely because of the cultural standards of the Canaanitic tribes that surrounded him, but because of several distinctly theological reasons. *First*, the gift of children was important for the preservation of the covenant line prophesied by God to Eve (Gen. 3:15). It seems quite probable that Abram knew about this prophecy to Eve (John. 8:56). *Second*, the task of cultural dominion was (and is) intimately linked with the expansion of human numbers (Gen. 1:28; 9:1). *Third*, a man's heirs—intellectual, spiritual, and biological—are part of his concern for linear history. This is not to say that other cultures besides the Hebrews did not hold children in high esteem, but the concern of these pagan cultures was not with linear history. The Greeks and

Romans held male children in high esteem for a distinctly religious reason: the sons were family priests who alone could administer the family's rites, century after century. Should these rites be abandoned by any son, and not renewed by his son, then the family's long line of ancestors would be left to roam the shadows of the nether world in darkness. The concern of classical religion was therefore limited to future family rites, not long-term covenantal dominion. There was an inherent past-orientation and otherworldliness in classical religion, for it was to bring peace to one's ancestors, and to guarantee one's own peace in the afterlife, that one needed male heirs. Future generations were therefore important for the sake of long-dead ancestors.¹

Hebrew faith, in stark contrast to classical religion, looked to the future. The covenants of the past were important, but not for the sake of the past. They demonstrated God's personal concern with, and commitment to, a special people selected by Him to perform important tasks in history. *The covenants of the past were tokens of victory in the future.* The psychology was altogether different from the dominant themes of classical religion. Eve was to look to the future, for her seed would battle the serpent's seed. Noah was given hope: no future deluge would destroy his heirs. Abram was promised a nation out of his loins; his name was changed by God to Abraham, "father of nations," when God announced the nature of the covenant (17:4-5). This covenant included the promise of the land (17:8). All of these features of the covenant related to God's original covenant of dominion. The sure nature of God's word secured the future to Abraham's descendents. The covenant of dominion would be extended by a new, as yet unborn, nation. *The faith of the Old Testament saints was to be in linear, irreversible historical development, controlled by God.* Men and women were to play an important role, in time and on earth, as parents. This work had meaning because of God's covenants and requirements.

Part of Job's testing was the loss of all his children (Job 1:18-19), as well as the loss of his material wealth (1:14-17). His blessings consisted of the restoration of his wealth beyond what he had possessed before (42:12), as well as the birth of ten children (42:13). As a final gift, he was granted a long life (42:16-17). In short, he was given the capital he needed to begin once again to exercise dominion over the earth as a godly family man: *tools, children, and time.*

1. Fustel de Coulanges, *The Ancient City: A Study on the Religion, Laws, and Institutions of Greece and Rome* (Garden City, New York: Doubleday Anchor, [1864]), Books I and II.

Children are basic to the covenant and a sign of God's unmerited favor to man: "Lo, children are an heritage of the LORD: and the fruit of the womb is his reward" (Ps. 127:3). Children are blessings—not blessings in disguise, but blessings—within the framework of the covenant of grace. The broader covenant of dominion also implies that children are a blessing in time and on earth, since men and women are told to reproduce, and obedience involves blessings. The all-inclusive nature of the covenant of dominion does not mean that the element of cursing, on the day of judgment, has been overcome merely by the willingness of people to have large families. But in time and on earth, children are a blessing.

The growth of his family, resulting in millions of descendants, was unquestionably basic to the Abrahamic covenant. As far as Abraham was concerned, the modern ideal of zero population growth would have been an acceptable one . . . for the Canaanites. The promise of ultimate victory in Canaan necessitated the extermination and expulsion of the enemies of God from the land (Gen. 15:16, 18-20; Ex. 23:31; Josh. 21:44). When the Israelites had left Egypt, they were given a special promise by God: their covenantal faithfulness would result in a society without miscarriages, either of animals or humans. In the same breath, God promised them long life: ". . . the number of thy days I will fulfill" (Ex. 23:26b). The "old folks" would be allowed to get even older. The earth would therefore be filled and subdued by covenantally faithful people far sooner. When you lower the death rate of infants by eliminating miscarriages, and you simultaneously lower the death rate of adults, you create ideal conditions for an historically unprecedented "population explosion." Yet this was the promise of God to a people who had just undergone the most rapid expansion of population in recorded human history.

The fulfillment of the covenant was inescapably linked to the decline of influence in Canaan of the ungodly. As the numbers of the faithful increased, the ungodly would decrease. This was basic to the Abrahamic covenant, as well as to the revelation presented to Abraham's descendants immediately prior to the military invasion of Canaan (Deut. 1:10). God preferred the expansion of man's numbers and man's dominion in comparison to the dominion over the land by the wild animals (Ex. 23:29-30), but He much preferred the expansion of His special people and their dominion over the land instead of continued dominion by the Canaanites.

The Demographics of Defeat

It is indicative of the widespread secularism and defeatism in late twentieth-century Western culture that population in the industrial states has slowed down radically. French population growth has been slow since the middle of the nineteenth century, increasing by about 41% from 1861 to 1974 (37 million to 52 million).² Ireland, after the devastating famines of the 1840's, became Europe's only zero population growth state. In fact, Ireland's population actually shrank, from 8 million in 1841 to 6.5 million in 1851, and from there to about 4.5 million (counting the population of Northern Ireland, which is part of Great Britain today) in the early 1970's.³ Ireland, however, has remained an essentially agricultural nation, and France was far more agricultural after 1850 than the other Western European industrial nations, which did experience population growth in the same period. The Netherlands grew from 2 million in 1816 to 3 million by 1849, and by 1975 the population was well over 13 million.⁴ In 1871, Germany had some 41 million; by the mid-1960's, the combined populations of East and West Germany were in the range of 73 million.⁵ Where European industrialization flourished, 1850-1950, there was considerable population growth.

A shift has begun to catch the attention of the demographers, the specialists in population changes. After 1957, the birth rate in the United States began to plunge. The fertility rate in 1957 was 3,767 births per 1,000 women, meaning that the average woman was bearing almost four children in her years of fertility.⁶ By 1975, the fertility rate had fallen to about 1,800 per 1,000 women, or 1.8 children per woman. Since the replacement level of population in the United States is 2.1 children per woman (because some children do not bear children), the United States is no longer reproducing sufficient children to replace the parents when they die. This is the lowest birth rate in United States history.⁷ It is a *prosperity-induced slowdown*,

2. B. R. Mitchell, *European Historical Statistics, 1750-1970* (New York: Columbia University Press, 1976), p. 20; *The World Almanac & Book of Facts, 1976* (New York: Newspaper Enterprise Association, 1976), p. 615.

3. Mitchell, p. 21; *World Almanac*, pp. 627 (Ireland), 663 (Northern Ireland).

4. Mitchell, p. 22; *World Almanac*, p. 640.

5. Mitchell, p. 20; *World Almanac*, p. 618.

6. U. S. Department of Commerce, *Social Indicators, 1976* (Washington, D.C.: Government Printing Office, 1977), Table 1/6, p. 26.

7. *Final Report*, Select Committee on Population, U.S. House of Representatives, 95th Congress, Second Session, Serial F, House Report No. 95-1842 (Jan. 5, 1979), p. 5.

in contrast to the 1930's slowdown, the years of international economic depression.⁸ The percentage of women in the U.S. labor force has risen continuously, so that 45 percent of American workers were women by the mid-1970's.⁹

West Germany is facing the same problem. The fertility rate has fallen to about 1.65 children per woman. Some 9.8 babies are born per 1,000 inhabitants, in contrast to 14.7 in the United States, 18.2 in the Soviet Union (if their reported statistics are to be trusted, which is doubtful), and 13.6 in France. The German birth rate fell by a startling 50 percent from the mid-1960's to the mid-1970's. At present reproduction rates, the 60 million West Germans will continue losses in total population until extinction is reached around 2500 A.D.¹⁰

The Eastern European nations are experiencing similar declines in births. In Hungary, there are 150 abortions for every 100 births. With the exception of Romania, where abortions were outlawed in 1966, the Soviet-bloc nations have all experienced falling birth rates. Only East Germany, aside from Romania, is experiencing an increase, as a result of a major shift in government policy in 1976, and the beginning of a program offering substantial maternity benefits. East Germany had the lowest birth rate of all the Soviet-bloc nations in 1976, and it was by far the most industrialized.¹¹

The growth of population in the rural, underdeveloped nations is continuing at an estimated rate of 2 percent per annum. This means that by the year 2010 A.D., there will be about 8 billion people, unless death rates increase, or birth rates fall, or both. This is an increase of over 114 million people per year, net. The headlines blaze the message: "The World's Biggest Problem."¹² A Library of Congress Congressional Research Service report, which is periodically updated for use by Washington legislators, announces: "Responsibility for world population control rests with the whole world com-

8. Some economists think that a mild economic slowdown will increase the birth rate by removing women from the labor force. See "Speaking of Business: New Baby Boom?" *Wall Street Journal* (July 3, 1979); "Economists Theorize a Recession Induces An Increase in the Nation's Fertility Rate," *Wall Street Journal* (Sept. 6, 1979).

9. *Social Indicators*, 1976, Table 8/4, p. 371.

10. *New York Times* (April 28, 1978). See also "People Shortage: West European States See Economic Troubles As Birth Rates Decline," *Wall Street Journal* (Aug. 23, 1979).

11. Associated Press story, *Durham Morning Herald* (Sept. 1, 1978).

12. *U.S. News & World Report* (Oct. 4, 1965).

munity."¹³ What does this mean? That a world government should control people's decisions to have children? That some international committee should establish guidelines? Is such a goal feasible in the real world? Should it even be considered? What are the implications for the growth of the messianic State?

What we find, then, is that the optimistic future-orientation of Western industrial populations, 1850-1960, had important effects on the growth of population. Now, however, that confidence is fading, along with birth rates. The present-orientation of young couples who delay having children for the sake of higher present income is creating a demographic disaster for the State-created retirement programs, since not enough young workers will be able to fund them by the year 2000, and certainly by 2020, unless birth rates increase, or unless the older generation is systematically exterminated by the young in a program of euthanasia.¹⁴ The welfare state faces bankruptcy.

The American Social Security system was doomed, statistically, from the very beginning. Those who entered the system at the beginning, in 1937, paid in \$30 per year (maximum bracket), and their employers paid in \$30. By 1989, unless the 1977 revision of the tax schedule is altered, each worker will pay a maximum of \$3,560, and his employer will match this payment.¹⁵ Of course, many families have two members in the work force, so the family payment may be more. The very first lady to receive a Social Security check, Ida Fuller, retired in 1940, after having paid in \$22.54. She died in 1975 at age 100. Her total benefits exceeded \$20,000.¹⁶ She was a winner. The taxpayers paid her winnings. Ironically, it was 1975 that marked the first year of a deficit in the Social Security program.¹⁷

Government officials assure voters that all benefits will be paid.

13. Congressional Research Service, Library of Congress, *World Population Control*, Issue Brief #IB74098 (June 25, 1976).

14. On the looming crisis in the American Social Security compulsory retirement benefit system, see Warren Shore, *Social Security: The Fraud in Your Future* (New York: Macmillan, 1975); Rita Ricardo Campbell, *Social Security: Promise and Reality* (Stanford, Calif.: Hoover Institution, 1977). See also the series on Social Security that appeared in the *Wall Street Journal* (June 4, June 6, June 8, 1979). In 1979, there were 3.1 persons receiving Social Security benefits for every 10 workers who were paying Social Security taxes. By the year 2030, assuming a birth rate of 2.1 children per woman, the figure will be 5 recipients for every 10 workers: *U.S. News & World Report* (April 30, 1979), p. 27. But the birth rate is below 2.1.

15. *U.S. News & World Report* (April 30, 1979), p. 24.

16. *Los Angeles Times* (Jan. 28, 1975).

17. *Los Angeles Times* (May 6, 1975).

This is either a mistake, a lie, or else the economy will collapse under the tax burden. If the program is not officially abolished, it will mean the destruction of the American dollar. This was admitted by James Cardwell, then the director of Social Security, in response to a statement by Senator William Proxmire, in 1976. This exchange took place:

PROXMIRE: . . . There are 37 million people, is that right, that get social security benefits.

CARDWELL: Today between 32 and 34 million.

PROXMIRE: I am a little high; 32 to 34 million people. Almost all of them, or many of them, are voters. In my State, I figure that there are 600,000 voters that receive social security. Can you imagine a Senator or Congressman under those circumstances saying, we are going to repudiate that high a proportion of the electorate? No.

Furthermore, we have the capacity under the Constitution, the Congress does, to coin money, as well as to regulate the value thereof. And therefore we have the power to provide that money. And we are going to do it. It may not be worth anything when the recipient gets it, but he is going to get his benefits paid.

CARDWELL: I tend to agree.¹⁸

Underdeveloped nations have received Western medical aid, which has enabled far more infants to survive. They have received DDT and pesticides. "But more important as causative factors in the sharp drop in infant mortality which set off the population explosion," writes economist Peter Drucker, "were two very old 'technologies' to which no one paid any attention. One was the elementary public-health measure of keeping latrine and well apart — known to the Macedonians before Alexander the Great. The other one was the wire-mesh screen for doors and windows invented by an unknown American around 1860. Both were suddenly adopted even by backward tropical villages after World War II. Together they were probably the main causes of the population explosion."¹⁹ Drucker has a tendency to focus on unique and previously ignored

18. *The Social Security System*, Hearings Before the Joint Economic Committee, Congress of the United States, 94th Congress, Second Session (May 26-27, 1976), pp. 27-28. Printed by the Government Printing Office, 1977. I have surveyed this problem at greater length in my book, *Government by Emergency* (Ft. Worth, Texas: American Bureau of Economic Research, 1983), ch. 1.

19. Peter F. Drucker, *Management: Tasks, Responsibilities, Practices* (New York: Harper & Row, 1974), p. 330.

historical factors in offering explanations for historical change, but this argument is certainly plausible. The immediate benefits of not having flies and other bothersome insects buzzing around the house were deemed to be worth the financial sacrifice involved in buying screens. Tribesmen did it for themselves, but an immediate side-effect was a reduction in infant mortality. A simple imported technology from the West reshaped the underdeveloped world, yet few of the consumers involved had any knowledge of the cause-and-effect relationships among certain insects, disease, death, and demographics.

The commitment to larger families has not been dislodged in these populations, yet far fewer children must be born in order to have several of them survive into adulthood. So the underdeveloped societies have become the short-run beneficiaries of the West's technology, yet without the attitudes that enabled the West to expand agricultural and industrial productivity to accommodate the increased number of surviving youths. The result is a large increase of population. The socialistic, envy-dominated underdeveloped nations, without Western freedom and without Western attitudes toward thrift and capital accumulation—the old Protestant ethic—now face a demographic crisis. Will famine eventually strike these societies? It seems quite likely from the perspective of those living in the early 1980's. (1987 note: it has happened in Marxist Ethiopia.)

The Demographics of Dominion

Biblical economics affirms that children are a blessing, since they are a form of personal capital. Men are to become effective stewards of God's resources. They are to invest in their children by constantly training them in the precepts of biblical law (Deut. 6:7). They are to encourage them to take up a productive calling before God. But parents are entitled to a return on their investment. Children are supposed to provide for their parents in the latter's old age. Parents are therefore to be honored (Ex. 20:12). Honoring God involves giving of one's financial substance (Prov. 3:9). Parents are also deserving of just this kind of honor. Jesus strongly criticized the Pharisees of His day for their denial of this law, in the name of tradition. They refused to support their parents by claiming that they were themselves without assets, having "given to God" all that they had (Mark 7:6-13). This "higher spirituality" in defiance of God's law was repudiated by Christ. Children must support aged parents. The

parents get the financial security they deserve; their investment in their children is returned to them in a direct fashion. This increases the likelihood that parents will honor their obligations while their children are young. The family becomes a trans-generational economic unit—one worth investing in.

James A. Weber's book, *Grow or Die!* (1977) serves as a compelling, lucid antidote to the zero-growth advocates, such as E. J. Mishan and Garrett Hardin. He cites the remark of Alfred Sauvy, director of the Institut de Demographie at Paris University and the past president of the United Nations Commission on Population. Sauvy writes that a "stationary or very slowly moving population does not benefit enough from the advantages of growth. There is no historical example of a stationary population having achieved appreciable economic progress. Theoretically, it is not impossible, but in practice, in our period especially, it does not happen."²⁰

Simon Kuznets, the distinguished economist and winner of the Nobel Prize in economics in 1971, has devoted his career to a series of studies of national income: its formation, statistics, and consequences. In an important essay published in 1960, Kuznets made some pertinent observations. There is an important relationship between people's faith in the future and high birth rates. "Contrariwise, a constant or slowly growing population is implicit evidence of lack of faith in the future."²¹ Kuznets warns against relying on what we can see—the limits of material resources—to the exclusion of those factors which we cannot yet see, such as human creativity. As he writes, "there is no excuse for the consistent bias in the literature in the field, in which the clearly observable limits of *existing* resources tend to overshadow completely the dimly discernable potentials of the new discoveries, inventions, and innovations that the future may bring. Perhaps only those who are alarmed rush into print whereas those who are less concerned with the would-be dangers are likely to be mute."²²

Thus, concludes Weber, we should not look at a zero population growth as beneficial. "This is not to say that there are not disadvan-

20. James A. Weber, *Grow or Die!* (New Rochelle, New York: Arlington House, 1977), p. 21.

21. *Ibid.*, p. 3. This quotation is taken from Simon Kuznets, "Population Change and Aggregate Output," in *Demographic and Economic Change in Developed Countries* (Princeton: Princeton University Press for the National Bureau of Economic Research, 1960).

22. *Ibid.*, p. 175.

tages to population growth. To increase population obviously requires that an 'investment' be made in more children, more new people. And, as with any future-oriented investment, this means that a sacrifice involving more work or less consumption or both must be made today in the interests of achieving greater population growth tomorrow. Conversely, if all children below working age suddenly vanished today, we could all immediately enjoy the 'advantage' of consuming more and working less tomorrow, although the achievement of such an 'advantage' would obviously be short-sighted as well as short-lived."²³ The modern Pied Pipers, our zero population growth and negative population growth (i.e., contraction) advocates, seem to ignore the long-run implications of their policies. When they retire, to live off their government subsidies (e.g., Social Security payments), they will be grateful for all those younger workers and taxpayers who are still willing and able to support them. "Honor thy father and mother" is a meaningless phrase in a world without children. Why not produce more children to do the honoring?

There is a continuing relationship in the Bible between *seed* and *subduing*. Genesis 1:28 commanded mankind to be fruitful and multiply (seed) and to subdue the earth. After the Fall of man, God's covenantal promise to Eve involved her seed: hers would bruise the head of the serpent (Gen. 3:15), and God's curse on Adam involved the ground and his efforts to subdue it. The importance of genealogies in Hebrew culture was based on this promise to Eve: tracing the covenant line and the lines of those who had become the seed of Satan. The covenant with Noah repeated the command to be fruitful and multiply and replenish the earth (Gen. 9:1), and God told Noah that the animals would fear man from that time on: "into your hand they are delivered" (9:2b). Furthermore, "Every moving thing that liveth shall be meat for you; even as the green herb have I given you all these things" (9:3). Again, the earth's fruits belong to mankind. Abraham received two promises, the promise of a land (12:1) which would be given to his seed (12:7). Here would be a land for Abraham's seed to subdue to the glory of God. God promised David both seed and a permanent throne, the symbol of dominion. Speaking of Solomon, God said: "He shall build an house for my name, and he shall be my son, and I will be his father; and I will

23. *Ibid.*, p. 38.

establish the throne of his kingdom forever" (I Chr. 22:10). Psalm 89 is even more explicit: "I have made a covenant with my chosen, I have sworn unto David my servant, Thy seed will I establish forever, and build up thy throne to all generations. Selah" (3-4). Again, "His seed also will I make to endure for ever, and his throne as the days of heaven" (29). The ultimate fulfillment of this promise came with Jesus Christ.

And the angel said unto her, Fear not, Mary: for thou hast found favor with God. And, behold, thou shalt conceive in thy womb, and bring forth a son, and shalt call his name JESUS. He shall be great, and shall be called the Son of the Highest: and the Lord God shall give him the throne of his father David: And he shall reign over the house of Jacob forever; and of his kingdom there shall be no end (Luke 1:30-33).

It is Jesus Christ, the "seed born of a woman," who is the recipient of, and fulfillment of, the promises. It is Jesus who finally announces, "All power is given unto me in heaven and in earth" (Matt. 28:18).

Christ has total power today. He is steadily subduing His enemies. This is why Paul could write to the Roman church, "the God of peace shall bruise Satan under your feet shortly" (16:20a). We believers are now the seed of Christ: "And if ye be Christ's, then are ye Abraham's seed, and heirs according to the promise" (Gal. 3:29). The church is the Israel of God: "And as many as walk according to this rule, peace be on them, and mercy, and upon the Israel of God" (Gal. 6:16).

What does it mean, to be heirs of the promise? Are we to receive everything apart from any conditions? In the area of justification, all is by grace (Eph. 2:8-9), but sanctification is equally by grace: "For we are his workmanship, created in Christ Jesus unto good works, which God hath before ordained that we should walk in them" (Eph. 1:10). Both sanctification and justification are unearned gifts of God, in the sense that both are freely bestowed by God. Nevertheless, the grace of God was operating in the Old Testament era; justification was by grace in that era, and so was sanctification. What, then, is the source of our external blessings? *Sanctification*: the progressive disciplining of ourselves and our institutions to conform to God's criteria of righteousness. We are His seed; we are therefore to subdue the earth. The seed-subduing relationship still exists. As we exercise godly dominion in terms of the concrete standards of biblical

law, we are given greater quantities of resources. We are to use these resources as a means of extending God's visible kingdom even farther. We are to subdue those institutions that are under our authority, even as we are to subdue the lusts of the flesh in our own personalities. We are heirs of the promise, and we must be heirs of the inheritance. We are the Israel of God, and we are under the same requirement to subdue the earth to the glory of God, and to subdue it in terms of His revealed standards of righteousness. *God's work done in God's way*: here is our covenant of dominion. Here are our marching orders. We are under a sovereign Commander-in-Chief. We have assignments, conditions to meet; as we meet those conditions as faithful subordinates, we will receive promotions individually, and the church will be victorious, in time and on earth.

The external blessings of God are offered in response to society's external, covenantal conformity to the standards of biblical law (Deut. 8; 28). These blessings include the expansion of inanimate capital goods (Deut. 8:7), wealth in livestock (Deut. 8:13), and food (Deut. 8:8-9a). The promised expansion also applies to human capital, namely, children. The clearest statement of this principle of growth is found in Deuteronomy 28: "Blessed shall be the fruit of thy body, and the fruit of thy ground, and the fruit of thy cattle, the increase of thy kine, and the flocks of thy sheep" (vs. 4). By calling into question the lawfulness and benefits of an expanding population within a godly culture, the advocates of zero population growth thereby challenge the whole concept of the covenant of dominion. They simultaneously challenge the validity of the covenant of grace, which is the theological foundation of a society's partial fulfillment of the covenant of dominion. It is not surprising that the intellectual leaders of the zero population growth movement in the late twentieth century have inhabited the temples of secular humanism in all their tenured safety, namely, the universities. Ironically, zero population growth is the primary economic threat to those employed by the universities, since a reduced birth rate inevitably reduces the applications for admission to colleges two decades later. The only way to "stay even" is to lower the academic standards of the university and admit students who would never have qualified had there been an increasing number of available applicants. In other words, the success of the academic proponents of zero population growth in convincing educated members of the public to have fewer children leads to a deterioration of academic performance by future users of

university services, not to mention the eventual dilution of quality in the faculties themselves. God will not be mocked at zero cost to the mockers.

Unquestionably, nothing can grow at a constant rate of increase forever. The effect of "positive feedback," meaning compound growth, is to push life against the inescapable limits of the environment. If, for example, the population of the world in the 1970's, some 4 billion people, were to increase at 1 per cent per annum for a thousand years, the world's population in human beings alone—not to mention the supplies of beef or other animals to feed them—would be over 83 *trillion*. Either the rate of increase slows eventually to zero, or less, or else we run out of time. But this is precisely the point: *exponential growth, meaning compound growth, points to a final judgment, the end of time*. If the growth process is God-ordained in response to a society's covenantal faithfulness, then the day of judgment should become the focus of men's concern and hope. History is not unbounded. The zero-growth advocates assume that resources are finite, that history is indefinite, and therefore growth has to be called to a halt eventually. The Christian response is different: *growth is legitimate and possible, resources are indeed limited, and therefore the end of history will arrive before the growth process is reversed*, assuming society does not first return to its ethically rebellious ways, thereby bringing on temporal judgment (Deut. 8:19-20; 28:15-68).

Conclusion

Any attempt to challenge the ethical legitimacy and economic possibility of an epoch of long-term compound growth that is the product of God's external blessings for covenantal faithfulness is nothing less than paganism. Such an attack is based on a philosophy of history which is unquestionably pagan, either cyclical time or unbounded temporal extension. The goal of both views of history is the same: to deny the possibility of an impending final judgment. Compound growth points to final judgment, so humanists are faced with a major problem: either the growth must stop or history must end, and most Western humanists in positions of academic, economic, or political responsibility are afraid or unwilling to admit the existence of this dilemma. They want endless progress and growth, and the "numbers"—compound growth rates matched against finite resources—testify to the impossibility of achieving both goals. A few have become zero-growth advocates; most simply prefer to ignore the problem.

Christians who have not been influenced strongly by contemporary humanism should answer: let us have ethical conformity to God's law, let us have the external blessings (including larger families)²⁴ that are promised by God in response to ethical conformity, let us extend regenerate mankind's dominion across the face of the earth, and let us pray for final judgment and the end of the curse of time. To pray for any other scenario is to pray for the social goals of paganism.²⁵

24. Gary North, *Moses and Pharaoh: Dominion Religion vs. Power Religion* (Tyler, Texas: Institute for Christian Economics, 1985), ch. 1: "Population Explosion."

25. *Ibid.*, Appendix B: "The Demographics of Decline."

COMPETITIVE BARGAINING

And Jacob said, Sell me this day thy birthright. And Esau said, Behold, I am at the point to die: and what profit shall this birthright do to me? And Jacob said, Swear to me this day; and he swore unto him: and he sold his birthright unto Jacob (Gen. 25:31-33).

Throughout the Bible, there are warnings against economic oppression. Men are not supposed to take advantage of their weaker neighbors, or widows, or strangers, or those temporarily in need. Regarding food supplies, men are warned not to hold supplies off the market in order to obtain a higher price. "He that withholdeth corn, the people shall curse him: but blessing shall be upon the head of him that selleth it" (Pr. 11:26). It should be understood that this prohibition on "forestalling" does not involve the civil government. The State is not to set arbitrary prices for the sale of food (or any other scarce economic resource). The sanctions are social (cursing by the public) and the loss of a blessing from God. Food may legitimately be sold at a profit, but it is supposed to be sold, not hoarded for the sake of obtaining a higher price. The passage in Proverbs appears to refer to large-scale commercial agriculture, since the forestalling involves sufficient quantities of corn to enrage the general public. It is unlikely that such an outcry would be aimed at someone who was hoarding only enough corn to feed his family, since a man is responsible for the welfare of his family (I Tim. 5:8), and since the withholding of such small quantities could hardly impose a major burden on the whole community. The frame of reference is the withholding of so much grain that local prices are affected, so that the sale of this grain represents a substantial benefit to the community.

Given this perspective on food sales, must we categorize Jacob as an oppressor? Or is it legitimate to classify him simply as a successful bargainer? Bargaining in his family was an accepted tradition, after

all. Jacob's grandfather had tried to negotiate with God Himself, who appeared to Abraham in a pre-Incarnation form of a man in the plains of Mamre. Abraham had tried to lower the price of preserving Sodom. Would God preserve the city for the sake of fifty righteous people? Yes? How about forty-five? Fair enough? How about forty? But that is a fairly considerable sum. What about twenty? All right, here is my last offer: Will you spare the city for the sake of ten righteous people? And God, knowing that only Lot was righteous in the city, graciously agreed to each reduction of price offered by faithful Abraham (Gen. 18:22-32). In the language of the modern marketplace, Abraham was asking God to spare the city for a "wholesale" price. God in no way rebuffed this continual bargaining process as being somehow immoral or in poor taste. Yet he was asking God to preserve a perverse society for the sake of only a handful of righteous men—a declining handful. He bargained.

The New Testament's assessment of Esau is clear enough: he was a profane person, "who for one morsel of meat sold his birthright" (Heb. 12:16). He "despised his birthright" (Gen. 25:34b). In his heart, the man was a murderer (Gen. 27:41). Though he was entitled to the double portion of the inheritance because he was the first-born (Deut. 21:15-17), in terms of his personal character, he was to be regarded as the second son. God loved Jacob (an astonishing miracle of grace) and hated Esau even before they were born (Rom. 9:10-13). God's promise had been with Jacob from the beginning (Gen. 25:23). God hated Esau from the beginning, and He laid waste to his heritage (Mal. 1:3).

Nevertheless, had not Esau come to his brother in time of great need? Didn't he deserve lawful consideration from Jacob? Didn't he announce that he was dying of starvation, making his birthright worthless in his own eyes (25:32)? Shouldn't Jacob have had compassion on his dying brother, comforting him in his hour of crisis? Didn't Jacob in fact owe food to Esau? Yet he actually bargained with him for the starving man's birthright. Can we regard Jacob's actions as ethical?

Before commenting on the biblical account of the relationship between Jacob and Esau, we must first understand something about hunger, food deprivation, and actual starvation, which are not the same things. We are told in verse 29 that Esau was "faint." Yet the obvious reaction of Esau after his meal indicates that this faintness was anything but a faintness unto death.

Herbert Shelton, an advocate of supervised fasting as a means of attaining good health, documents numerous cases of individuals

who have fasted well over a month. He cites a statement by Dr. Ragnar Berg, a Swedish biochemist: "One can fast for a long time, we know of fasts over a hundred days duration, so we have no need of fearing that we will die of hunger."¹ In March of 1963, a couple was rescued in northern British Columbia. Victims of a plane crash, the pair had gone without food for over a month and a half. They had survived in their lean-to by drinking water and sitting by the fire. The lady, who had been somewhat overweight before the crash, had lost 30 pounds. The man, who had been more active during the fast, had lost 40 pounds. Physicians who examined them announced that they were in "remarkably good" condition.² Shelton gives an account of one 70-year-old victim of asthma. The man was placed on a complete fast for 42 days, under a physician's care. He experienced a major asthma attack the first night of the fast; subsequently, all symptoms disappeared, never to return.³ Fasts of similar lengths have been supervised by two physicians who specialize in treating overweight patients, Dr. Lyon Bloom of the Piedmont Hospital in Atlanta and Dr. Garfield Duncan of the University of Pennsylvania.⁴

The feelings of hunger which bother fasters generally disappear within 36 hours, Shelton reports.⁵ The fast should end, he says, only when hunger returns, which can be a month later. This reappearance of hunger is not accompanied with hunger pains. "The hungry person is conscious of a desire for food, not of pain or irritation. It is a false appetite that manifests itself by morbid irritation, *gnawing* in the stomach, pain, the feeling of weakness, and various emotionally rooted discomforts."⁶ The fact, then, that Esau was "faint" does not prove that he was biologically desperate for food.

It is important to bear in mind the fact that God had promised Rebekah that two separate nations would arise from her sons (Gen. 25:23). This indicated that a separation based on ethical standing before God would eventually take place, since "two manner of people" would be born. The covenant line, the true heirs of God's promises, would be extended through the younger son. God's hostility to Esau

1. Herbert Shelton, *Fasting Can Save Your Life* (Chicago: Natural Hygiene Press, 1978), p. 28.

2. *Ibid.*, p. 26.

3. *Ibid.*, pp. 17-19.

4. *Ibid.*, p. 24.

5. *Ibid.*, p. 23. I have personally fasted for six consecutive days without food or juices, and I experienced no problems. My hunger pains were minimal. —G. N.

6. *Ibid.*, p. 33.

and his descendants, the nation of Edom, was implacable (Mal. 1:2-3).

Therefore, when Esau came before Jacob to request a meal, Jacob was confronted with an enemy of God. Moreover, this enemy possessed a very valuable capital asset, namely, legal title to the birthright that was due to the eldest son. If this birthright had remained with Esau, then an important transfer of capital would not have taken place. The Edomites would be the heirs of the blessing. Yet the Edomites were not to be the heirs of God's promises, something God had revealed to Rebekah.

It is true that Esau was Jacob's brother, biologically speaking. The question then arises: Did Jacob owe his biological brother a free meal? Was it immoral for Jacob to refuse to give his biological brother a free meal? If he did owe a free meal to Esau, morally though not legally, then he was clearly being selfish when he began to bargain for the meal.

Are we acting immorally and selfishly when we enter into a voluntary economic exchange with the enemies of God, instead of giving them everything they ask for, irrespective of who they are, what they plan to do with our assets, and what their present condition of strength happens to be? Is a voluntary exchange less preferable than an unconditional gift to an enemy of God? If the enemy of God is not actually destitute, and therefore not totally dependent upon our mercy, must we heed his every request for a free handout? If so, where does the Bible say so? Must we subsidize evil men?

"In the name of Christian charity," writes Rushdoony, "we are being asked nowadays to subsidize evil. Every time we give in charity to anyone, we are extending a private and personal subsidy to that person. If through our church we help an elderly and needy couple, or if we help a neighboring farmer with his tractor work while he is in the hospital, we are giving them a subsidy because we consider them to be deserving persons. We are helping righteous people to survive, and we are fulfilling our Christian duty of brotherly love and charity. On the other hand, if we help a burglar buy the tools of his trade, and give him a boost through a neighbor's window, we are criminal accomplices and are guilty before the law. If we buy a murderer a gun, hand it to him and watch him kill, we are again accessories to the fact and are ourselves murderers also. Whenever as individuals in our charity, or as a nation in that false charity known as foreign aid and welfare, we give a subsidy to any kind of evil, we are guilty before God of that evil, unless we separate our-

selves from the subsidy by our protest.”⁷ His conclusion is straightforward: “We need therefore to call most of which passes for charity today exactly what it is. First, it is a subsidy for evil. Second, it involves a penalizing and taxing of the righteous in order to subsidize evil, and this penalizing of the godly is an important part of this false charity. Third, basic to this kind of action is a love of evil, a preference for it and a demand that a new world be created in which evil will triumph and prevail.”⁸

Had one of us had the responsibility of offering counsel to Jacob, what would have been the proper advice? Would we have told him that he owed a meal to his lawless brother? If so, then our counsel would have meant the loss of the value associated with the birthright. If Esau was willing to trade his birthright for a meal, which was the case, then he was asking Jacob not simply to give him a free meal, but rather *to give him permanent possession of the birthright*. If Jacob was in a position to ask for and receive the cherished birthright—cherished by Jacob but despised by Esau, the Bible says—then to fail to make the transaction meant *giving up the birthright* that was virtually in his hands. It was not simply the value of the food that Jacob would have had to forfeit, but the value of both the food *and* the birthright—the birthright which Esau valued less than food.

To understand the nature of this exchange, we must also consider verse 34: “Then Jacob gave Esau bread and pottage of lentiles; and he did eat and drink, and rose up, and went his way: thus Esau despised his birthright.” What an astounding recovery from the brink of death! A few moments before he had announced that he was facing a life-and-death crisis. Yet after one hearty meal, he sauntered out undaunted. The New Testament does not say that he traded his birthright away for his life; he traded it away for “one morsel of meat.” One morsel of meat is not the dividing line between life and death. He wanted a handout. He did not deserve mercy.

What are we to make of Esau’s words? Did he really believe that he was facing death from imminent starvation? If so, he was present-oriented to a fault. His stomach was growling, and he simply could not bear the discomfort. Another possible interpretation is that he was lying to Jacob about his condition. He wanted a meal and

7. R. J. Rushdoony, *Bread Upon the Waters* (Fairfax, Virginia: Thoburn Press, [1969] 1973), p. 5. This book is a compilation of columns Rushdoony wrote for *The California Farmer*.

8. *Ibid.*, p. 6.

thought he could play upon Jacob's sympathy. This indicates that the two did not get along well to begin with — a reasonable assumption, given Jacob's plain ways and Esau's skills as a hunter (25:27). But in all likelihood, Esau was present-oriented. How else could he justify his willingness to give up his birthright for a mess of pottage? Would any future-oriented man have traded so much for the sake of so little? So he justified his willingness to enter into such a woefully ridiculous exchange by feigning near-starvation. Once the transaction was consummated, he did not even bother to keep up the pretense. He got up and went his way, leaving his birthright behind. Then he despised his birthright, a phenomenon known among children, by way of "Aesop's" medieval fables, as "sour grapes." Anything worth as little as less than a single meal, yet so much in the eyes of the culture of that era, had to be despised by anyone so short-minded as to sell it so cheaply. He had wanted a handout. He had feigned helplessness in order to receive mercy. His trick had failed.

Why would anyone have entered into such a transaction? Esau's present-orientedness was his downfall. He wanted immediate gratification. The benefits of the birthright seemed so far in the future to Esau, and the food was so tempting. Why cling to something so valueless in the present (the value of the birthright, discounted by his very high rate of interest, or time-preference), when one might get something quite valuable right now (a mess of pottage)?

Jacob knew his brother's character quite well. His offer of some stew for his brother's birthright was, on the surface, nothing short of preposterous. He knew his brother's price because he understood Esau's preposterously high present-orientedness. Esau possessed a very high time-preference; he wanted instant gratification. He therefore made economic decisions in terms of a high rate of interest, so that he discounted the present value of future goods quite steeply, forcing the present value of future goods almost to zero on his personal preference scale. Jacob understood the economic implications of his brother's preference for instant gratification, and he made him the offer: birthright for food. The food was worth a lot to Esau; the future value of the birthright meant practically nothing to him. The result was this remarkable exchange. Jacob purchased legal title to his promised birthright.

The birthright had been promised to Jacob. Yet Jacob bargained in a free market to obtain it. By God's law, later put into written

form by Moses, it was Esau's right as the firstborn, as long as Esau remained faithful to the covenant. God knew in advance that he would not (Rom. 9:10-13). Jacob used this incident in Esau's life to purchase the birthright at a remarkably low price. Esau's character flaw, plus the presence of his temporary hunger, combined to present a unique economic opportunity to Jacob. Jacob was not one to let an opportunity like this escape. By despising the covenant, his birthright, Esau forfeited his rights as the firstborn son.

Conclusion

There is not the faintest hint in the Bible that Jacob's transaction with Esau was in any way immoral. Any attempt on the part of commentators to draw conclusions from this incident concerning the immorality of sharp economic bargaining is wholly unwarranted exegetically. It is in no way immoral to bargain competitively with anyone whose lack of vision, lack of foresight, lack of self-discipline, and lack of a strong future-orientation have combined to place him in a weak bargaining position. Such men are entitled to purchase their heart's desire, namely, instant gratification, at whatever price they are willing to pay. We should ask them to pay a lot.

This conclusion is *not* sufficient to justify overly sharp bargaining with righteous men who have been forced by unpredictable circumstances into a position of competitive weakness. Mercy is to be shown to victims of external crises. The moral rule against the forestalling (withholding) of grain is a case-law application of the biblical law against economic oppression. But this valid rule in no way inhibits men from getting the best return they can in exchanges with undisciplined, present-oriented men. There is no doubt that the present-oriented man is at a distinct competitive disadvantage when bargaining with a future-oriented person, and it is quite possible that he will forfeit something as valuable as his birthright for something as valueless as a single meal. The fact that assets tend to flow in the direction of future-oriented, thrifty, and self-disciplined economic actors is a testimony to the godly order of a free economy. To stand in judgment of Jacob's competitive bargaining with Esau is to stand in judgment of a moral and economic order which penalizes the present-oriented man, benefits the future-oriented man, and in no way imposes compulsion on either. Such a critical judgment certainly goes beyond the Bible's assessment of Jacob's actions.

THE USES OF DECEPTION

And Jacob said unto his father, I am Esau thy firstborn; I have done according as thou badest me: arise, I pray thee, sit and eat of my venison, that thy soul may bless me (Gen. 27:19).

Commentators who are prone to criticize Jacob's sharp bargaining with Esau are equally prone to argue that Jacob's character flaw is inescapably visible in this incident. Here Jacob resorted to lying to receive the coveted blessing from his father. He used a flagrant deception on his aged father, taking advantage of the old man's failing eyesight to gain the blessing. Jacob, it seems, would stop at nothing in order to secure an economic advantage for himself.

The commentator who comes to the Bible with the assumption that it is, in every conceivable case, immoral to tell a falsehood, naturally must conclude that Jacob's actions here were unlawful. However, such an *a priori* assumption concerning deception overlooks, or in some instances deliberately suppresses, the testimony of the Bible that deception in a godly cause may be blessed by God.

The obvious example is Rahab, who deliberately lied to the representatives of Jericho's government who were searching for the Hebrew spies. Even John Calvin attacks the propriety of Rahab's lie, although he exonerates her completely in her act of treason against Jericho, and Calvin was followed in this judgment by the Puritan commentator Matthew Poole and by the twentieth-century theologian John Murray.¹ Yet it should be patently obvious that the spy is, by definition, a full-time deceiver, as is the treasonous individual who remains inside the commonwealth as an agent of the

1. John Calvin, *Commentaries on the Book of Joshua* (Grand Rapids, Michigan: Eerdmans, 1949), pp. 47-48; Matthew Poole, *A Commentary on the Whole Bible* (London: Banner of Truth, [1685] 1962), I, p. 411; John Murray, *Principles of Conduct* (Grand Rapids, Michigan: Eerdmans, 1957), pp. 138-39.

enemy. The fact that a verbal lie was spoken by Rahab is incidental, analytically speaking, to the far greater deception of her treason, yet the commentators are all too often unwilling to accept the incidental lie, though they are forced to follow the New Testament's judgment concerning the righteousness of Rahab's treason (Heb. 11:31). The closed-mouth traitor of Judges 1:24-26 and the obvious use of deception by Ehud the regicide (Judg. 3:15-25) are other examples of the successful use of deception by men who were covenanted to God. When Ehud announced the intention of his secret visit in the king's chambers, to deliver a "present" to the king, he was no less a liar than Rahab or Jacob; no king expects to receive in private a man carrying a dagger rather than a present from his defeated subjects (Judg. 3:15). So basic was deception in Ehud's case that his own biology was involved. He was a left-handed man, so he strapped his 18-inch dagger onto his right thigh, so that the lazy guards would examine only his left thigh, where any normal right-handed man would strap a dagger for rapid use.²

Another remarkable instance of wartime deception is the story of Jael and Sisera, the captain of the army of Hazor, the Canaanitic captor of Israel. In a successful uprising against their captors, the Israelites, commanded by Deborah, defeated Sisera's forces. Sisera, fleeing on foot, came to the home of Heber the Kenite, who had a peace treaty with Sisera's commander, Jabin (Judg. 4:17). He was welcomed by Heber's wife, Jael, who said, "Turn, my lord, in to me; fear not" (4:18). He told her to tell any man inquiring about some male visitor that there was no man present (4:20). Then he went to sleep, confident in the bond between him and the family, secure in the knowledge that Jael would lie for his sake, deceiving his pursuers. What did she do? She unilaterally broke her husband's treaty with the defeated nation. She crushed his head by pounding a nail through his temples and literally nailing him to the ground (4:21). Like a type of the Messiah, who would crush the head of the serpent (Gen. 3:15), she effectively broke the word of her husband. What is the Bible's judgment concerning her disobedience to her husband, her active deception, her lies, and her murder? "Most blessed of women is Jael" (Judg. 5:24). Deborah's song of praise to

2. For an extended discussion of the treasonous nature of Rahab's lie, and a justification of her actions, see my essay, "In Defense of Biblical Bribery," in R. J. Rushdoony, *Institutes of Biblical Law* (Nutley, New Jersey: Craig Press, 1973), pp. 838-42.

Jael catalogues her deceptions and praises them (4:25-27). Jael's nail has provided exegetical headaches for legalistic commentators ever since.

But, exclaim the "no deceptions allowed" commentators, would God use deception to bring forth His will in history? The Bible's answer is categorically affirmative. Speaking of the false prophets of Israel, God instructed Ezekiel to announce:

Therefore speak unto them, and say unto them, Thus saith the Lord God: Every man of the house of Israel that setteth up his idols in his heart, and putteth the stumblingblock of his iniquity before his face, and cometh to the prophet; I the LORD will answer him that cometh according to the multitude of his idols; That I may take the house of Israel in their own heart, because they are estranged from me through their idols. . . . And if the prophet be deceived when he hath spoken a thing, I the LORD have deceived that prophet, and I will stretch out my hand upon him, and will destroy him from the midst of my people Israel. And they shall bear the punishment of their iniquity: the punishment of the prophet shall be even as the punishment of him that seeketh [unto him]; That the house of Israel may go no more astray from me, neither be polluted any more with all their transgressions; but that they may be my people, and I may be their God, saith the Lord God (Ezk. 14:4-5, 9-11).

The legalistic or humanistic commentator will have enormous problems with this passage of Scripture, and it can serve as a very useful "litmus test" of an implicit exegetical humanism on the part of a Bible expositor. Another passage in which deception is singled out as a valid part of God's plan for the ages is II Thessalonians 2:8-12:

And then shall that Wicked be revealed, whom the Lord shall consume with the spirit of his mouth, and shall destroy with the brightness of his coming: [Even him] whose coming is after the working of Satan with all power and signs and lying wonders. And with all deceivableness of unrighteousness in them that perish; because they received not the love of the truth, that they might be saved. And for this cause God shall send them strong delusion, that they should believe a lie: That they all might be damned who believed not the truth, but had pleasure in unrighteousness.

It is difficult to understand why commentators should criticize the actions of Rahab in lying to the representatives of a doomed, degenerate culture. Why a verbal deception by Rahab should be accounted to her as unrighteousness, despite the clear testimony of the

Bible concerning her faithfulness, is a mystery, biblically speaking. It is as if the clear testimony of Scripture is too bright in the eyes of the commentators. They are as confused by the revelation of God in this area of applied faith as the early disciples were by the parables of Jesus. They simply cannot grasp the nature of God's total hostility toward humanistic rebellion.

The problem in understanding Jacob's lie to his father should not be that he lied as such, but only that he lied to a fellow believer. Colossians 3:9 declares: "Lie not one to another, seeing that ye have put off the old man with his deeds." Was Jacob guilty of a violation of this commandment? There seems to be no escape: he disobeyed the law. The question is: Is this law absolutely universal, irrespective of historical circumstances? If it is, then Jacob sinned. If Jacob's action here was lawful, then the rule is not absolutely universal, but must be tempered by our knowledge of other biblical rules that modify or even suspend its binding nature in certain instances.

Several facts must be borne in mind when dealing with the context of Jacob's lie. *First*, God had spoken out in favor of Jacob as against Esau (Gen. 25:23). The elder son would serve the younger, God had declared. *Second*, God's reason for reversing the normal relationship between elder and younger brothers was His grace toward Jacob. He hated Esau and his heirs, while He loved Jacob and his heirs (Mal. 1:3; Rom. 9:10-13). Jacob was redeemed; Esau was not. *Third*, God had explicitly revealed His plans for the two nations prior to the birth of the twins. He had told Rebekah. *Fourth*, Isaac loved Esau because he enjoyed eating the venison Esau shot, but Rebekah loved Jacob (Gen. 25:28). Isaac was not concerned about the moral standing of the two sons before God, nor did he care about God's explicit revelation concerning their respective futures. What he was concerned about was meat. In this respect, he was a lot like Esau, who was more concerned with meat than his birthright (Heb. 12:16). This present-orientation of Isaac, who refused to consider God's word concerning the future position of the two families, blinded him to the character flaws in Esau, who was a murderer in his heart (Gen. 27:4). *Fifth*, Isaac was determined to use his power of giving the patriarchal blessing as a device to get one last round of venison out of Esau (Gen. 27:41). He was perfectly willing to challenge God's judgment concerning the respective merits of the two sons in order to get one final meat dinner. He ignored the fact that Esau had sold his birthright. He ignored the fact that God had promised Jacob the

position of superiority. All that mattered was his own instant gratification. In other words, *at this point Isaac went to war against God*. He rebelled. *Sixth*, Rebekah instigated the deception, not Jacob. She was a lawful authority in the home, and she had been told directly by God about the future of the two sons and the future of their heirs. She sided with the son favored by God. She sided with the covenant line. Thus, Jacob did not unilaterally decide to thwart the desires of his parents; he decided to follow the advice of one of them — the one who was conforming her actions to the prophecy of God. Rebekah was clearly more future-oriented than her husband, for she took seriously the promise of God concerning the future of Jacob's side of the family — the covenant line which would ultimately bring forth the Messiah. Though God normally rules through the husband rather than the wife, and though normally the elder son is to receive the double portion, in this instance the wife sided with God against her husband, and with the younger son against the elder.

Jacob was unquestionably following the orders of a lawful superior. At first, he worried about the deception involved; his father might discover his deception, "and I shall seem to him as a deceiver; and I shall bring a curse upon me, and not a blessing" (27:12). But his mother assured him that he had no need to worry: "Upon me be thy curse, my son: only obey my voice . . ." (27:13). Jacob obeyed.

Isaac's Rebellion

Isaac was absolutely determined (self-willed) to give Esau the whole blessing. It was not simply that he intended to give Esau the double portion, as first-born sons are entitled to under normal conditions. He intended to give Esau such a great blessing that he would put Jacob permanently under the dominion of the evil elder brother. His blessing had announced: "Let people serve thee, and nations bow down to thee: be lord over thy brethren, and let thy mother's sons bow down to thee . . ." (Gen. 27:29a). He thought he was giving the blessing to Esau. Instead, Jacob received it.

From the beginning, it was clear that Esau was hated, and would not be part of the covenant line. God had told Rebekah: "Two nations are in thy womb, and two manner of people shall be separated from thy bowels; and the one people shall be stronger than the other people; and the elder shall serve the younger" (Gen. 25:23). Two nations meant that one nation was part of the covenant

line and was chosen of God, while the other would be cast aside. God intended that Jacob would receive the total blessing, not just a double portion. Isaac, in contrast, decided that he could thwart God's declared will by autonomously giving the blessing to the son and nation that God had decided to hate (Rom. 9:11-14; Mal. 1:3-4). It was through Jacob's deception that he received the promised comprehensive blessing, leaving nothing for Esau except the promise of a dwelling place in "the fatness of the earth" (27:39). Isaac had tried to save the very best for rebellious Esau, and he had nothing remaining within the framework of the covenant line to give to his chosen beneficiary, once Jacob's deception had brought to pass God's original promise to Rebekah. Isaac's rebellious choice, coupled with Jacob's effective deception, brought God's promised conditions into the stream of covenant history.

Rebekah understood the motivation and character weakness of her husband. She had seen him favor Esau with his love from the beginning. Now he was about to defy God, cheat Jacob, and bless the elder son. Like Esau, Isaac was guilty of the sin of honoring his belly more than God's promises, almost like the belly-worshipping sinners criticized by Paul (Phil. 3:18-19). There was no time to lose. Rebekah made an assessment concerning the likelihood that she and Jacob could convince Isaac to reverse his judgment of a lifetime concerning the respective merits of the two sons, and she decided that deception, rather than an appeal to God's word, was more likely to be successful. After all, the two sons were 84 years old.³ Isaac had not yet seen the light. So she cooked up some meat, thereby appealing to Isaac's desires, and dressed her son in camouflage.

When Esau returned to receive his blessing and found that Jacob had received it, he asked for an additional blessing from his father. Isaac's answer is significant: "Behold, I have made him thy lord, and all his brethren have I given to him for servants . . ." (Gen. 27:37a). He announced that it was his blessing that had elevated Jacob over his brother. Yet God had announced this from the beginning. It is

3. If we compare Gen. 47:9 with 45:6 and 41:46, it is clear that when Jacob was 130, Joseph was 32. Thus, Jacob was 98 when Joseph was born. According to Gen. 29:20, 30 and 30:25, Joseph was born at the end of Jacob's first fourteen years of service. Thus, Jacob entered Padan-Aram at age 84, and married at 91. According to 27:41 to 28:1, Jacob fled to Padan-Aram immediately after the deception of Isaac, so that Jacob was 84 when he received the blessing. Esau was also 84, being Jacob's twin. (My thanks to James Jordan for pointing this out.)

obvious that Isaac understood his blessing as having the power to convey this position of historical superiority — covenantal superiority — apart from God's word. Furthermore, he had unquestionably intended to give this favored position to the rebellious son who would trade him meat for the blessing.

What had Jacob accomplished? He had executed the preposterous exchange. Like Esau, who had traded his birthright for a mess of pottage — one morsel of meat (Heb. 12:16) — Isaac traded the blessing that was lawfully Jacob's for one meal of savory meat. Jacob was only purchasing that which was covenantally and legally his. God had promised it, and he had purchased the birthright from his brother. Isaac had recognized Jacob's voice, but the camouflaged hands that appeared to be hairy, coupled with the promise of an immediate meal, were sufficient to allay Isaac's suspicions (Gen. 27:2-25). The idea of trading a meal of meat for a blessing owed to God's chosen recipient was preposterous. Jacob, however, had learned that it was sometimes necessary to enter into preposterous exchanges with present-oriented men in order to purchase what was covenantally his in the first place.

Isaac had persisted in his defiance of God's revelation concerning the boys throughout their lives. He had shown no willingness to reverse his assessment of their respective character for forty years or more. The twins were born when Isaac was 60 years old (25:26), and Esau had married the Hittite women against his parents' wishes when he was 40 years old (26:34-35); but the blessing was given 44 years after Esau's marriage. Every visible action on his part indicated that he would bless Esau, despite the pain the wives of Esau had caused him. What could an appeal to the original promise of God have accomplished?

There are those who would say, in the face of Isaac's whole history, that both Rebekah and Jacob were in error, that they should have appealed to the old man's theological judgment by reminding him of God's assessment of the two sons. They should have denied the effect of a lifetime of active, conscious rebellion on Isaac's part, and have told him, on their own, in defiance of his life-long preference for Esau and his venison, to bless Jacob instead. There are those who would say this, but none of the New Testament writers ever did.

We are told in Hebrews 11:20 that "By faith Isaac blessed Jacob and Esau concerning the things to come," but this refers only to the

confidence Isaac had that his blessing, as a patriarch in the covenant line, would have historical impact in time and on earth. He had confidence in his own word. There is no doubt that he did have confidence in his own word. It was an important word. It was so important that Jacob and Rebekah had to use deception in order to be assured that this word by Isaac would be applied in the way that God had prophesied. His word was so important that he could tell Esau that *he* had transferred long-term authority to Jacob (Gen. 27:37). The power of his word was nevertheless dependent on his faith in God, and it took a conspiracy against him to make certain that his verbal blessing actually conformed to the announced intention of God to bless Jacob. It took deception, in other words, to bring Isaac's words into line with the God to whom Isaac was officially committed, but whose own words were being defied in practice by Isaac.

One conjecture made by critics of Jacob's deception is that he was repaid, like for like, when his uncle Laban deceived him into a marriage with Leah, and then was able to compel Jacob to work an additional seven years to pay for Rachel (Gen. 29:23-28). He, too, used a disguise to trap the victim. The Bible says nothing about any "like for like" retribution being involved in this incident. We are told that Jacob faithfully served Laban six additional years. So faithfully did he serve, in fact, that Laban begged him to remain as an administrator of his flocks after the seven years were over (30:27-28). Furthermore, despite Laban's continued deceptions, it was Jacob who prospered (31:1-13). It is true that Jacob had been deceived, but he wound up so wealthy that his own wives, Laban's daughters, were viewed by Laban's household as strangers (31:5). Laban had used up the capital of the family, leaving the daughters with no inheritance (31:5). God had transferred Laban's wealth to Jacob's household (31:16).

It should be clear enough for anyone who examines the record of Jacob's sojourn in the household of Laban that Laban's deceptions resulted in the opposite outcome from what he had intended. He knew that God was with Jacob, which is why he hired him after the second seven years were up (30:27). Yet he persisted in numerous deceptions, trying to gain economic advantage with respect to Jacob (31:7). He lost his daughters, his wealth, and even his household idols (31:19). Yet when he confronted Jacob, he had the audacity to assert that everything Jacob owned was his (31:43). (The idols *were* his, but he never found them: 31:33-35.) Jacob told his uncle just

how honestly and efficiently he had served him for two decades, sweltering during the day, freezing at night, and getting little sleep (31:38-42). Had God not been with him, Jacob charged Laban, surely Laban would have sent him away empty-handed (31:42). Yet it was Jacob who had the wealth, not Laban.

The results of Jacob's deception of Isaac were altogether beneficial to Jacob. The results of Laban's deceptions of Jacob were economically beneficial for Jacob. What are we to conclude? That deceptions as such always backfire? Obviously, Jacob's deception of his father did not backfire. It was Esau who wailed his despair, not Jacob. Are we to conclude that deception as such always wins? Hardly; Laban's losses testify to the opposite conclusion. What, then, are we to conclude?

The Holy Pretense

We are to conclude that it is better to conform ourselves to the explicit revelation of God, unlike Isaac and Esau, and to the visible signs of God's favor, unlike Laban and his sons, than to defy God. We have evidence that God blesses those who conform themselves to His covenantal law-order. We have evidence that a similar tactic to gain personal advantage, namely, the use of deception, can result in vastly different results, depending upon a person's place in the plan of God. God honored Isaac's blessing because He honored the deception by Rebekah and Jacob. The deception saved Isaac from a crucially important error of judgment. The deception enabled Jacob to gain that which was rightfully his, both by God's promise and Esau's voluntary sale. The deception in no way led to Jacob's impoverishment; indeed, the words of Isaac's blessing were fulfilled in Jacob's life over the next 20 years, as his heirs and capital grew rapidly.

If Jacob's action was categorically wrong, the Bible's testimony against him is inferential, not explicit. It would no doubt have been better if Isaac had never indulged his taste for meat at the expense of God's promises. It would no doubt have been better if Jacob, at Rebekah's insistence, had never had to use deception. But the deception was unquestionably preferable to Isaac's giving of the blessing to Esau, and *that* was the situation faced by Rebekah and Jacob. Jacob and Rebekah accepted their historical circumstances and acted in terms of them. Jacob prospered.

God deceives the unbelievers. Christ Himself spoke in parables

deliberately, so that the people of His day would be confused, and not understand, and fail to repent, and perish in time and eternity. This was Christ's own response when the disciples asked Him why He spoke in parables: "For this people's heart is waxed gross, and their ears are dull of hearing, and their eyes they have closed; lest at any time they should see with their eyes, and hear with their ears, and should understand with their heart, and should be converted, and I should heal them" (Matt. 13:15). How explicit must the Bible become to convince men of the valid role of deception and even verbal camouflage—Christ's chosen method of sending lawless men to eternal judgment—to convince His followers of the usefulness of deception? Are we to condemn the use of spies in cases when Christian nations confront their enemies? Was Moses wrong in sending the twelve spies into the land of Canaan? Puritans like William Perkins and William Ames had no doubt on this score; there are perfectly valid uses, they said, of the holy pretense.⁴

When we see a godly man headed for a disaster, and we have proven on countless occasions in the past that a direct confrontation of that man with the truth of God has proven wholly incapable of turning him aside from a particular act of rebellion, and we do not have any lawful authority over him in this particular instance, then the testimony of Rebekah and Jacob stands as a beacon to guide us: if he must be tricked to save him from a serious error, deception is valid. This rule of conduct is not to be used by men to exonerate the Labans of the world, but God has acknowledged implicitly by His explicit praise and blessing of Jacob, that the occasional use of deception against brothers in the faith, or even fathers, is valid, at least in cases where other lawful authorities are consulted and approve (in this case, Rebekah).

Unfortunately, conservative commentators have failed to deal adequately with the biblical doctrine of legitimate deception. They have tended to take a woefully unrealistic view of deception as such, irrespective of the context. All too typical of this approach is the analysis of Jacob's deception of his father which appeared in the standard late-nineteenth-century work, the *Cyclopedia of Biblical, Theological, and Ecclesiastical Knowledge* (1894): "It cannot be denied that this is a most reprehensible transaction, and presents a truly painful picture, in which a mother conspires with one son in order to

4. Cf. George L. Mosse, *The Holy Pretence: A Study in Christianity and Reason of State from William Perkins to John Winthrop* (Oxford: Basil Blackwell, 1957).

cheat her aged husband, with a view to deprive another son of his rightful inheritance. Justification is here impossible: . . .” Such an analysis is almost completely devoid of historical understanding. The circumstances are generally ignored, including God’s promise concerning the two sons, the lawful exchange between Jacob and Esau, the short-run perspective of Isaac, and the murderous nature of Esau. The time limitation under which Rebekah and Jacob were operating is also ignored. Is it any wonder that such a blind spot toward history, combined with an *a priori* approach to deception as such, has led to the social and practical irrelevance of the vast bulk of Christian ethical analysis over the past three centuries? Can you imagine a military commander burdened by the limitations of this variety of Christianity? He could not camouflage his artillery or missiles. He could not send out spies. He could not manufacture false reports in order to deceive the enemy. Is it any wonder that secular leaders throughout the West have come to regard Christians as socially irrelevant and utterly impotent to deal with the realities of life?

The commentators can always reply that since Jacob had been given the promise, he did not have to resort to deception. Somehow, God would have been able to bring His promise into history. Jacob never had to resort to competitive bargaining with his lawless brother, or to deception with his short-sighted (literally and figuratively) father. This same argument can be raised (and has been raised) with respect to Rahab,⁵ and it could be raised with Ehud and Jael. Somehow, God would have brought His will to pass without deception. How, we do not know. We cannot say. But God would have overcome the effects of truth-telling on the part of His servants. By implication, we tell the military commander, he need not use camouflage.⁶ He will win the war without it, and without spies, and without any other sort of deception. How, we do not know. We can-

5. Murray, *Principles of Conduct*, pp. 138-39.

6. John Murray, a soldier who lost his eye in World War I, was aware of the military advantages of camouflage. When teaching a children’s catechism class, Murray spoke critically of Rebekah’s deception. But when he raised the question of camouflage to the class, he denied that camouflage is comparable to a verbal deception. Camouflage is concealment, not deception, and concealment is justified under certain conditions, namely, when we “conceal something from a person when that person has no right to know. . . .” In such a case, concealment “is not deception.” This account is reprinted in *John Murray, a Memorial with Tributes*, edited by Iain Murray (Edinburgh: Banner of Truth, 1975), p. 46. Sadly, Murray did not pursue this crucial line of reasoning. Isn’t the question of “the right to know” central to the

not say. But we know. We know that the military commander, like Jacob and Rahab and Jael, is not truly under the constraints of historical circumstances. We assert that our commitment to unqualified truth-telling can overcome historical circumstances. But there is a problem with such logic: those praised by the Bible as great men and women have on occasion been exceedingly skillful liars, and the unquestioned success they have enjoyed as a direct and immediate result of their lies has been the very cause of the Bible's praise of them.

Jacob faced historical constraints. His father had made up his mind long ago, and he was trying to get one more plate of stew out of the deal, an unrighteous deal at that, one in defiance of God's promise, as well as in defiance of the lawful exchange made by the two brothers. He was going to override that exchange, to intervene into the market and thwart the economic implications of Esau's sale of his birthright. Isaac was about to become an *interventionist*, a redistributor of wealth, taking away the blessing owed to Jacob, who had paid for his birthright in a voluntary transaction, and transferring it back to the present-oriented, rebellious brother who had given him and Rebekah so much pain when he married the Canaanite wives (Gen. 26:34-35). Jacob had only a brief period of time to overcome Isaac, the rebellious interventionist, the present-oriented statist, who in that moment was willing to turn his back on the promise of God and the law of God—the protection of private property in the sanctity of voluntary exchange. Jacob looked at the historical constraints that had been placed on him, and he lied. And that lie worked!

Why do the commentators refuse to acknowledge that Jacob's deception was the immediate historical cause of his having received what was lawfully his—lawfully because of God's promise and lawfully because of the voluntary exchange? Why do they look down on Jacob? It is difficult to say. What can be said is that it is time to stop criticizing Jacob and, by implication, Rebekah, and to start criticizing Esau and his short-sighted father, Isaac. In taking this approach

issue of lying? Rahab lied because she did not believe the rulers of Jericho had the right to know the whereabouts of God's servants, the spies. Rebekah decided that Isaac did not have the right to know about the costume—we might call it camouflage—Jacob wore. If we can dismiss the charge of immorality in the case of concealment by raising the question of "the right to know," should we not dismiss the same accusation raised by critics, including Murray, against Rahab and Rebekah?

to the Scriptures, we may be able to restore the sense of reality, an awareness of historical circumstances, to biblical exposition.

One of the arguments that commentators sometimes lodge against Jacob's deception of Isaac is this one: God repaid Jacob for his sin by having Laban deceive him in the same way, when Laban put Leah under wraps and gave her to Jacob as if she had been Rachel. On the surface, this looks like an impressive argument, but like Leah herself, it is disguised. Yes, Jacob was deceived. Jacob, however, was not acting sinfully against Laban, as Isaac had acted against Jacob with respect to the ownership of the birthright and the blessing that was attached to the birthright. The sin was wholly on the part of Laban's family. At least three people were involved: Laban, Leah, and Rachel. Either of the daughters could have come to Jacob in advance and revealed what their father was planning. Leah had little incentive to reveal this secret, but Rachel did. The obvious threat Laban could have used against Rachel was this: without her cooperation in the deception, he would never permit her marriage to Jacob. Also, Rachel knew that ordinarily she owed her father obedience. But did she owe obedience to her father in the committing of sin? Could she not have eloped with Jacob? After all, she later deceived her father, by stealing his household gods (Gen. 31:19). Her sorrow throughout her marriage came as a result of her unwillingness to disobey her father and reveal the planned deception in advance. Jacob loved her, and she betrayed him.

Rachel's sin was that she obeyed her father and went through with his evil plan. This painful chain of events was not God's punishment of Jacob for his deception of, and disobedience to, his father Isaac; it was God's punishment of Rachel for not having also disobeyed her father, just as Jacob disobeyed his. In short, the fundamental issue involved in Rachel's sinful deception of Jacob was not the deception as such. Instead, it was the issue of *obedience to the ungodly command of her father*. She obeyed her father, unlike Jacob, who refused to participate in the sin of his father. She entered into a sinful deception of her future husband. But it was not her deception as such which constituted her sin, but rather her obedience to an unlawful command. Once again we are faced with an important biblical truth: it is not deception as such which is sinful. We cannot avoid asking the more important questions: Deception for what purpose? Deception under whose authority? Is the authority in question biblically valid? These questions must be answered before we take up the question of the lawfulness or unlawfulness of a particular deception.

Conclusion

This is not "situation ethics." Situation ethics denies the existence of any permanent moral standards. Situation ethics denies the existence of a standard of action for which each man will be responsible on the day of judgment. Situation ethics argues that the existential moment determines the ethics of an action, that time is the god of man. What the Bible says, in this particular and limited case of deception, is that deception can be warranted. It provides us cases in which deception was warranted, primarily cases of war or, in the instance of Jacob and Esau, conflict between the representative heads of two separate nations. Just because deception is valid in cases of war, as the Bible affirms, we should not be led to the conclusion that there is nothing wrong with deception in general. We know that we are not supposed to bear false witness against our neighbor, for example. But we are also informed by the Bible that righteous saints have sometimes been forced to deceive others, in cases where the others were acting unrighteously and therefore in direct defiance of God and God's law. And far from being criticized by a single word in the Bible, they have been praised openly (in the case of Deborah's praise of Jael), or grafted into the covenant line (Rahab), or blessed with enormous wealth (Jacob). Jacob tricked his father into bestowing the blessing on the one to whom it belonged by law and by promise, and sure enough, the blessings were poured out on him. We should take this lesson seriously. If we fail to do so, the world will (and should) conclude that our religion is simply not serious and is therefore unworthy of serious consideration. If Jacob and Rahab and Jael were serious actors in history, we should do our very best to emulate their seriousness, their understanding of the meaning of the covenant, and their understanding of the historical circumstances in which their part in that covenant was being played.

CONTINGENCY PLANNING

Then Jacob was greatly afraid and distressed: and he divided the people that was with him, and the flocks, and herds, and the camels, into two bands; And said, If Esau come to the one company, and smite it, then the other company which is left shall escape (Gen. 32:7-8).

Jacob had left his home at his mother's suggestion, in order to avoid the wrath of his brother (Gen. 27:42-45). He also wished to fulfill his parents' desire that he not marry a Canaanite (27:46; 28:1-5). He had left empty-handed; he returned with massive wealth. Now, as he travelled through the land which was inhabited by his brother, he feared for his life. He was afraid of Esau's vengeance. His messengers had informed him that Esau was coming, accompanied by 400 men (32:4). This did not appear to be a peaceful welcoming committee, as far as Jacob was concerned. His mother had believed that Esau's fury would last only a few days (27:44), and Jacob had been absent for twenty years (31:38). Nevertheless, he was not so certain of his brother's present-orientedness. Perhaps Esau still bore a grudge against the brother who he believed had defrauded him of his blessing.

Jacob's immediate goal was to preserve at least a portion of his capital. He divided his flocks into two sections, on the assumption that in case of a direct confrontation, at least half of his goods would be saved from destruction or confiscation. This willingness to forfeit half his goods in order to save the other half, rather than risk everything in an "all or nothing" situation, testifies to Jacob's economic realism. He intended to minimize his losses. There was too much at stake to invest all of his assets in terms of the present-orientedness of his unpredictable brother.

What is not generally understood is that Jacob was an old man by this time. Joseph is spoken of as "the son of his old age" (37:3),

even though Benjamin was born after Joseph. No events are recorded between the death of Rachel at the birth of Benjamin (35:19) and Jacob's visit to his father (35:26) and his father's death at age 180 (35:27). Jacob was then about 120 years old, since he was born twenty years after Isaac's marriage, when Isaac was 60 (25:26). Jacob was 104 when he met Esau's forces.¹ Jacob, therefore, was taking great care to preserve half of his capital for the sake of his family, since at his advanced age, there was no guarantee that he would be able to recoup his losses if Esau took everything Jacob owned. He was very probably running short of economically productive years, so capital preservation was far more important than it would have been had he been younger. The economic strategy of an older man is understandably different from that which might appeal to a younger man who has time to recover from mistakes.

Only after he had taken what he regarded as effective contingency planning did he go to God in forthright prayer (32:9-12). He then pleaded with God to uphold His promises to him, though admitting freely that "I am not worthy of the least of all these mercies, and of all the truth, which thou has shewed unto thy servant . . ." (32:10). He reminded God of God's own covenant with him, to uphold him and bless him, but he did not assume that God was in any way bound to honor Jacob's temporary interpretation of the meaning of the terms of the covenant in that particular situation. He did not sit by idly, waiting for God's automatic seal of approval on his own self-confident decisions. Jacob had already taken prudent steps to preserve a portion of his capital before coming to God. He acted sensibly, and he did so almost automatically, knowing from experience that God is in no way morally compelled to honor foolishness or lethargy.

Jacob did not leave off at this point. He adopted a further tactic to use against his brother. He decided to buy him off. In this case, however, he did not assume that Esau could be pacified with a mess of pottage. It would be very expensive, but well worth it if he could stay the hand of Esau without conflict. He separated numerous animals from the main flock and divided them into smaller groups. He then commanded his servants to go in small droves, one at a time, delivering multiple peace offerings to Esau (32:13-21). Esau

1. We have already seen that Jacob was 98 when Joseph was born: footnote #3 in the previous chapter. He left Laban's service six years later (Gen. 31:38).

would then be like a modern child on Christmas morning, unwrapping a dozen small presents gleefully, one by one, instead of unwrapping one big box—and then becoming bored or even resentful at having received “only one” present. If Esau would not be placated with only one present, he might be placated with several smaller ones distributed tactically. The tactic worked (33:9-11).

Jacob abandoned neither his common sense nor his total faith in God’s covenant promises. He knew that God had promised to bless him, but he could not be sure that God, in this instance, was automatically going to guarantee his safe passage through the land of Seir. God’s *general promise* was reliable, Jacob knew; the *specific application* of that promise in this instance was unclear. Jacob did not presume that the long-run reliability of God’s promises necessarily applied to each historical situation in the way that he, Jacob, hoped the promises would apply. Thus, he took the most effective action that he could to preserve some of his assets, given his imperfect knowledge of the uncertain immediate future. Jacob knew that his blessings were unmerited by his own worthiness, for they were given through God’s grace, but he also understood that *the Lord helps those who help themselves*.

(This phrase, so familiar to Americans as a result of Benjamin Franklin’s *Poor Richard’s Almanack*, was part of the Puritan heritage. Franklin was nine years old when Samuel Moodey delivered his sermon, *The Debtors Monitor* [1715], in which he offered the following advice: “It is the diligent hand that gathers in, because its works are blessed. Nor has the blessing of God [though his common providence may] ever enriched, either the folded hand, or the hand stretched out in deceit or oppression. And now, not any further, and more particularly to add, how it is most for God’s glory, and man’s good, that we should help ourselves, that God may help us” [p. 51]. “The Lord helps those who help themselves” is little more than a reworking of Moodey’s words, and like so many of “Poor Richard’s” slogans, the phrase was probably quite common in Franklin’s day.)

First, Jacob divided his flocks into two camps. Second, he prayed to God for aid. Third, he selected animals from his flocks to serve as peace offerings to Esau. Finally, he was ready for the great confrontation—not with Esau, but with God in the flesh. Jacob wrestled with the unnamed man throughout the night, demanding a blessing from Him (32:26). This man was a theophany of God, a pre-Incarnation revelation of God in human form. We know that God walked in the

garden of Eden in the cool of the day (Gen. 3:8). We know that Abraham was visited by God in human form, and Abraham spoke to Him face to face (Gen. 18). We know that "the LORD spake unto Moses face to face, as a man speaketh unto his friend" (Ex. 33:11a), yet Moses was told that he could not look on God's face and live (Ex. 33:20). The face of God the Father must be mediated through a theophany, or through Jesus Christ (John 14:9). Jesus said: "Not that any man hath seen the Father, save he which is of God, he hath seen the Father" (John 6:46). Again, we read in John 1:18: "No man hath seen God at any time; the only begotten Son, which is in the bosom of the Father, he hath declared him." Thus, what Moses saw in the burning bush was not the very face of God the Father, but a theophany, in this case a dual theophany: the burning bush itself and the angel of the LORD in the midst of the burning bush (Ex. 3:2). When Joshua saw the man holding the sword and challenged Him, the man announced that he was in fact the captain of the Lord's host. Joshua fell on his face, and the man said, "Loose thy shoe from off thy foot; for the place whereon thou standest is holy" (Josh. 5:15). These were the same words God spoke to Moses out of the burning bush (Ex. 3:5). Thus, concluded the author of "Angel" in the conservative *Cyclopedia of Biblical, Theological, and Ecclesiastical Literature* (1894): "These appearances are evidently 'foreshadowings of the incarnation.' By these God the Son manifested himself from time to time in that human nature which he united to the Godhead forever in the virgin's womb." He lists the man who wrestled with Jacob as one of these angelic theophanies.

In Hosea 12:4, we read of Jacob: "Yea, he had power over the angel, and prevailed: he wept, and made supplication to him. . . ." Hosea equates the angel with the Lord God of hosts, since it was He who spoke with Jacob (Hos. 12:5). The defeated wrestler gave Jacob his new name, Israel, which can be translated "he will rule as God" or "prince," and one commentator thinks it is best translated "successful wrestler with God."² The ability to rename a patriarch is clearly a prerogative of God (Gen. 17:1-5). The man announced: "Thy name shall be called no more Jacob, but Israel: for as a prince hast thou power with God and with men, and thou hast prevailed" (32:28). These words were spoken to an elderly man who had the

2. "Israel," *Cyclopedia of Biblical, Theological, and Ecclesiastical Literature* (New York: Harper & Bros., 1894), IV, p. 693.

strength to wrestle all night with a theophany. He was determined to have a blessing, whether it took wrestling, or in the case of his father, deception. In both cases, he received his blessing.

Jacob called the place of conflict Peniel, or "the face of God," for as he said, "I have seen God face to face, and my life is preserved" (32:30). What is most significant with respect to economics is that *Jacob sought God's face and blessing only after he had made all of his plans, but before he executed them.* He planned, prayed, planned some more, and then sought his blessing from God with such confidence that he wrestled God Himself to obtain it. He had done all that he believed possible to protect his assets and his life, and then he asked for his blessing. *Systematic planning* and *systematic prayer* are complementary.

Peniel was the capstone of a life of common sense, hard work, shrewd planning, and remarkable economic acumen. Jacob had bargained for the birthright that God had promised his mother that he would receive, collected his blessing under adverse circumstances, departed in poverty and returned back to the land with great wealth, which had been amassed in the face of treachery by Laban, an economic oppressor and liar (Gen. 31:41). He saw no contradiction between his careful planning to preserve a portion of his capital and his humble prayers before God. He saw no contradiction in his advanced age and a night-long struggle with God in the flesh (not in the sense of full Incarnation, of course). He saw no contradiction between God's unmerited favor toward him and his own personal responsibility to do all that he could to preserve what God had given to him. He saw no reason to be soft-headed on the one hand, or blindly self-confident on the other. Jacob-Israel was an eminently practical man of great wealth and skill in managing capital resources, a man willing to act in terms of a life of education in capital accumulation, even before he approached God in prayer. He assumed, quite correctly, that God honors the instinctively sensible responses of law-disciplined, experience-disciplined stewards—instincts gained through years of self-discipline. At Peniel, Jacob became Israel, a prince, a man of power with men and God, one who prevailed: over his short-sighted brother, his near-sighted father, his sin-blinded uncle, and God Himself.

He went from Peniel to his brother and the troops, and once again, he emerged with his life and capital intact. He was to walk with a limp (32:31), a sign of his non-autonomy before God, but he walked once again into victory. He played the servant's role in front

of his brother (33:14), and he did not tarry with Esau, probably because he was unwilling to risk another emotional shift by Esau, from friendship to rage. His wisdom, and his knowledge of his opponent's psychological weaknesses, allowed him to triumph one more time.

Conclusion

Jacob stands like a beacon of common sense and careful economic planning. His example is not one to be ashamed of; it is to be imitated. There is no shame in continual victory in the face of seemingly overwhelming opposition. The world needs more godly men who can successfully wrestle with God and circumstances, and still emerge victorious, though possibly limping. It is Isaac, not Jacob, who tends to be favored by the modern pietistic commentators, the supposed victim of ungodly deception, rather than a short-sighted, near-sighted, present-oriented old man who refused to take seriously God's promise concerning the respective destinies of his two sons. Isaac was ready and willing to defy God and unlawfully sell his blessing for a plate of venison stew. The sympathy for Isaac and the criticism showered on Jacob by modern commentators is indicative of the power of pietism—a systematic retreat from the hard decisions of daily life—to distort men's judgment of the Scriptures. Future-oriented Jacob, not present-oriented Isaac, should be our representative guide. When Isaac was old (though at least two decades away from death), he wanted a plate of stew as his final reward before joining his fathers in death (Gen. 27:4). When Jacob was old, he wrestled with God and asked for still another blessing, that he might pass through yet another danger to safety—and with at least half his family's capital intact. May godly old men live like Jacob rather than Isaac. May godly young men live like Jacob, too, in order to learn the successful way to grow old. Victory, like any other skill, takes practice. And if we are to learn anything from the careers of Esau and Laban, it is that defeat takes practice, too. Esau and Laban may have been successful men in their dealings with lesser men, but when they faced the likes of Jacob, they were conditioned to defeat. Jacob had courage, shrewdness, and a commitment to the future. Esau and Laban were not prepared to deal successfully with a godly man like Jacob. And neither is the unregenerate world today. Time and God are on the side of the Jacobs of the world. They shall become Israels.

THE LAW OF DIMINISHING RETURNS

And Esau took his wives, and his sons, and his daughters, and all the persons of his house, and his cattle, and all his beasts, and all his substance, which he had got in the land of Canaan; and went into the country from the face of his brother Jacob. For their riches were more than that they might dwell together; and the land wherein they were strangers could not bear them because of their cattle (Gen. 36:6-7).

This is the second great division of families recorded in the book of Genesis. The first one was the division between Lot and Abraham. The same reason was given in both instances: "And the land was not able to bear them, that they might dwell together: for their substance was great, so that they could not dwell together" (Gen. 13:6).

We are not told why the land would no longer support the families and flocks of the two sons of Isaac. It may have been that the Canaanites were numerous, and that the families were able to occupy only a tiny fraction of the land of Canaan. Obviously, when the exodus from Egypt brought 600,000 men and their families (Ex. 12:37) back into the land, it was sufficiently productive to support them. Nevertheless, the Bible is clear: neither Abraham and Lot nor Esau and Jacob could raise their cattle on whatever land was available to them. The curse of the ground (Gen. 3:17-19) made itself felt. The families had more living wealth than the land could support.

What these men faced was the law of diminishing returns, an economic doctrine made famous by the English economist David Ricardo in his important book, *Principles of Political Economy and Taxation* (1817). The basic idea had been discussed by economists of the late eighteenth century, when Sir James Steuart and the Baron de Turgot published in the same year, 1767, treatments of the topic. Steuart's formulation, later called the law of the "extensive margin,"

observed that as population increases, poorer and poorer lands are brought into cultivation in order to feed the newcomers, so that equal amounts of productive effort yield progressively smaller harvests. (Of course, this statement of the problem implicitly assumes that other factors remain equal, especially agricultural technology.) The second formulation, put forth by Turgot, is far more relevant, the so-called law of the "intensive margin." Professor Schumpeter's summary of Turgot's position is a good one. As equal quantities of capital (or labor) are applied to a given piece of land, the quantities of the product that result from each application will at first increase, then decrease. If more applications of the same resource are added, given a fixed quantity of land and fixed technology, then output will eventually fall to zero. Schumpeter writes: "This statement of what eventually came to be recognized as the genuine law of decreasing returns cannot be commended too highly."¹ After 1900, American economists termed this observation by Turgot "the law of variable proportions." First an increase, then a decrease in output per unit of resource input.

It is easiest to understand in the case of agriculture. Assume that there is a single acre of land. One man works the land by himself. He has trouble lifting large rocks, and he cannot move boulders. Rolling logs is very difficult. Then he hires an assistant. Now certain jobs become manageable, and some, which were previously impossible, become possible. The total output produced by two men may be more than double the cost of each man's wages. So the owner of the land hires another man, and another, and another. Eventually, the men begin to get in each other's way. Production sags. Costs increase. It no longer pays to hire more men. It may even pay to fire one or more of them. Marginal net returns—the profits from the addition of one resource factor to the "production mix"—eventually fall to zero, or even become negative. The costs of employing an additional laborer eventually exceed the benefits derived from that additional laborer.

This is precisely the problem which faced Jacob and Esau. Within the confines of the available land, the two families could no longer remain productive. The land had "filled up." This did not mean that cattle were standing side by side, or that the tents of Esau's servants

1. Joseph A. Schumpeter, *A History of Economic Analysis* (New York: Oxford University Press, 1954), p. 260.

were right next door to those owned by Jacob's servants. But the productivity of the land was falling noticeably. The output of cattle, whether in numbers, or weight, or however the two family leaders measured output, was falling because there were too many of them for the relatively fixed supply of land. Esau reached a major decision. He left, in order to find a more profitable "mix" of cattle and land. He went searching for the "wide open spaces."

This demonstrates the importance of the curse of the ground for the goal of geographical dominion. Because every single acre of ground has been cursed by God, productivity per acre has been restrained. Those wishing to multiply their flocks or crops are eventually forced to subdue more ground. They cannot remain on that original plot of ground and progressively expand the physical output of goods. If they want more wealth, they must seek out available land to bring under cultivation. Their desire for greater wealth impels them to bring more land under cultivation.

What must be understood from the beginning, however, is that the law of diminishing returns is not limited to agriculture. It is basic to all economic production. The limits of scarcity are everywhere. Schumpeter's discussion of this point is extremely illuminating. "Both Steuart and Turgot spoke of agriculture only. Fifty years ago [i.e., about 1900] this would not have astonished anybody, since it was then established practice to restrict decreasing returns to agriculture. But we who take it for granted that neither increasing nor decreasing returns are restricted to any particular branch of economic activity but may prevail in any branch, provided certain general conditions are fulfilled, are in a position to realize how surprising that actually was. Explanation seems to lie in the fact that, to the unsophisticated mind, there is something particularly compelling in the limitations imposed upon human activity by an inexorably 'given' physical environment. It takes prolonged effort to reduce the analytic importance of these limitations to their proper dimensions and divorce them from the soil and the industry that works the soil. Yet it should not have taken so long to see that there is really no *logical* difference between trying to expand output on a given farm and trying to expand output in a given factory, and that if farms cannot be indefinitely multiplied or enlarged, neither can factories. The additional explanation required is provided by the belief of practically all eighteenth-century authors—a belief that carries over to the 'classics' of the nineteenth century—that while the factor

land was given once for all, the other original factor, labor, would always increase to any amount required if allowed to do so. If we adopt this view, we shall at once sympathize with the reluctance of those authors to treat labor and land alike and to apply the laws of physical returns impartially to both."²

In other words, all resources are limited. Put another way, at zero price there is greater demand for most goods than supply of those goods. This is what defines a scarce resource, meaning an economic good. No single good can provide us with all the output we could ever want. There is no magic formula, no genie in a bottle, that can provide us with an infinite supply of desirable goods and services. We cannot turn stones into bread—not at zero cost, anyway. The limited productivity of "land," and the limited supply of land, force us to search out new supplies of land when our productivity presses against the limits of the land. But the same restraints apply to all resources. *There is no asset which is infinitely productive.* If we want more steel, we must build more steel mills, unless we can develop a cost-effective technology that enables us to expand steel production in the same factory. And the curse of the ground also implies a curse on man: technology is not infinitely expandable. Contrary to Schumpeter, there *are* decreasing returns to technology.³ Man is not originally creative, nor is he infinitely creative. He is a creature. In any case, even if we admit that men have enormous powers of technological creativity, there are still two further limits that can never be overcome: *time* and *capital*. It takes time to develop and install a new technology, and it takes capital resources. The *day of judgment* limits the first factor, and the *curse on the creation* limits the other. The rate of interest—a phenomenon of time-preference—also limits the application of technology. Men will not and cannot give up *all* present consumption.⁴ For this reason, there is an inescapable discount rate between present goods and future goods, and economists call this discount rate the rate of interest, or "originary interest," or simply time-preference. Technological innovations require both

2. *Ibid.*, p. 261.

3. *Ibid.*, p. 263.

4. Ludwig von Mises, *Human Action* (3rd ed.; Chicago: Regnery, 1966), ch. 18. See also the essays by the American economist, Frank A. Fetter, who wrote in the first three decades of the twentieth century: *Capital, Interest, and Rent: Essays in the Theory of Distribution*, edited by Murray N. Rothbard (Kansas City, Kansas: Sheed, Andrews and McMeel, 1977).

time and capital, and there are limits on both, even if there were no limits on man's intellectual capacity to devise new technologies, an assumption which cannot be made, given the Bible's doctrine of man.

Whatever man turns his hand to will eventually produce negative returns (losses) if the producer insists on adding ever-greater quantities of complementary resources to a fixed supply of any particular resource. He will have to search out new ways of combining these resources, or find quantities of the overextended factor of production that can be purchased or rented at prices that enable him to increase the value of his production's final output. His desire for increased wealth impels him to devote energy, capital, and time to subduing his portion of the earth.

In the case of land, the law of diminishing returns tells us that there are limits on the soil's ability to sustain life. If a land user refuses to acknowledge the existence of such limits, then his attempts to expand output by adding more and more complementary factors of production—more seed, more laborers, more water, etc.—will eventually deplete the soil. This is one technological reason why Israel was required to rest the soil one year in seven (Lev. 25:2-7). The land is entitled to its rest. Before the soil is completely exhausted, however, the law of diminishing returns will make itself felt. Output per unit of resource input will decline. The farmer will have to add fertilizers, or new technological devices, or a system of soil-replenishing crop rotation, or periods of fallow land, if he is to save the value of his land. The law of diminishing returns therefore provides men with an *economic incentive to care for the land* and make it fruitful by acknowledging and honoring its limits.

The Tragedy of the Commons

Land which is not privately owned by the person using it is far more exposed to reckless soil depletion and ecological devastation. This is the so-called "tragedy of the commons," in which the political authority owns the land and leases it out (or even gives it away free of charge temporarily) to private or public uses. The man who benefits immediately from its use—running animals on it, stripping it of its trees, camping on it, digging minerals out of it—has little direct incentive to conserve its productivity. If he had exclusive use of it for many years, he might, but that is almost the same as reintroducing private ownership. His personal benefits are directly and

immediately realized; the costs associated with the depletion of the resource are borne by all taxpaying citizens — an infinitesimal additional cost to the actual user. Since it is not his land, he need not conserve its long-run productivity. A kind of “positive feedback” occurs. It generally pays to add one more cow or cut down one more tree, unless the variable costs — supervising the cow, sharpening the saw, spending the time — have risen so high that even the “free” land is not a sufficient subsidy to continue production. The “positive feedback” process can continue until the ecological crisis hits, and the productivity of the “free” resource plummets.⁵ The “negative feedback” of the law of diminishing returns is temporarily blunted, since the retarding factors — increased costs of maintaining the long-term productivity of the resource — are not registered forcefully in the mind of the user. Others bear these costs, and his personal benefits far outweigh his share of these costs. Eventually, the law reasserts itself visibly, since it is simply a discovered regularity based on a real fact, namely, the curse of the ground. But the crisis may give few warnings, at least few that the user will recognize or respect. It comes all at once, not in smaller portions that an owner of private property would be more likely to recognize and take steps to alleviate or reverse. Without private ownership of the means of production, the law of diminishing returns does not produce those warnings concerning the impending advent of radically reduced output from an overused resource.⁶ Or more accurately, the warnings are not heeded so rapidly. (Economists call this the problem of “externalities.”)

It is extremely difficult and costly for bureaucracies to evaluate the full effects of the use of any publicly owned resource. The costs of upkeep in relation to the benefits of use are evaluated by different people. The reality of the subjective theory of value asserts itself. The bureaucrats in charge of managing or leasing the public property must estimate the value produced by the users of the resource, and this is inevitably impossible to estimate without prices. But even prices do not tell the administrators everything they wish to know. Is the subsidy to the public of “free” land, for example, really the best way to benefit the public? How can any bureaucrat determine the answer? Are the costs too high? Again, how can he put a price tag on

5. Garrett Hardin, “The Tragedy of the Commons,” *Science* (Dec. 13, 1968); reprinted in Garrett de Bell (ed.), *The Environmental Handbook* (New York: Ballentine, 1970).

6. C. R. Batten, “The Tragedy of the Commons,” *The Freeman* (Oct., 1970).

the costs, if the asset is publicly owned and therefore not subject to the subjective evaluation of costs by the legal owners, namely the voters? Who is to say whether the bureaucrats' assessment of the "true" costs and benefits to the "public" are the same as the "public" would assess them? And how is the "public"—a collection of individuals—to register its collective judgment? Who pays the piper, whose ox will be gored, and who eats the cake? So the management of publicly owned resources tends to swing between policies of overuse and no use, between the profligate squandering of resources through "free" leases that lead to erosion, and the profligate squandering of resources by allowing valuable assets to sit inactive. First the bureaucrats allow erosion, then they require total conservation, which means that productive assets are rendered unproductive, or productive only for those few people who enjoy using the resource in a legally acceptable way (such as hikers who enjoy the wilderness and who do not enjoy the sound of chain saws or other tools of production).

The Puritans of New England learned these lessons early. After 1675, with half a century of mismanaged common lands behind them, they steadily sold off the communally owned property to private owners. The bickering about who was to pay for the cattle herders, how many trees were to be cut down yearly, whose fences were in disrepair, and the costs of policing the whole unmanageable scheme, finally ended. So ended the "tragedy of the commons."⁷

Dominion and Diminishing Returns

The law of diminishing returns, when structured through the private ownership of scarce resources, becomes an incentive for the fulfillment of the cultural mandate. Men reach the limits of productivity of a particular production process, and then they are forced to find better methods of production, or to find additional quantities of some overextended factor of production. They must either intensify production through better technology and more capital, or search for more of the resource which has reached its limits of productivity under the prevailing production "formula" or "recipe." The overextended resource may be land, or a building, or the labor supply, or managerial talent, or forecasting skill, or any other scarce economic resource. When its

7. Gary North, "The Puritan Experiment in Common Ownership," *The Freeman* (April, 1974).

limits are reached, men must find new ways of accomplishing their goals. They may have to rethink their goals because the costs have risen, or else they must find ways to reduce the costs of achieving their goals. Or they may have to settle for a combination: modified goals and reduced costs of production. But they must change. The law of diminishing returns makes change inevitable, along with many other factors that make change inevitable. But the cultural form that change produces in a profit-seeking society, in which the private property system prevails, is a culture which is dominion-oriented. The earth is subdued, if not because men aim at subduing it for God's glory, then at least for individual profits. The general dominion covenant is furthered.

By fostering conservation, the quest for long-term returns from the ownership of any productive resource also tends to preserve the productivity of the earth. The cultural mandate is not to serve man as an excuse to destroy the earth. Because men failed to give the land of Israel its rest, they went into captivity for 70 years (II Chr. 36:21). They were warned not to misuse the soil. Because the price we pay for a productive asset is the function of our expected future returns from that resource (a stream of income over time), discounted by the rate of interest, we have an incentive to maintain that resource's productivity, since we paid for its productivity in the purchase price. We are forced to count the costs of ownership and use. The law of diminishing returns must be recognized. We must recognize the limits of scarcity. And having recognized these limits, we are then to find ways to mitigate scarcity's burden in lawful ways, to expand output, improve our techniques of production, and buy more capital resources. We count the costs and evaluate the benefits. We are the winners or losers as individual decision-makers. If output falls when we add more inputs, we are forced to discover why. We are told, by the profit-and-loss sheets, that we are now overusing a particular resource, and that we must stop doing so if we are to keep from wasting resources. The search begins for more of the overextended resource or for techniques of production that compensate for the falling productivity of the present production mix. The dominion covenant is extended.

Conclusion

In Esau's case, he decided to leave. His decision led to the establishment of Edom. It also allowed Jacob to increase his family's hold-

ings, at least until the time of the great famine when they journeyed to Egypt. The Canaanites, who dominated the land in the era of the famine, were to enjoy their independence for only a few centuries after that famine. Both Jacob and Esau were to increase their dominion of the earth as a result of the law of diminishing returns. It forced them to seek new lands to conquer.

THE BLESSING OF RESPONSIBILITY

And the LORD was with Joseph, and he was a prosperous man; and he was in the house of his master the Egyptian. And his master saw that the LORD was with him, and that the LORD made all that he did to prosper in his hand. And Joseph found grace in his sight, and he served him: and he made him overseer over his house, and all that he had he put into his hand (Gen. 39:2-4).

Like Jacob his father, who had served Laban for many years, Joseph was proving to be an efficient, highly profitable servant. Potiphar, like Laban, recognized that God had some special relationship with his servant, and he was determined to benefit from this fact. Both Laban and Potiphar sought to appropriate the fruits of their servants' productivity by delegating increased responsibility into their hands (Gen. 30:27-28). Furthermore, during the period when each master dealt justly with his servant, he saw his own economic affairs prosper.

We are not told what duties Potiphar had as captain of the guard. We are told that as far as his own household was concerned, he delegated all authority to Joseph, "and he knew not ought he had, save the bread which he did eat" (39:6). In one respect, Potiphar proved that he was a successful businessman, for one of the most important aspects of the entrepreneur's tasks is to locate and employ able subordinates. Frank H. Knight, whose pioneering work, *Risk, Uncertainty and Profit* (1921), presented the first systematic, accurate analysis of profit, put it even more emphatically: ". . . this capacity for forming correct judgments (in a more or less extended or restricted field) is the principal fact which makes a man serviceable in business; it is the characteristic human activity, the most important endowment for which wages are received. The stability and success of business enterprise in general is largely dependent upon the

possibility of estimating the powers of men in this regard, both for assigning men to their positions and for fixing remunerations which they are to receive for filling positions."¹ The essence of control over a business, he argued, is mainly the selection of the men who will do the controlling. "Business judgment is chiefly judgment of men."² Therefore, he concluded, "In the field of organization, the knowledge on which what we call responsible control depends is not knowledge of situations and problems and of means for effecting changes, but is knowledge of other men's knowledge of these things. . . . so fundamental is it for understanding the control of organized activity, that the problem of judging men's powers of judgment overshadows the problem of judging the facts of the situation to be dealt with."³ This analysis may be exaggerated, but it certainly holds true for very large-scale organizations. In the case of Potiphar and Laban, they exercised very good judgment initially concerning the judgment of their God-blessed subordinates.

Potiphar's error was in relinquishing control of his family. In abdicating the management position in the family business, he went too far. He did not notice, or chose to ignore, his wife's roving eye. In the time of crisis, when it was his wife's word against Joseph's, he chose to believe his wife rather than the man who had proven faithful and competent in the management of the family business. He thereby forfeited the benefits that Joseph's abilities had brought him, just as Laban had forfeited the benefits of Jacob's productivity.

Joseph was cast into prison. Through no fault of his own, he had lost his position of authority. Potiphar's envy had brought him low, just as Joseph's brothers' envy had led to his exile in Egypt. But the keeper of the prison immediately recognized Joseph's unique talents, and like Potiphar, he was willing to entrust the administration of his organization to Joseph, and "whatsoever they did there, he was the doer of it. The keeper of the prison looked not to any thing that was under his hand; because the LORD was with him, and that which he did, the LORD made it to prosper" (39:22b-23). Officially, he had been a slave; in reality, he had been master of Potiphar's household. Legally, he was now a prisoner; in reality, he was the director of the prison.

1. Frank H. Knight, *Risk, Uncertainty and Profit* (New York: Harper Torchbook, [1921] 1965), p. 229.

2. *Ibid.*, p. 291.

3. *Ibid.*, p. 292.

Slavery and prison: neither position is relished by any servant of God. But once forced into such a position, the godly man does his best with whatever resources are available to him. He accepts whatever lawful authority is offered to him, going about his daily affairs honestly and efficiently. He subdues that portion of the earth which God has allotted to him. If he can obtain his freedom lawfully, he does so, for freedom is a better condition in which to exercise one's calling before God (I Cor. 7:21-23). Nevertheless, a man is to be content with the status quo, if that is where God has placed him (I Cor. 7:20; I Tim. 6:6-8).

By serving well in the position that had been given to him, Joseph discovered that responsibility flowed his way. Like scarce economic resources that flow in the direction of those who serve the buying public most efficiently, so responsibility tends to flow in the direction of those willing and able to bear the burdens of responsible decision-making. In a present-oriented culture, this is doubly true, for men seek to escape the burdens of future-oriented decision-making. They want to be the recipients of the fruits of efficient labor, but they are not interested in bearing personally the direct costs of bearing risk (in the sense of a statistically calculable risk) or uncertainty (in the sense of an unknown future which cannot be dealt with by means of the laws of probability). The more present-oriented and risk-avoiding a culture is, the more responsibility and profit opportunities we can expect to see flowing to those who are willing to risk failure.

Neither Joseph nor Jacob was favored because either of them shared the religious presuppositions of his employer. The opposite was true: they were selected to serve precisely because a very different God from those worshipped by the employers was favoring the two servants. The servants were not beloved, but only respected. Later, they were resented. Initially, however, the masters were not overly concerned about the religious beliefs of their servants, but only with their productivity. A very similar feature of the free market is this lack of concern about the personal characteristics of producers. The buyer is normally unconcerned about the race or religion of the manufacturer of the product. On a personal basis, the buyer might be alienated by the producer. He might even despise him. Yet as a consumer he is primarily concerned with the price and quality of the product. The more impersonal the market—the broader, more extensive, more mechanized the market—the more

likely that productivity will count for more than the personal characteristics of the producer. The covenant of dominion is assigned to all people; hence, the person who comes closest to fulfilling the buyers' concept of efficient production, under competitive market conditions (price competition, open entry, absence of State-imposed restrictions on selling), will receive the value of his output. He will have the greatest opportunity to demonstrate his talents for production.

The problem faced by Joseph and Jacob was the fact that their employers regarded them as magical talismans of some sort. They saw that God blessed the two men, but they themselves did not choose to humble themselves before God. They thought that they might manipulate God by hiring those favored by Him. In the case of both Potiphar and Laban, their own character defects destroyed their ability to appropriate the productivity of their servants. Laban was greedy (Gen. 31:7), and Potiphar was envious of Joseph, or at least embarrassed by his wife's actions, and too weak to take Joseph's side in the dispute. Because they were so close to their servants, they were in effect surrendering themselves to the authority of their subordinates, for their prosperity depended upon the continuing relationship between the God of their servants and their own households. Eventually, this became too great a price to pay. They drove out their honorable servants, even as generations of gentiles drove out productive Jews, or as French Roman Catholic kings drove out the Huguenots in the sixteenth century.

This is the weakness of pragmatism.⁴ Pragmatism is related to magic. Pragmatists and magicians share similar presuppositions. Both deny the sovereignty of God. Both elevate the desires of man to principles of social organization. Both say, in effect, "if it works, I'll buy it; if it pays, I'll manipulate it." Is it surprising that the modern secular world, officially pragmatic and relativistic, should witness an outbreak of magic, witchcraft, and occultism?⁵ The same relationship was basic to the Renaissance and the Roman Empire. Is it surprising that the pragmatists, relativists, and occultists resent the religion of the Bible? The burdens associated with a godly calling are

4. I am not referring here to the narrowly defined pragmatism of those philosophers who have been designated as members of the school of philosophy known as Pragmatism.

5. Gary North, *Unholy Spirits: Occultism and New Age Humanism* (Ft. Worth, Texas: Dominion Press, 1986).

heavy for the pragmatist. Thrift, future-oriented investing, honest dealing, and risk-bearing are increasingly abandoned by hedonistic pragmatists. Pragmatism requires moral constraints that are the product of a non-pragmatic culture. Without these restraints, pragmatism degenerates into the lowest-common-denominator principle: theft, envy, and the abdication of personal responsibility, very often an abdication to the political authorities. Pragmatists like Potiphar will not pay the price. They will not humble themselves before the God they seek to manipulate. And in the long run, they lose. They are not productive, and capital tends to flow in the direction of those who are. As the Proverbs say, "the wealth of the sinner is laid up for the just" (13:22b).

Responsibility is therefore a potential blessing. In the short run, good servants may be able to appropriate more of it indirectly from those who are willing to abdicate from a position of full leadership. In time, their "masters" grow weaker economically and politically, as they seek to delegate too much authority to their subordinates, becoming too dependent upon their continuing productivity. If the masters refuse to submit themselves to God's law-order, the godly servants will eventually triumph, even as Joseph triumphed. Responsibility, like capital, eventually winds up in the hands of those who exercise it well. The burden of responsibility is ultimately a blessing, for it is the basis of external victory, in time and on earth.

Joseph and Jacob were suffering servants. They served their masters well, yet their masters failed to appreciate their moral character. The same role was played by Jesus Christ, who was also a suffering servant. Through His own perfection, He alienated the rulers of His day. He paid the highest price, in order to serve His friends, for he laid down His life for them (John 15:13). Yet in doing so, He triumphed over all His enemies (Matt. 28:18). *This relationship between service and victory is basic to biblical order.* Christ said: "Ye know that the princes of the Gentiles exercise dominion over them, and they that are great exercise authority upon them. But it shall not be so among you: but whosoever will be great among you, let him be your minister; and whosoever will be chief among you, let him be your servant: Even as the Son of man came not to be ministered unto, but to minister, and to give his life a ransom for many" (Matt. 20:25-28).

Nowhere can this principle be seen more clearly than in the free market. The producer who best meets the desires of consumers will

prosper. He must subject himself to the highest-bidding participants in the market. This need not mean the richest people in society. In fact, the highest bidders may be a mass market: millions of people bidding a few dollars each, rather than a handful bidding several thousands each. The producer seeks the highest rate of return on his capital and labor. He cannot compel buyers to pay his price, except in very rare instances. He has to clear his inventory of products at the price that the buyers are willing to pay. Of course, he seeks the highest available price, where no additional bidders are willing to pay his price, and no products remain in stock to be sold. The market's clearing mechanism is pictured well when we imagine a theater. When all the seats are filled, and no one is standing in line to get in, the seller of seats has forecasted his market perfectly. He has set his price in terms of market demand. He has served his customers well, as his filled seats demonstrate, but he has also served himself well. He has earned the highest return per seat. The richest, most successful, most famous entrepreneurs in the market are those who have consistently forecasted accurately future market demand. The chief *rulers* of the free market are those who *serve* the buyers well.

The free market does not call us to be suffering servants. It calls us to meet the demands of the potential buyers better than our competing sellers. It calls us to be *prospering servants*. The better we serve, the higher our income. If we would be chief among businessmen, we must serve the buyers best. The entrepreneur who bears full responsibility for his forecasts, and who also forecasts accurately, will experience the financial blessings of responsibility.

Conclusion

The Bible repeats the theme of prison as a training ground for victory: Joseph in prison, Daniel in the lion's den, Paul in several prisons, and the archetypal image, Jesus in the prison of the grave. The "suffering servant" motif is similar: suffering brings victory. In the case of the church in history, suffering of earlier generations brings victory for later generations. Thus, the means to victory, suffering, is not our goal: victory is our goal. The emphasis on continued suffering is theologically invalid; sin is to be progressively conquered in history, and suffering by Christians therefore is to be progressively reduced.

The free market reflects this overcoming of suffering sin, and scarcity. Men are to be servants, but successful men are not to suffer throughout their lifetimes; they are instead to prosper. Consumers are not to suffer, either; they are to be benefited by the productivity that freedom and personal responsibility produce.

THE ENTREPRENEURIAL FUNCTION

And Joseph said unto Pharaoh, The dream of Pharaoh is one: God hath shewed Pharaoh what he is about to do. . . . This is the thing which I have spoken unto Pharaoh: What God is about to do he sheweth unto Pharaoh (Gen. 41:25, 28).

Joseph had demonstrated his administrative competence to Potiphar, captain of the guard, and to the Egyptian jailer. He had also shown his ability to interpret prophetic dreams to the Pharaoh's butler. The butler recommended Joseph to Pharaoh when Pharaoh confronted a dream which he could not understand. They brought him from the dungeon, and Pharaoh described his visions of the seven fat animals being devoured by the seven lean ones, and the seven fat ears of corn being devoured by the seven lean ones. Joseph informed Pharaoh that the dream revealed the coming of seven years of agricultural prosperity, to be followed by seven years of famine. As for the two separate visions, "the dream was doubled unto Pharaoh twice; it is because the thing is established by God, and God will shortly bring it to pass" (41:32). Joseph entertained no doubts whatsoever. God had provided a *double witness*.

Pharaoh wisely listened to Joseph's interpretation. When Joseph then recommended that Pharaoh seek out a man "discreet and wise, and set him over the land of Egypt," to direct the collection of one-fifth of the grain during the seven years of plenty, Pharaoh appointed Joseph (41:33-43). Not only did Joseph's prophecy come true, but he also once again proved himself to be a reliable and efficient administrator of men. Because of his unique combination of economic foresight (in this case prophetic in nature) and efficient administration, Joseph stands out as the Bible's archetype of the entrepreneur.

It is the task of the entrepreneur to forecast the future accurately,

at least in so far as it affects his business, and then to plan effectively to meet the economic demands of consumers in that expected future. *Of all the economic functions of the free market, this is the pivotal one.* It is the ability of men to estimate the demands of their fellow men in the future, and then to produce in terms of those demands without wasting scarce economic resources, which makes it possible for society to advance beyond the most primitive methods of production. The individual who does plan efficiently for the future, producing goods or services that satisfy the demand of consumers at the prices he expected them to pay, reaps a reward: entrepreneurial profit or pure profit. It is an *economic residual*, funds remaining after payment has been made for raw materials, labor, capital equipment, interest, rent, and taxes.¹ The person who misforecasts the future, or who is unable to foresee the costs of delivering his goods and services to the waiting consumers, eventually produces losses. He is forced to dip into his capital in order to stay in business. If the losses continue, he loses control of capital resources, and others who are able to meet future consumer demand with less waste are able to buy these resources from him. In the competitive auction market for scarce economic resources, the profit-making individuals are the more effective bidders for resources, transferring them to their own companies in order to meet the demands of consumers. The consumer benefits, for he is able to purchase more resources at the end of the production process, precisely because there has been less waste of land, labor, and capital in delivering the goods to him. *The consumers therefore determine the success or failure of entrepreneurs.* Those who waste resources by failing to meet consumer demand at prices the consumers, through buyers' competition, are willing to pay, are penalized by consumers, while those who are successful are rewarded with entrepreneurial profit. A free market encourages *consumer satisfaction and efficiency of production.*

Profit is therefore a residual accruing to those who deal on a day-to-day basis with the *inescapable uncertainties of the future.* Men are not omniscient. We cannot see the future perfectly. We are limited creatures. Even Jesus, in His Incarnation as perfect man, admitted that

1. On profit as an economic residual which results from accurate forecasting, see Frank H. Knight, *Risk, Uncertainty and Profit* (New York: Harper Torchbook, [1921] 1965); Ludwig von Mises, *Human Action* (3rd ed.; Chicago: Regnery, 1966), pp. 289-94; Murray N. Rothbard, *Man, Economy and State* (New York: New York University Press, [1962] 1976), ch. 8.

He did not know—in terms of His human nature—when God's judgment would arrive (Matt. 24:36). Creatures must respect their own limitations. By encouraging specialists in economic forecasting to administer scarce economic resources, consumers seek to mitigate the uncertainties of life. By permitting entrepreneurs the right to keep the economic residual, *profit*, of their activities in meeting consumer demand, the consumers insure that their needs will be met with greater efficiency. The burden of bearing uncertainty is picked up by those willing to do it, and their incentive is the lure of profit. If they make mistakes, they produce losses.

The *consumer* is the beneficiary of the entrepreneurial function, Frank H. Knight concluded. Because others are willing to become entrepreneurs, or as they are also called, speculators, the consumer can shift much of the responsibility for predicting the future to these specialists. In fact, the entrepreneurs make it their business to know what the consumer will want in the future even before the consumer knows. We know, for example, that the consumer seldom contracts in advance for the delivery of goods or services. Why not? "A part of the reason might be the consumer's uncertainty as to his ability to pay at the end of the period, but this does not seem to be important in fact. The main reason is that he does not know what he will want, and how much, and how badly; consequently he leaves it to producers to create goods and hold them ready for his decision when the time comes. The clue to this apparent paradox is, of course, in the 'law of large numbers,' the consolidation of risks (or uncertainties). The consumer is, himself, only one; to the producer he is a mere multitude in which individuality is lost. It turns out that an outsider can foresee the wants of a multitude with more ease and accuracy than an individual can attain with respect to his own. This phenomenon gives us the most fundamental feature of the economic system, *production for a market*, and hence also the general character of the environment in relation to which the effects of uncertainty are to be further investigated."²

Does this mean that bureaucrats operating at the very top levels of government planning agencies are better able to foresee the needs of consumers than the consumers are? Not necessarily. What we are comparing is not "consumers" vs. "government forecasters" in the realm of forecasting future consumer demand, but rather "con-

2. Knight, *Risk, Uncertainty and Profit*, p. 241.

sumers served by profit-seeking, competitive entrepreneurs" vs. "consumers served by Civil Service-protected, guaranteed tenure, monopolistic government planners." The fact that government planners have access to reams of data concerning *past* decisions of consumers and producers means very little. *The crucial ability is to make correct assessments about the uncertainties of the future*, meaning those aspects of the economic future that are not subject to computerization or even statistical probabilities. It is the presence of incessant *change* in human affairs that calls forth the skilled and not-so-skilled entrepreneurs in the quest for profits. The market provides a mechanism of economic competition which sorts out the successful from the unsuccessful entrepreneurs. There is no comparable mechanism operating in government, for government has a monopoly of support (taxation) and very often a monopoly of supply operations, such as the delivery of first-class mail, which insulates it from the competitive framework of the open market.³ Knight's warning is significant: "The real trouble with bureaucracies is not that they are rash, but the opposite. When not actually rotten with dishonesty and corruption they universally show a tendency to 'play safe' and become hopelessly conservative. The great danger to be feared from a political control of economic life under ordinary conditions is not a reckless dissipation of the social resources so much as the arrest of progress and the vegetation of life."⁴ Bureaucracy favors present-oriented risk- (uncertainty-) averters.⁵

What service is it that the entrepreneur performs in order to receive his residual? *He perceives a special opportunity in the future*. He believes that consumers will be willing and able at a specific point in time to pay more for a particular good or service than today's entrepreneurs think they will be willing and able to pay. Because of this lack of perception on the part of his competitors, the entrepreneur finds that the scarce economic resources that are used in the produc-

3. Ludwig von Mises, *Bureaucracy* (New Rochelle, New York: Arlington House, [1944] 1969). On the inability of governments to make accurate economic assessments of costs and benefits, see Mises' essay, "Economic Calculation in the Socialist Commonwealth," (1920), in F. A. Hayek (ed.), *Collectivist Economic Planning* (London: Routledge & Kegan Paul, [1935] 1963), ch. III. He expanded his analysis of this topic in his book, *Socialism: An Economic and Sociological Analysis* (New Haven, Conn.: Yale University Press, [1922] 1962), Book II, chaps. 1, 2.

4. Knight, *op. cit.*, p. 361.

5. Gary North, "Statist Bureaucracy in the Modern Economy," in North, *An Introduction to Christian Economics* (Nutley, New Jersey: Craig Press, 1973), ch. 20.

tion of the good or service are underpriced in relation to what they would be if all entrepreneurs recognized the true state of future consumer demand. The entrepreneurs are *middlemen for consumers*, actual surrogates for them. They enter the markets for production goods and compete among each other in order to buy them, but always because they intend to sell the results of production to consumers. If an entrepreneur sees that certain factors of production are presently underpriced in relation to what consumers in the future really will be willing and able to pay for them in the form of final consumer goods, then he has a profit opportunity. (Of course, he has to pay a rate of interest, since future goods are always discounted in comparison to what people will pay for present goods, and he has to tie up the use of the scarce resources until the time he can get the finished products to market.) The entrepreneur enters the market and begins to buy up production goods—land, labor, capital—in order to manufacture the consumer goods. Or he may simply rent these factors of production. In any case, *he removes them from the marketplace for a specific period of time*. When he brings the final products to market as finished consumer goods, he raises their price to the level determined by the competitive auction bids of consumers. In short, he makes his profit by estimating in advance what future consumers, in bidding against each other, will be willing to pay in a free market for the output of his production process.

The entrepreneur does not compete against consumers, except in so far as there are zones of ignorance in the minds of both consumers and his competitors, other potential sellers, concerning the market price of the goods or services. In a highly competitive market, these zones of ignorance are drastically reduced. People know pretty well what items sell for in the marketplace. *The entrepreneur is always competing against other entrepreneurs*—the middlemen who act for the benefit of consumers—who also produce in order to meet future consumer demand. When the finished consumer goods or services are offered for sale, the “auctioneer”—the seller of goods—is guided by the competitive bids of competing consumers. He is unable to set any price he wants to set, though of course he prefers to receive a high price. He sets his price in response to consumer bids, so as to “clear the market.” He wants to sell every item scheduled for sale in the particular time period. He cannot squeeze any more money out of the consumers than they are willing and able to pay. Other sellers

can also enter the market and offer goods or services for a lower price, and he has to consider this possibility, too. In short, *sellers compete against sellers*, while *consumers compete against consumers*.

If the entrepreneur was correct in his original estimation of the extent of consumer demand, and if no unforeseen contingencies have disrupted the expected cost of producing the final goods, and if no new sources of supply are brought to market that he had not been able to predict, then the entrepreneur gets his expected price per unit sold. He has "bought low" and has been able to "sell high." He sells to the highest bidders. He reaps his reward, entrepreneurial profit. It is the *residual* which remains *after* he has paid for all production inputs, including interest and his own management wage (the equivalent income that he had to forego because he could not sell his services to other entrepreneurs during the time he was working in his own company). If all has gone according to his original plan, then he has profited. But one fact must be understood: *he has not profited at the expense of consumers*. Consumers have not "lost" because of his presence in the market as a seller. *He has profited at the expense of rival entrepreneurs* who failed to see the opportunity for profit, and who failed to enter the resource markets for scarce factors of production. They stayed out, thereby allowing him to buy up those production factors less expensively. But the consumers have unquestionably benefited. He has served the highest-bidding consumers well. What if he had never bothered to buy up those producer goods, pay the interest, and bear the risks of production? What if he had never brought the goods or services to market? How would that have helped those consumers who wanted the goods so much that they were willing to pay him top prices? He made more of these goods available to them than they would otherwise have had offered to them by sellers. He has been their benefactor—at a profit.

Professor Mises summarized the nature of profits in a straightforward manner: "If all entrepreneurs were to anticipate correctly the future state of the market, there would be neither profits nor losses. The prices of all factors of production would already today be fully adjusted to tomorrow's prices of the products. In buying the factors of production the entrepreneur would have to expend (with due allowance for the difference between the prices of present goods and future goods) no less an amount than the buyers will pay him later for the product. An entrepreneur can make a profit only if he anticipates future conditions more correctly than other entrepre-

neurs.”⁶ While there is always considerable intellectual risk in discussing what anything would be like if man were not man—specifically, what profits would be if men were omniscient—nevertheless, the reader should grasp what Mises is saying. Profits and losses are part of the human condition, precisely because *man is not God. It is the quest for a risk-free, uncertainty-free, profit-and-loss-free world which is demonic. It is the demand that we remake man into God, that man become omniscient, that man transcend the limits of his creaturehood.*

The Middleman

Every so often, some local businessman buys advertising time on television, usually on a non-network station, and he tries to unload his merchandise by using a variation of this time-tested sales pitch: “Friends, we can offer these incredibly low prices because we sell directly to you, the consumer. That’s right, you buy directly from our factory warehouses at wholesale prices. You buy at factory prices because *we’ve eliminated the middleman!*” Isn’t that terrific? No middleman. All these years, profit-seeking businessmen have been paying middlemen to stand around in the middle doing nothing. Profit-seeking businessmen have, it seems, for centuries been willing to buy nothing—the non-services of useless middlemen—for something. But now some enterprising businessman has found a way to eliminate the middleman, and he is willing to pass the savings on to us. As the old saying goes, “What a deal!”

Think about the logic of the offer. Where are we told about this fabulous opportunity? On television. Who is buying the time slot? The businessman. Who is stocking all the inventory? The businessman. Who is paying the interest rate, space rental, night watchman, and utilities expenses to warehouse the merchandise? The businessman. Who is bearing the risk of getting stuck with a warehouse full of unsalable merchandise? The businessman. Who pays the fire and theft insurance premiums? The businessman. Who, then, is the middleman?

There will always be a middleman because there will always be uncertainty. *The middleman is the entrepreneur.* He exists because there is an entrepreneurial function. The producer may decide to become the middleman. The State, through some bureaucratic agency, may decide to become the middleman. Or an independent “jobber” may

6. Mises, *Human Action*, p. 293.

decide the payoff potential is worth the risk. But what is not conceivable, in a world of uncertainty, is a production system without a middleman, where buyers never have to pay for the services of economic forecasters. The producer may "sell direct to the consumer," but as long as the consumer has the right to say no and shop elsewhere, the producer is not really selling direct to the consumer. He is a buyer of goods or services who *hopes* to become a seller. The only consumer he can really sell direct to is himself, in his capacity as entrepreneurial middleman.

It is imperative that we understand the difference between *profit-seeking* and *gambling*, though both aim at predicting the future. Murray Rothbard's analysis is illuminating in this regard. "It is not accurate to apply terms like 'gambling' or 'betting' to situations either of risk or of uncertainty. These terms have unfavorable emotional implications, and for this reason: they refer to situations where *new* risks or uncertainties are *created* for the enjoyment of the uncertainties themselves. Gambling on the throw of the dice and betting on horse races are examples of the deliberate creation by the bettor or gambler of new uncertainties which otherwise would not have existed. The entrepreneur, on the other hand, is not creating uncertainties for the fun of it. On the contrary, he tries to reduce them as much as possible. The uncertainties he confronts are already inherent in the market situation, indeed in the nature of human action; someone must deal with them, and he is the most skilled or willing candidate."⁷

Market speculation may be indulged in by the very same men who, in their off hours, enjoy betting on horses or dice, but the economic effects are vastly different. The market speculator tries to reduce uncertainty for the sake of future consumers (which, of course, may well include himself), while the gambler is a present consumer of the joy or masochism of a game. Assume, for the sake of illustration, that the same individual is a part-time entrepreneur and a part-time gambler. He is a public benefactor if he guesses correctly in his capacity as a market forecaster. He is simply a winner at a game—matched by losers in the same game—when he forecasts correctly as a gambler. He has put his capital at risk to serve future consumers as a market speculator. He has put his capital at risk to serve himself as a believer in a chance-dominated universe when he

7. Murray N. Rothbard, *Man, Economy and State*, pp. 500-1.

enters a game of chance. As a market forecaster, he acknowledges his limits as a creature, and deals with the world of the future in which men can see only darkly. He cannot escape living in such a world without actually dying. He serves others by entering into market-forecasting activities. But as a gambler, a man risks losing his God-given capital assets in a game of chance, probably in a game in which the laws of probability for winning are against him (and if they are for him, they are against his opponents in the game). He affirms a universe of luck, of chance, of "fortunate" benefits for those who take needless risks with their capital. In short, the market speculator affirms the universe God has created, while the gambler affirms a very different world. The speculator tries to conserve capital for his own profit and for the benefit of future consumers. The gambler wastes capital in terms of a philosophy of impersonal chance or personal luck, neither of which is a valid assumption concerning a created universe which is governed by an omniscient, omnipotent, sovereign personal God.

It is no doubt true that it is impossible for anyone, including the entrepreneur, to sort out precisely what part of his income is a wage for management services, what part is an interest return for the money he puts into the business, and what part is pure profit. But what we must understand is that these are *theoretically* distinct aspects of the production process. If we try to pay an entrepreneur a fixed wage for managerial services, he will quit, or cease bearing the uncertainties of predicting the future, or cease making consistently accurate predictions. If we pay him a predictable interest return on his money, and no more, then we have made him an investor, not an entrepreneur. There is an entrepreneurial function which cannot be remunerated in advance, precisely because entrepreneurial profit is a residual which at best is estimated effectively only by future-predicting entrepreneurs.

Joseph, the Forecaster

It might be argued that Joseph's experience in Egypt serves as a biblical justification of central planning by the civil government. Such an argument, while no doubt tempting, overlooks the key fact in this incident: Pharaoh had been given a direct revelation by God, and Joseph came to him as God's prophet with the ability to interpret Pharaoh's dream perfectly. Only on this assumption, namely, that we can expect truly prophetic *omniscience* from salaried or elected officials of the central government, can a biblical case be made for universal central economic planning. If this assumption is rejected,

then central economic planning initially has no greater claim to biblical sanction than private economic forecasting does.

Is the assumption correct? Is there some feature about becoming a State official which in some way endows a person with a prophetic mantle? What biblical evidence do we have for such an assumption? Is any foreign prisoner who has served two years of an indeterminate jail sentence a predictably effective interpreter of visions given to national leaders? Would anyone wish to build a theory of political economy on such a premise? Could we create a governmental planning structure in terms of such an operating presupposition about the nature of civil government?

The consequence of Egyptian economic planning by Joseph must also be borne in mind. The entire nation, excepting only the priests, went into bondage to the Egyptian State (Gen. 47:13-22). All land, except that owned by the priests, became the possession of the Pharaoh. The people survived the famine, which they might not have been able to do had it not been for Joseph's entrepreneurship, but they and their heirs became servants of the Pharaoh and his heirs.

It was basic to the religions of antiquity that the State was in some fundamental way divine, or linked to the divine through the ruler. Egypt's theology was especially notable for its adherence to the theology of a divine ruler. The Pharaoh was supposedly the descendent of the sun god. Only the Hebrews, with their doctrine of the Creator-creature distinction, avoided the lure of a theology of immanent divinity. The outcome of such a theology, when coupled with a mechanism of State economic planning, was enslavement. This was the curse of what Wittfogel has called oriental despotism.⁸

The Hebrews, in stark contrast, were told to worship God, and only God, as divine. The State, clearly, is not divine, and any attempt to make it divine — the sole representative of God on earth — was understood to be demonic. Officials were constantly told to remain honest stewards of the great King. The office of prophet was decentralized, and prophets continually challenged kings, princes, priests, and average Hebrew citizens when they turned away from God and His law. God sent a shepherd like Amos to speak to the people; they were expected to heed this shepherd's word, not the king and his court priests. The civil government is no more trust-

8. Karl A. Wittfogel, *Oriental Despotism: A Comparative Study of Total Power* (New Haven, Conn.: Yale University Press, 1957).

worthy than any other human institution. All institutions are to be under the jurisdiction of God. There is no monopoly of sovereignty on earth, except God's written word, the Bible.

By decentralizing the office of prophet, God insured that His people would not be compelled to listen exclusively to false prophets catering to the civil government rather than serving God. When the people were stiff-necked, refusing to heed His word, He punished them by allowing them to believe the false reports provided by the court's false prophets (Ezek. 14:1-5). The curse on their ethical rebellion was quite specific: the imposition of centralized decision-making by corrupt kings and their officially sanctioned prophets.

We never face a choice of "planning" vs. "no planning." The only question is: "Whose plan?" When economic planning is decentralized, and decisions are made by owners of private property, society is shielded from the risks of massive, centralized error. An erroneous decision made by a particular privately owned firm may cost its shareholders dearly, and consumers who would have purchased the goods that would have been made, had the firm not embarked on its error-filled course, no doubt are harmed. There has been waste. Nevertheless, the majority of consumers are protected because competing firms and suppliers can step in and satisfy consumer demand. The rival suppliers help to smooth out the disruptions caused either by the unforeseen external circumstances or the operations of the misallocating firm.

When a monopolistic central planning agency makes an error in forecasting the economic future, large segments of the population suffer. There are few legal alternatives open to potential buyers. Black market operators may step in, for a high price, and smooth out the disruptions in supply, but buyers will bear higher risks in dealing with these suppliers, and they will pay higher prices than would have been necessary had private firms been allowed to compete with State planners. Bureaucrats, wielded as they are by tenure, trade union restrictions, or Civil Service regulations, do not have the same incentives to bear uncertainty successfully, when compared to the incentives offered to the private entrepreneur. Bureaucrats are not rewarded directly with profits, nor are they immediately fired. The carrot and the stick are only indirectly related to any given decision made by a central planning agency. Blame for error is easily transferred in anything as complex as a national economy. The consumers cannot weed out the inefficient planners in a direct, forceful manner when planners are paid functionaries of the political State.

By monopolizing the entrepreneurial function, the State creates a planning structure that is far too rigid, far less sensitive to shifts in consumer demand and resource supplies, than the decentralized planning of profit-seeking entrepreneurs. This *inflexibility in the face of ceaseless change* drastically increases the risk of *devastating, centralized, universal failure*. And even when the State's bureaucrats turn out to be successful forecasters, as Joseph was in Egypt, the citizens who benefit from this accurate forecasting run the risk of becoming increasingly dependent on the State. As those in Egypt learned during the reign of the Pharaoh of Moses' day, successful State planning in one period in no way guarantees the continued success of central planners in subsequent periods. But successful State planning does increase the share of capital assets controlled by the State and its bureaucratic functionaries, thereby insulating them in subsequent decisions from private competition in the total decision-making process. The Egyptians learned this lesson the hard way.

Conclusion

It must be recognized that Joseph was in Egypt. No system of centralized economic planning was created at Mt. Sinai. God did not tell His people to imitate the experience of Egypt. He told them to avoid all contact with the "leaven" of Egyptian culture. Joseph brought the theological slaves of Egypt under bondage to their false god, the Pharaoh. God does not want His people to turn to the legacy of Egypt's bureaucratic tyranny as a model for a godly social order.

This exegesis of Joseph in Egypt outrages your typical State-promoting evangelical, especially college professors. They have tied their classroom lecture notes to the State-worshipping worldview of the tax-supported, humanist-accredited universities that awarded them their Ph.D.'s. They are the Pharaoh-worshippers of this era. Had they been in Egypt in Moses' day, they would have been the Hebrew foremen working under the authority of Pharaoh's Egyptian taskmasters. They are the people who would have come to Moses and Aaron and told them to go away, because they were making Pharaoh angry (Ex. 5:20-21). Their high position in the slave system was dependent on the continuing bondage of their people. So it is with humanism's chaplains in the Christian college classroom and the pulpit today. Freedom would require them to revise their notes and begin to promote economic freedom in the name of Christ rather than bondage to the would-be savior State.

THE MISAPPLICATION OF INTRINSIC VALUE

And when money failed in the land of Egypt, and in the land of Canaan, all the Egyptians came unto Joseph, and said, Give us bread: for why should we die in thy presence? for the money faileth. And Joseph said, Give your cattle, if money fail (Gen. 47:15-16).

Like all of God's relationships with men, famine can be simultaneously a curse and a blessing. The curse aspect is far easier to understand. The threefold curse promised by God to the Israelites involved the sword, pestilence, and famine (Deut. 28:21-22). The famine promised by Isaiah was a witness to the "fury of the LORD, the rebuke of thy God" (Isa. 51:20b). The people of Egypt were being placed under a long-term curse in the form of perpetual servitude to a bureaucratic State. The famine was the means of producing this servitude. Egyptians would henceforth live externally in terms of the religious faith which they held: the religion of a divine ruler.

The blessing accrued not to the Egyptians, but to the family of the house of Jacob. During his journey from Canaan, where he was still a stranger in the land (Gen. 36:7; 37:1), Israel (Jacob) was specifically told by God: "Fear not to go down into Egypt: for I will there make of thee a great nation" (36:3). In Egypt, they multiplied greatly (Ex. 1:7), even in the face of affliction (Ex. 1:12). A single family and its covenanted servants (Gen. 36:6-7) became a nation of 600,000 men, plus women and children (Ex. 12:37), in a little over two centuries, if Courville's estimate is correct.¹

Famine can also be a means of enforcing the cultural mandate. In forcing the Israelites down into Egypt, the ultimate conquest of

1. Donovan A. Courville, *The Exodus Problem and Its Ramifications* (Loma Linda, Calif.: Challenge Books, 1971), I, p. 151. North, *Moses and Pharaoh: Dominion Religion vs. Power Religion* (Tyler, Texas: Institute for Christian Economics, 1985), Appendix A.

Canaan was assured. In setting up Joseph as master of Egypt, the covenant of dominion was enforced by God. Famines act in much the same way as the law of diminishing returns acts, only far more rapidly and discontinuously; the migration of populations results. Men are forced into new lands in search of agricultural productivity. They are forced to trade with those in other regions whose lands have not been hit by famine. The famine was worldwide in scope (41:56). Egypt, however, had grain. This meant that the world would have to come to Egypt to trade on whatever terms the Egyptians thought were advantageous to them. Egypt could become a center of world trade, assuming the Egyptians thought it worth the risk of bargaining away food (41:57).

Famine is an incentive for rapid cultural change. The great European famines of 1315-17 disrupted late-medieval life, and the outbreak of bubonic plague in 1348-50, which reappeared intermittently for over three centuries, helped to destroy people's faith in medieval institutions. Religion, philosophy, labor practices, interest rates, and attitudes toward art all shifted radically in the fourteenth century.² The rise of the Lollard movement, the influence of Wycliffe, and the spread of proto-Protestant ideas were all part of the cultural turmoil of the late fourteenth century. The combination of plague, famine, and the printing press made possible the Reformation. The famines and plague had put whole populations on the move. One result was the imposition of wage controls and restraints on the movement of laborers, in country after country, in the middle of the fourteenth century. This was the first great European experiment with wage controls. Predictably, they intensified the labor shortage created by the loss of population from the plague.³

The Bible tells us that the money failed. What is money? Simply *the most marketable commodity*. Usually, a commodity which can function as money must have five characteristics: durability, divisibility, transportability, recognizability, and high marginal utility (scarcity). Gold and silver have been the traditional monetary metals of mankind, but salt, sugar, beads, shells, and numerous other scarce economic commodities have served men in exchange transactions.

2. Johan Huizinga, *The Waning of the Middle Ages* (Garden City, New York: Doubleday Anchor, [1924]); Barbara Tuchman, *A Distant Mirror: The Calamitous 14th Century* (New York: Knopf, 1978).

3. Herbert Heaton, *Economic History of Europe* (New York: Harper & Bros., 1948), p. 208.

By the second year of the famine, neither gold nor silver functioned as a means of exchange any longer. "The money faileth," cried the hungry Egyptians, and so it had. The Pharaoh had in his possession both the metal and the grain by the second year of the famine. If anything functioned as money in Egypt, it was grain.

Gold and silver were no longer acceptable means of payment. The bulk of the population no longer had much desire to possess metals. This indicates a total breakdown of the economy. The reason why men accept gold and silver in voluntary exchange for other scarce resources is because they believe that other people will do the same later on. Because people expect others to give up scarce resources for the money metals sometime in the future, the metals have exchange value in the present. This is what is usually meant by the phrase, "storehouse of value." Of course, value is not some physical aspect of the metal. Value is imputed by acting men to the metals because of estimates they have made concerning the willingness of men later on to continue to impute value to the metals. *Money metals, like all forms of money, are valued because of the future-orientation of acting men.* They use money in exchange today because they expect to be in the market buying other goods and services with money tomorrow or next year. They expect the traditional estimations of others to prevail in the marketplace. They expect familiar institutional arrangements to prevail over time.

Yet we are told that the money failed. What also must have failed was men's commitment to long-term planning. They needed food. They could not expect to survive over the long run unless they had access to food in the present. The long run was discounted to practically zero. The famine made Egyptians intensely present-oriented. Thus, the value of traditional monetary units fell to zero—"failed." Men lost confidence in the marketplace to supply them with their needs. They looked to the State, with its warehouses filled with grain, for their salvation. This shift in faith, or rather this shift in confidence, destroyed the monetary unit of account that had prevailed in the marketplace prior to the catastrophe. The State was able to collect the money metals until they no longer served as money (47:14-15).

What could then serve as a means of payment? Joseph set the terms of exchange because he controlled the one asset the whole world wanted (41:57). First he asked for their cattle, and they capitulated (47:16-17). At the end of the year, they were back,

empty-handed. All they had left were their bodies and their lands (47:18). *Land* and *labor*: here are the two sources of production. (Capital is simply the combination of land and labor over time.) They believed that they faced death, so the discounted present market value of the expected future income from both their land and their labor—their freedom—had fallen to zero. Joseph bought their land in Pharaoh's name. He then removed all of them to the cities of Egypt, which he could do only because of the huge store of food that the State had collected. He separated them from their ancestral lands, a graphic demonstration of the reality of the transaction he had just made with them. They were no longer independent peasants; they were now totally dependent urban dwellers who looked to the State for sustenance. Once assembled in the cities, the people were given grain by Joseph, so that they could replant (47:23). He then announced the imposition of a permanent tax of 20 percent of their production. He exempted only the priests from this transaction (47:22). They alone maintained ownership of their lands. Pharaoh already assigned them a portion of what he collected in taxes, so they did not need to sell their lands to Pharaoh. They would remain close supporters of Pharaoh's kingdom, visibly exempt from the new political order in which the people of Egypt had become slaves to Pharaoh.

Donovan Courville's reconstruction of Egyptian chronology presents the case that the famine described in Genesis began under the rule of Sesostriis I, in 1662 B.C.⁴ Certain aspects of the Genesis account add support to his thesis. First, the Pharaoh in Joseph's day had the political authority to collect 20% of the grain grown in the seven years of plenty. This indicates that the central government had considerable power. On the other hand, the sale of the land to the Pharaoh by the people indicates that this Pharaoh, prior to Joseph, did not own the land of Egypt. Both features of the Genesis account would appear to fit the facts we have concerning Sesostriis I. His father, Amenemhet I, had consolidated the central government into a feudal order, centralizing the Egyptian State after a period of radical political decentralization. Breasted commented that "under the vigorous and skilful leadership of Amenemhet I the rights and privileges attained by the powerful landed nobles were for the first

4. Courville, *Exodus Problem*, I, pp. 137ff. He says that 1445 was the date of the exodus, and that Jacob and his sons came into the land of Egypt 215 years earlier, or 1660 B.C. The famine presumably began two years before they came down (my view).

time properly adjusted and subjected to the centralized authority of the kingship, thus enabling the country, after a long interval, again to enjoy the inestimable advantages accruing from a uniform control of the nation's affairs."⁵ The radical centralization of the earlier Egyptian State—which had made possible the construction of the enormous pyramids of Khufu (Cheops), Khafre, and Menkure—had not been able to survive, and the local nobles had taken over after the IVth Dynasty kings had passed from the scene. Sesostri I, the second of the XIIth Dynasty rulers, was able to consolidate his father's recentralization. Finally, an Egyptian official in the reign of Sesostri I left a tomb inscription which refers to "the years of famine."⁶ (Sesostri I is also known as Usertasen I.) The total centralization of Egypt was accomplished under Sesostri III, not under Joseph's administration, and Courville believes that it was this latter Pharaoh who enslaved Israel.⁷

The experience of the Egyptians should draw our attention to the reality of *change* in human affairs. The traditional monetary units failed. The confidence of the people in money and money's supporting institutions failed. What had been valuable before fell to zero value. *There is therefore no ultimate, infallible, all-purpose "store of value" in the economic affairs of men.* Money is simply a marketable good, and if faith in market institutions fails, and men give up hope in their earthly futures, then money is not immune to this transformation of men's outlook. Ours is a world of *uncertainty*. No single earthly commodity or institution can deal successfully with every conceivable possibility of the human condition. No commodity is equally useful or valuable in every possible human situation. This is what Christ pointed to when he cautioned men to lay up treasure in heaven, since there alone is a man's treasure safe from the flux of human events (Matt. 6:19-21).

Money may function as a unit of account in exchanges, but it does not "measure" value, any more than the number of carats in a girl's engagement ring's diamond "measures" the love of her fiancé. Human value, like human love, is subjective. It is imputed by acting men to objects of their desire or revulsion. Men are told to impute value in terms of God's objective standards for men—to think God's

5. James Henry Breasted, *A History of Egypt* (New York: Charles Scribner's Sons, [1905] 1956), p. 177.

6. Courville, I, p. 134.

7. *Ibid.*, I, pp. 146ff.

thoughts after Him—even as God imputes value to His creation (Gen. 1:33). In their activities as acting agents responsible before God for their thoughts and actions, men assign value to objects, including money. *Money does not measure value; on the contrary, acting men impute value to money.* As external conditions change, or men's evaluations of external conditions change, they may well shift their value preferences away from money to something else, or from one form of money to a newly popular form. In Egypt, men learned that they could not eat gold. They could not induce other men to exchange food for gold. The fact that they could not eat gold does not, of course, mean that they could have eaten paper money, credit cards, or certified checks from prestigious banks.

What we must recognize is that *money does not have intrinsic value.* Only the Word of God has intrinsic value—permanent, unchanging value imputed to those words by God Himself, who is the source of value. God is self-attesting, self-sustaining, and absolutely autonomous. No human device, including gold and silver, possesses intrinsic value. All human devices are transitory; all shall pass away except God's Word (Matt. 24:35). Gold and silver have demonstrated for millennia that men evaluate their value in relatively predictable, stable ways. This stability of purchasing power over time and geographical boundaries testifies to the *historic* value of these monetary metals, but historic value is *not* the same thing as the hypothetical intrinsic value ascribed to the metals. Some people may use the term "intrinsic" when they really have in mind only the concept of *historic* value, but other people are actually quite confused about the concept of intrinsic value. They assume, for example, that some sort of long-term relationship of "16 to one" exists between the exchange value of silver and gold; 16 units of silver being equal to one unit of gold. No such relationship exists, except on a random basis, in a free market. *No permanent exchange value can exist between two or more economic objects. Human action is subject to change, and exchange values are no exception to this law of human life.*

By "intrinsic value," we must limit our discussion to market goods and services. We are speaking of *market* value. Of course, God imputes intrinsic value to this or that aspect of the creation. He imputes intrinsic value to the souls of His people. He evaluates the intrinsic evil of His enemies. But when we come to *values imputed by acting men to market phenomena*, there is nothing which possesses intrinsic value—nothing, in short, which remains a *created constant* within the frame-

work of historical change. We might argue that the value of the Word of God is greater than the value of gold and silver, but this does not mean that the value of God's Word is always precisely *this much* greater than gold and silver, since the value of gold and silver are not constants, in time or eternity. The very existence of changing market exchange ratios (prices) between commodities testifies to the myth of intrinsic *market* value.

Conclusion

The value of money is determined by acting men in the marketplace. The value of God's Word is determined by God. Any appeal to a hypothetical intrinsic value, some supposed fixed exchange relationship between market goods, is simply an attempt to deify some aspect of the creation, to find in the creation one of the attributes of God, namely, His unchangeableness. It is God, and only God, who can say, "I am the LORD, I change not" (Mal. 3:6a). That was a lesson learned by the Egyptians of Joseph's day when the money failed.

Well-meaning defenders of the traditional gold standard have confused the issue by proclaiming the intrinsic value of gold. They should instead proclaim the historic value of gold. Those who understand at least the basics of value theory are able to dismiss as naive all defenses of the gold standard that appeal to God's intrinsic value, and then go on to proclaim a fiat money standard in defiance of the historic value of gold over long periods of time.

We should not become defenders of the traditional gold standard anyway. We should instead become defenders of freedom of entry, honest weights and measures, 100% reserve banking, and no State-created money.⁸ We should also not become defenders of "intrinsic value" theory. We should become consistent in our economic recommendations and theoretical defenses of biblical freedom.

8. Gary North, *Honest Money: The Biblical Blueprint for Money and Banking* (Ft. Worth, Texas: Dominion Press, 1986).

CONCLUSION

The Book of Genesis provides the economist with the fundamentals of his academic discipline. Without the revelation of God to man concerning the origins of the world, man, and scarcity, there can be no systematic, accurate economic science. The fact that such a science exists, and that it has been developed predominately by men who reject the testimony of the Bible, testifies to the willingness of men to accept at least some of the Bible's truths, without actually accepting the Bible itself. As I have argued in Chapter Four, in Appendix B, and in my essay on economics in *Foundations of Christian Scholarship*, modern free market economists have used stolen intellectual capital in their attempt to build an autonomous science of economics. There is no science of economics that can logically stand the test of reason, except for Christian economics. The antinomies of value theory—objective vs. subjective—are obvious to the more inquisitive economists, but there is no way to reconcile these antinomies by means of autonomous human reason. The antinomies are therefore ignored, or dismissed as irrelevant. The contradictions in both *a priori*, deductivist economics and *a posteriori*, inductivist economics—best represented by the epistemologies of Ludwig von Mises (an *a priorist*) and Milton Friedman (an *a posteriorist* or empiricist)—are also obvious. Both schools of thought wind up relying on nonrational *intuition* to explain the mind-matter relationship. A few economists, such as Frank H. Knight, openly admit that such contradictions exist, but most economists never even think about such matters.¹ In short, all humanistic economic systems rely on stolen goods, namely, the revelation by God to man concerning Himself, man, and the world of scarcity.

1. Gary North, "Economics: From Reason to Intuition," in North (ed.), *Foundations of Christian Scholarship: Essays in the Van Til Perspective* (Vallecito, Calif.: Ross House Books, 1976).

Without an understanding of the economics of the Book of Genesis, it is not possible to understand economics. Secularists or other anti-God writers may think they understand economics. And they may well discover truths about men's economic relationships, but whatever they discover that is correct will be misinterpreted by them, if they use their anti-Genesis presuppositions to analyze their discoveries. Because God does not allow men to think completely consistently with their anti-God presuppositions, He restrains their errors. They make contributions to human thought and culture that are beneficial. The common grace of God, meaning His unmerited gifts to men in general, allows secular economists to make valid contributions. But it is the Christians who will be the ultimate beneficiaries of these contributions, for they alone have the key to understanding, namely, the Bible. The Christians will make the best use of the discoveries of secularists in all fields of thought. The Christians will steadily integrate the valid findings of secular science into a biblically sanctioned framework. This is why we need to take the Book of Genesis seriously as a source of information concerning the foundations of economic analysis.

Admittedly, Christians have failed to understand the crucial position of Genesis as the foundation of economics, education, and social science in general. They have been paralyzed, since the days of Justin Martyr (the second century, A.D.), by the myth of neutrality. They have tried to establish a common intellectual ground with Greeks of all nations. Greek philosophy and its spiritual heirs have misled the Christians almost from the beginning. Only when Christians recognize Genesis for what it is—the foundation of all human thought—will they begin to make culture-reconstructing intellectual contributions. They must no longer be satisfied with the scraps of stolen wisdom that fall from the humanists' tables.

The irony is that to the extent that humanistic economists have made any lasting and valid contributions, they have used biblical categories of thought. Most obviously, they have acknowledged the effects of scarcity. They have come to grips with the economic consequences of God's curse of the ground. To the extent that economists have departed from the reality of Genesis 3:17-19, as is the case with Marxism, socialism, and other forms of collectivism, they have become irrational. When they argue that institutional changes will produce a world of zero scarcity—a utopian world of universal abundance at zero price—they have adopted satanic principles of inter-

pretation. They have ceased to be economists.

If you have struggled through 237 pages of exegesis and economic analysis, you may be asking yourself: "Why hasn't anyone ever tried this sort of a commentary in the past? Why haven't there been many such attempts, from the days of Constantine to the present? Why aren't there hundreds of commentaries available that deal not only with economics, but also with politics, education, family relationships, psychology, sociology, and anthropology? How can serious Christians take the position that there is no such thing as Christian economics? After all, if there is no such thing as Christian economics, then there is no such thing as economics; for the secularists, to the extent that they are consistent with their own presuppositions, have to admit that their discipline faces unsolved and probably unsolvable intellectual contradictions. Why have Christians deliberately ignored the economics of Genesis for so long?" These are all good questions. It would take a scholar far more familiar than I am with the history of Christian thought to answer these questions. I can only speculate concerning the answers. I know this much, however: the acceptance by Christian thinkers of the *myth of intellectual neutrality* lies at the heart of the problem. It is the acceptance of this myth over generations which has kept Christian scholars from making the systematic, thoroughly biblical contributions to social science and social philosophy that have been needed for so long. They have for too long assumed that the anti-God philosophers and social commentators have done the Christians' work for them.

I remember an incident back in 1973. I went into the office of the president of tiny Northwest Christian College in Eugene, Oregon, to discuss the possibility of getting a job teaching economics. I had not made a formal appointment, so I was happy to have gained the opportunity to speak with him. He said that the college did not need any economics courses. The campus is next door to the University of Oregon. "If a student thinks he needs a course in economics, we just send him over to the University to take it." He told me that this was the college's policy in most of the social sciences, except for anthropology.

He was a wise man, given his acceptance of the myth of neutrality. Most of his empire-building peers who operate struggling little Christian colleges are almost bankrupting their schools to hire Ph.D.-holding intellectual humanists (who may attend church) to teach the very same courses that the University of Oregon offered.

No need to spend money on warmed-over, baptized humanism: go straight to the source. Go next door and take your economics courses from the Keynesians at the University. Let the University hire the faculty, buy the library books, and worry about budget deficits. Let the college concentrate on the courses that are exclusively Christian, such as missions, evangelism, and how to run a church. If the students think they need "secular" courses, let them get their secularism from the certified humanists, at tax-subsidized tuition levels. Why drain the funds of the kingdom—the "Christian courses"—by importing third-rate humanists to teach the students? The president of the college never said any of this, of course, but there is no doubt in my mind that he was operating in terms of a world-and-life view similar to what I have described. So do Christian college presidents everywhere. The difference is only that he was close enough to a state university, and smart enough, to make use of its humanistic opportunities. The students who took the college's advice and enrolled part-time at the University probably did not corrupt themselves intellectually any more than the thousands of students in Christian colleges do, five days a week, when they take classes in baptized humanism. If anything, the Christian student at a state university might be more alert to humanist propaganda than the student in a "Christian's" classroom. He knows he is getting his humanism straight. The student at the Christian college doesn't.

Genesis gives us the foundations of Christian thought. It tells us of the Creator-creature distinction. It tells us of the dominion covenant. It tells us of the Fall of man and the curse of the ground. We learn that we are stewards of God's property, fully responsible to Him for the proper administration of His goods. At the same time, we learn that we are also legitimate owners, in time and on earth, during the period of our stewardship. God entrusts His property to individuals and organizations, and they are called to increase the value of this property. Wealth is therefore not an innate evil, but a means of opportunity for godly service, as we learn in the case of Abraham. Wealth is preserved and expanded by means of character and lawful stewardship (Abraham, Jacob, Joseph), and it is lost by those with poor character and no respect for God's law (Lot, Laban, Esau).

Genesis teaches us that there is a curse on the ground. This means that we must cooperate with other men to increase our per capita wealth. There is a division of labor principle, as well as the law of

diminishing returns. The latter law pressures men to expand their area of responsibility, finding new means of increasing production, as well as subduing new lands to the glory of God (or at least to the benefit of their own pocketbooks).

Perhaps more important than anything else for a proper understanding of science, Genesis teaches us the concept of *cosmic personalism*. There is *purpose* in the creation: God's purpose foundationally, but also men's purposes derivatively. Life has meaning in terms of God's plan for the ages. This means that our labor has meaning, in time and on earth, but also in the post-judgment world to come (I Cor. 3). While some aspects of these truths are taught later in the Bible, Genesis provides us with the basics. The *theocentric* nature of all existence is the message of Genesis. This is assuredly *not* the operating presupposition of humanistic science, including economics.

The Bible lays the legal and social foundations for a society which permits human freedom. This legal and social order, when respected by the rulers and the subjects of a nation, produces the economic framework which is known today as the free enterprise system. Biblical economics is free enterprise economics. It is not anarchistic economics, but it is certainly not Keynesian economics or Marxist economics. When birthrights can be validly exchanged for a pot of stew, and God honors such an exchange, we are talking about free enterprise. When legal authorities try to intervene to reverse the consequences of such a voluntary exchange, as Isaac tried to do, those who are about to lose what their exchange entitled them to can legitimately take steps to defend their lives, their property, and their sacred honor, including the use of deception.

The example of Joseph in Egypt is just that: Joseph in *Egypt*. He did not bring all of Egypt into bondage to the State as an example to be followed by Christian societies, although there are ordained ministers and Ph.D.-holding economics professors, and especially political science and sociology professors, in Christian colleges who would dearly love to be top administrators in such an Egyptian-type centralized bureaucracy. Then, at long last, uneducated and unordained laymen would have to pay attention to them—something which most of them are not used to, for good reason.

It would be very difficult—I would say impossible—to make a case for "Christian socialism" by means of the Book of Genesis. As I demonstrate in the commentaries to follow, the Pentateuch offers no hope to the socialists who have for too long tried to argue that the

Bible teaches socialism. Book by book, I intend to drive them forward towards the New Testament in their attempt to defend Christian socialism, for the first five books of the Bible, God's law, give them no aid. (Neither does the New Testament, but it will take many years before I get there.) They cannot survive in this intellectual battle. They will have to abandon Christianity or socialism, or else they will have to become vague about the biblical basis for socialism. I intend to stuff their mouths with exegesis, so that they will finally have to shut up. To refute me, they will have to devote their lives to writing a socialistic version of my commentaries, and even if there were biblical evidence to support such a conclusion, which there isn't, they are too lazy to attempt such a project. If mine is the first multi-volume economic commentary on the Bible in man's history—that is, if the church hasn't produced anything like this in 2,000 years—then I think I am safe in saying that it is unlikely that the socialist-oriented members of Christ's church (who are a tiny minority today, and even tinier over the course of church history) will produce anything to match it. The few who are holding forth in the classrooms will die off, or be bankrupted by their deservedly low salaries, soon enough. The inflation which their teachings have defended will wipe them out soon enough.

For myself as, no doubt, for most of my contemporaries, the philosophy of meaninglessness was essentially an instrument of liberation. The liberation we desired was simultaneously liberation from a certain political and economic system and liberation from a certain system of morality. We objected to the morality because it interfered with our sexual freedom; we objected to the political and economic system because it was unjust. The supporters of these systems claimed that in some way they embodied the meaning (a Christian meaning, they insisted) of the world. There was one admirably simple method of confuting these people and at the same time justifying ourselves in our political and erotic revolt: we could deny that the world had any meaning whatsoever.

Aldous Huxley*

* Huxley, *Ends and Means: An Inquiry into the Nature of Ideals and into the Methods Employed for their Realization* (New York: Harper & Bros., 1937), p. 316.

Appendix A

FROM COSMIC PURPOSELESSNESS TO HUMANISTIC SOVEREIGNTY

Through billions of years of blind mutation, pressing against the shifting walls of their environment, microbes finally emerged as man. We are no longer blind; at least we are beginning to be conscious of what has happened and of what may happen. From now on, evolution is what we make it. . . .

So writes Dr. Hermann J. Muller, the 1946 Nobel Prize winner in physiology.¹ Muller has stated his position quite clearly. His statement of faith is almost universally believed within scientific and intellectual circles in the final years of the twentieth century. The idea is commonplace, part of the "conventional wisdom" of the age. Theodosius Dobzhansky, a zoologist at Columbia University and an influential scholar in the United States from the 1930's through the 1970's, concluded his essay, "The Present Evolution of Man," which appeared in the widely read *Scientific American* (September, 1960), with these words: "Yet man is the only product of biological evolution who knows that he has evolved and is evolving farther. He should be able to replace the blind force of natural selection by conscious direction, based on his knowledge of his own nature and on his values. It is as certain that such direction will be needed as it is questionable whether man is ready to provide it. He is unready because his knowledge of his own nature and its evolution is insufficient; because

1. Hermann J. Muller, "One Hundred Years Without Darwinism Are Enough," *The Humanist*, XIX (1959); reprinted in Philip Appleman (ed.), *Darwin: A Norton Critical Edition* (New York: Norton, 1970), p. 570. I first saw an incomplete version of this quotation in an article by Elisabeth Mann Borghese, "Human Nature Is Still Evolving," in *The Center Magazine* (March/April, 1973), a publication of the now-defunct Center for the Study of Democratic Institutions, a Santa Barbara humanist think-tank which was influential in the 1950's and 1960's. It was founded by Robert Maynard Hutchins. My point: this is a standard idea among liberals and humanists.

a vast majority of people are unaware of the necessity of facing the problem; and because there is so wide a gap between the way people actually live and values and ideals to which they pay lip service." Man must direct the evolutionary process, but the majority of men will not face up to their responsibilities in this respect. He does not elaborate, but the implication is clear enough: a *minority* of men, who *will* face up to their responsibilities for directing the evolutionary process, must step in and provide leadership.

In a later book, Dobzhansky discusses the role of the masses. The masses exist in order to provide the raw numbers of humans out of whom will arise the elite. "Are the multitudes supererogatory? They may seem so, in view of the fact that the intellectual and spiritual advances are chiefly the works of elites. To a large extent, they are due to an even smaller minority of individuals of genius. The destiny of a vast majority of humans is death and oblivion. Does this majority play any role in the evolutionary advancement of humanity?" He admits that the elites need the majority if they themselves are to survive. And the masses provide more than mere "manure in the soil in which are to grow the gorgeous flowers of the elite culture. Only a small fraction of those who try to scale the heights of human achievement arrive anywhere close to the summit. It is imperative that there be a multitude of climbers. Otherwise the summit may not be reached by anybody. The individually lost and forgotten multitudes have not lived in vain, provided they, too, made the effort to climb."² It is mankind, a collective whole, that is the focus of his concern, but it is obvious that the elite members are the directing geniuses of the progress of man, as mankind struggles to reach the summit, whatever that may be. "Man is able, or soon will be able, to control his environments successfully. Extinction of mankind could occur only through some suicidal madness, such as an atomic war, or through a cosmic catastrophe."³ Man, the directing god of evolution, need fear only himself, the new cosmic sovereign, or else some totally impersonal event, such as a supernova. Insofar as personalism reigns, man is sovereign.

It should be clear by now that the evolutionist is not humble. He has not viewed man as a helpless, struggling product of chaos. A *leap of being* has taken place. Dobzhansky speaks of two events of

2. Theodosius Dobzhansky, *The Biology of Ultimate Concern* (New York: New American Library, 1967), p. 132.

3. *Ibid.*, p. 129.

transcendence in the history of natural processes. Man is the second great transcendence. "Only once before, when life originated out of inorganic matter, has there occurred a comparable event."⁴ As he writes, "The origin of life and the origin of man are, understandably, among the most challenging and also the most difficult problems in evolutionary history."⁵ The continuity of slow evolutionary change is clearly not an applicable law when these tremendous "leaps in being" occur. In fact, these two remarkable discontinuities are notable only for their magnitude; there have been others, such as the appearance of terrestrial vertebrates from fishlike ancestors.⁶ Nevertheless, the appearance of man was a true revolution: "The biological evolution had transcended itself in the human 'revolution.' A new level of dimension has been reached. The light of the human spirit has begun to shine. The *humanum* is born."⁷ His language is unmistakably religious, as well it should be, given his presentation of a distinctly religious cosmology. The post-Darwin evolutionist is no less religious than the Christian creationist. *Evolutionists simply reverse God's order of creation.* The Christian affirms that a sovereign, autonomous, omnipotent personal God created the universe. The evolutionist insists that a sovereign, autonomous, omnipotent impersonal universe led to the creation (development) of a now-sovereign personal god, mankind.

Central to the task of eliminating God from the universe and time were two important intellectual developments. The first was the extension of space. The second was the extension of time, forward and backward. The late-medieval and early modern world saw the shattering of the pre-modern world's conception of the size of the universe. One of the standard arguments found in textbook accounts of the history of science is that when Copernicus broke the spell of the older Ptolemaic universe, which had hypothesized the sun and heavenly bodies circling the earth, he somehow diminished the significance of man. Astronomer William Saslaw repeats this standard analysis in a 1972 essay. He writes, "by diminishing the earth, Copernicus also diminished our own importance to the Universe."⁸

4. Dobzhansky, *Scientific American* (Sept., 1960), p. 206.

5. Dobzhansky, *Biology of Ultimate Concern*, p. 45.

6. *Ibid.*, p. 50.

7. *Ibid.*, p. 58.

8. William C. Saslaw, "An Introduction to the Emerging Universe," in Saslaw and Kenneth C. Jacobs, (eds.), *The Emerging Universe* (Charlottesville: University of

This so-called diminishing of man was accompanied by the rise of humanism, and in fact Copernicus' theory was basic to humanism's growth. A diminished view of man somehow led to an elevated view of man. How was this possible?

One lucid answer has been provided by Arthur O. Lovejoy, the historian of ideas. He argued that the traditional account of the significance of Copernicus' theory has been erroneous. It has misunderstood the place of the earth in the medieval cosmology. "It has often been said that the older picture of the world in space was peculiarly fitted to give man a high sense of his own importance and dignity; and some modern writers have made much of this supposed implication of pre-Copernican astronomy. Man occupied, we are told, the central place in the universe, and round the planet of his habitation all the vast, unpeopled spheres obsequiously revolved. But the actual tendency of the geocentric system was, for the medieval mind, precisely the opposite. For the centre of the world was not a position of honor; it was rather the place farthest removed from the Empyrean, the bottom of the creation, to which its dregs and baser elements sank. The actual centre, indeed, was Hell; in the spatial sense the medieval world was literally diabolocentric. And the whole sublunary region was, of course, incomparably inferior to the resplendent and incorruptible heavens above the moon. . . . It is sufficiently evident from such passages that the geocentric cosmography served rather for man's humiliation than for his exaltation,

Virginia Press, 1972), no page number, but introductory paragraph. This kind of language goes back to the early years of the Darwinian controversy. Thomas H. Huxley, one of Darwin's earliest defenders, and the most influential promoter of Darwin's gospel in England in the nineteenth century, wrote these words: "For, as the astronomers discover in the earth no centre of the universe, but an eccentric speck, so the naturalists find man to be no centre of the living world, but one amidst endless modifications of life; and as the astronomer observes the mark of practically endless time set upon the arrangements of the solar system so the student of life finds the records of ancient forms of existence peopling the world for ages, which, in relation to human experience, are infinite. . . . Men have acquired the ideas of the practically infinite extent of the universe and of its practical eternity; they are familiar with the conception that our earth is but an infinitesimal fragment of that part of the universe which can be seen; and that, nevertheless, its duration is, as compared with our standards of time, infinite. . . . Whether these ideas are well or ill founded is not the question. No one can deny that they exist, and have been the inevitable outgrowth of the improvement of natural knowledge. And if so, it cannot be doubted that they are changing the form of men's most cherished and most important convictions." Huxley, "On Improving Knowledge" (1886), in *Essays*, edited by Frederick Barry (New York: Macmillan, 1929), pp. 227-29.

and that Copernicanism was opposed partly on the ground that it assigned too dignified and lofty a position to his dwelling-place."⁹ To break the intellectual hold of the older medieval conception of the universe, and man's place on a cursed earth, the humanists found it convenient to promote Copernicus' cosmography. The basic step in creating a new, autonomous universe did not reduce the cosmological significance of man, for it was a key to establishing the centuries-long intellectual process of *shoving God out of the universe*. It was necessary to reduce God's significance in order to give to mankind the monopoly of cosmological significance. The infinite universe could be substituted for the once-central earth as the arena of man's drama. But an impersonal universe, however large, cannot provide meaning. Man, therefore, can now become the source of meaning in (and for) the universe, by virtue of his exclusive claim to cosmic personalism — the only source of personal purpose in this infinite universe. And this modern universe does not relegate man to the pit of sin and spiritual warfare, as the medieval view of the universe had done.

What the Copernican revolution did for man's sense of autonomy and monopoly of power within the spatial dimension, Darwin's revolution did for man's sense of temporal autonomy. An analogous error in the textbook accounts of the history of science and the history of modern thought is that Darwin made man the descendant of apes (or pre-apes).¹⁰ This supposedly debased man's view of himself and his importance in history. The opposite is the case. What

9. Arthur O. Lovejoy, *The Great Chain of Being: A Study of the History of an Idea* (New York: Harper Torchbook, [1936] 1965), pp. 101-2.

10. Predictably, some overly sensitive evolutionist, upon reading this reference to man's ancestors, the apes, will be horrified. "Darwin never said that man descended from apes!" On this point, let me quote George Gaylord Simpson, Harvard's prestigious paleontologist: "No one doubts that man is a member of the order Primates along with lemurs, tarsiers, monkeys and apes. Few doubt that his closest living relatives are apes. On this subject, by the way, there has been too much pussyfooting. Apologists emphasize that man cannot be a descendant of any living ape — a statement that is obvious to the verge of imbecility — and go on to state or imply that man is not really descended from an ape or monkey at all, but from an earlier common ancestor. In fact, that common ancestor would certainly be called an ape or monkey in popular speech by anyone who saw it. Since the terms *ape* and *monkey* are defined by popular usage, man's ancestors *were* apes or monkeys (or successively both). It is pusillanimous if not dishonest for an informed investigator to say otherwise." Simpson, *This View of Life: The World of an Evolutionist* (New York: Harcourt, Brace & World, 1964), p. 12.

Darwin did was to rescue rebellious Western man from Christianity's theology of moral transgression and its doctrine of eternal doom.

A superb analysis of the impact Darwinian thought had on late-nineteenth-century religious thought was presented by Rev. James Maurice Wilson, Canon of Worcester, in a 1925 essay, "The Religious Effect of the Idea of Evolution." Man became the focal point of religion, for "it is only in the study of man's nature that we can hope to find a clue to God's Purpose in Creation. Herein lies, as I think, the great service that the idea of evolution is rendering to theology."¹¹ Darwin freed man from the biblical God, concluded Rev. Wilson, and so did his contemporaries. "The evolution of man from lower forms of life was in itself a new and startling fact, and one that broke up the old theology. I and my contemporaries, however, accepted it as fact. The first and obvious result of this acceptance was that we were compelled to regard the Biblical story of the Fall as not historic, as it had long been believed to be. We were compelled to regard that story as a primitive attempt to account for the presence of sin and evil in the world. . . . But now, in the light of the fact of evolution, the Fall, as a historic event, already questioned on other grounds, was excluded and denied by science."¹² Understandably, the rejection of the doctrine of the ethical rebellion of man against God, at a particular point in human history, necessarily transformed that generation's interpretation of Christianity. "The abandonment of the belief in a historic 'Fall' of a primeval pair of human beings has removed one of the great obstacles to the acceptance by our generation of the Christian Faith which had required that belief. Yet taken by itself it certainly tends to create, as well as to remove, a difficulty. For if there was no historic Fall, what becomes of the Redemption, the Salvation through Christ, which the universal experience of Christendom proves incontestably to be fact? How does Jesus save His people from their sins? *He makes men better.*"¹³ Man now becomes a co-worker with a vague, undefinable God who does not judge. "It is the sins of the world and our sins that He who died on the Cross is taking away, by making us better. Salvation is not then thought of as an escape from hell; but as a lifting us all out from living lives

11. James Maurice Wilson, "The Religious Effect of the Idea of Evolution," in *Evolution in the Light of Modern Knowledge: A Collective Work* (London: Blackie & Son, 1925), p. 492.

12. *Ibid.*, pp. 497-98.

13. *Ibid.*, pp. 498-99.

unworthy of us. Religion so conceived is not the art of winning heaven, but the effort to become better and to work with God."¹⁴

Man now becomes part of God, who in turn is part of the universe. There is a *continuity of life* through evolution. There is therefore a *continuity of being*. "The idea of evolution affects Christology because it assumes and implies *continuity* along with advance in creation. And it is this idea and fact of continuity, impressed on us from all quarters, that is now determining what men are able to believe concerning Divine action in every sphere. The evidence for continuity everywhere is overwhelming. The implicit or explicit recognition of it among educated people, and a general sense of it, are becoming universal and axiomatic. . . . What a chain it is! Begin anywhere: with your own intelligence as you read, or mine as I write. First go down the chain. Intelligence is not confined to those who can read and write. It is shared by every human being. It is shared by animals. It is not limited to animals. Plants cannot be denied a share of it. It is found in roots and leaves and flowers. Go down farther still; and farther. You cannot find the end of the chain. And then go up. . . . To us intelligence, mind, spirit, is now seen as one long continuous chain, of which we see neither beginning nor end. We are perhaps at least as far from the top of it as we are from the bottom."¹⁵ This is, of course, a modern version of the ancient religion known as *pantheism*. It is certainly one reasonable extension of Darwinism. It is another reason why a generation of committed evolutionists in the late 1960's could turn to pantheism and then to forms of animism. The best-selling book, *The Secret Life of Plants* (1974), is essentially a defense of the animist cosmology, where sprites and personal "forces" inhabit plants and special regions of the earth.

This doctrine of the continuity of being was basic to ancient paganism, most notably in Egypt's theology of the divine Pharaoh and his divine State. It is the oldest heresy of all, tempting man "to be as god" (Gen. 3:5).

Rev. Wilson was being too modest. Man is not only closer to the top of the chain than to the bottom, he actually *is* the top. Dobzhansky has made this point inescapably clear. He knows how erroneous the textbook account is; he knows that Darwin *elevated*

14. *Ibid.*, p. 501.

15. *Ibid.*, pp. 501-2.

mankind by making him the product of ape-like beings, which in turn were products of impersonal random forces governed only by the law of natural selection. He writes: "It has become almost a commonplace that Darwin's discovery of biological evolution completed the downgrading and estrangement of man begun by Copernicus and Galileo. I can scarcely imagine a judgment more mistaken. Perhaps the central point to be argued in this book is that the opposite is true. Evolution is a source of hope for man. To be sure, modern evolution has not restored the earth to the position of the center of the universe. However, while the universe is surely not geocentric, it may conceivably be anthropocentric. Man, this mysterious product of the world's evolution, may also be its protagonist, and eventually its pilot. In any case, the world is not fixed, not finished, and not unchangeable. Everything in it is engaged in evolutionary flow and development."¹⁶ A changing, evolving world is at last free from the providence of God. "Since the world is evolving it may in time become different from what it is. And if so, man may help to channel the changes in a direction which he deems desirable and good. . . . In particular, it is not true that human nature does not change; this 'nature' is not a status but a process. The potentialities of man's development are far from exhausted, either biologically or culturally. Man must develop as the bearer of spirit and of ultimate concern. Together with Nietzsche we must say: 'Man is something that must be overcome.'¹⁷ Man, in short, must transcend himself. He must evolve into the pilot of the universe. He can do this because he alone is fully self-conscious, fully self-aware. "Self-awareness is, then, one of the fundamental, possibly the most fundamental, characteristic of the human species. This characteristic is an evolutionary novelty. . . . The evolutionary adaptive significance of self-awareness lies in that it serves to organize and to integrate man's physical and mental capacities by means of which man controls his environment."¹⁸

Understandably, Dobzhansky despises Protestant fundamentalism. Above all, he must reject the idea of creationism. To accept such a creed would be to knock man from his pedestal, to drag him away from the pilot's wheel. In fact, scholarly fundamentalists enrage him. "There are still many people who are happy and com-

16. Dobzhansky, *Biology of Ultimate Concern*, p. 7.

17. *Ibid.*, pp. 8-9.

18. *Ibid.*, pp. 68-69.

fortable adhering to fundamentalist creeds. This should cause no surprise, since a large majority of these believers are as unfamiliar with scientific findings as were people who lived centuries ago. The really extraordinary phenomenon is the continued existence of a small minority of scientifically educated fundamentalists who know that their beliefs are in utter, flagrant, glaring contradiction with firmly established scientific findings. . . . Discussions and debates with such persons is [sic] a waste of time; I suspect that they are unhappy people, envious of those who are helped to hold similar views by plain ignorance.”¹⁹

What is the heart of the evolutionist’s religion? Dobzhansky makes himself perfectly clear: “One can study facts without bothering to inquire about their meaning. But there is one stupendous fact with which people were confronted at all stages of their factual enlightenment, the meaning of which they have ceaselessly tried to discover. This fact is Man.”²⁰ This is the link among all of man’s religions, he says. Man with a capital “M” is the heart of religion; and on these terms, evolutionism must certainly be the humanistic world’s foremost religion. It is not surprising, then, that Dobzhansky’s book was published as one of a series, edited by Ruth Nanda Anshen: “Perspectives in Humanism.”

What must be grasped from the very beginning is that *evolutionism’s cosmology involves an intellectual sleight-of-hand operation*. It appears initially to denigrate man’s position in a universe of infinite (or almost infinite) space and time, only subsequently to place man on the pinnacle of this non-created realm. Man becomes content to be a child of the meaningless slime, in order that he might claim his rightful sovereignty in the place once occupied by God. By default—the disappearance of God the Creator—man achieves his evolving divinity.

Constants, Chronology, and Purpose

The Bible categorically asserts that the stars, sun, and moon were created after the earth. Therefore, the Bible categorically rejects the doctrine of *uniformitarianism*, namely, that the rates of change observed today have been the same since the beginning. Differently

19. *Ibid.*, pp. 95-96.

20. *Ibid.*, p. 96.

put, uniformitarianism teaches that the processes that acted in the evolution of the universe and the earth were the same as those that operate today. (Some evolutionary scientists have finally abandoned this straightforward version of uniformitarianism,²¹ but it is the one which has long been acceptable to most scientists, especially geologists, astronomers, and life scientists.) Science needs a constant, even the science of Einstein's theory of relativity. That constant is the speed of light. By striking at the validity of such a constant, the Bible necessarily denies the doctrine of uniformitarianism in relation to origins of the universe. Either the transmissions of light from the most distant stars began on the same day as the transmission of light from the moon, with the rays of light from all sources striking the earth on the day the heavenly bodies were created, or else the Genesis account of the creation is false. The Bible's account of the chronology of creation points to an illusion, one created by the modern doctrine of uniformitarianism. The seeming age of the stars is an illusion. The events that we seem to be observing, such as novae (exploding stars), did not take place billions of years ago. If they did take place, they took place recently, and then the speed of light is not a reliable constant; if the speed of light has been a constant since the creation of the earth, then the flashes of light which we explain as exploding stars are in no way related to actual historical events like explosions, unless the universe is relatively small. Either the constancy of the speed of light is an illusion, or the size of the universe is an illusion, or else the physical events that we hypothesize to explain the visible changes in light or radiation are

21. See, for example, George Gaylord Simpson, *This View of Life*, p. 132. Simpson denies that rates of geological change observable today have always prevailed. "Some processes (those of vulcanism or glaciation, for example) have evidently acted in the past with scales and rates that cannot by any stretch be called 'the same' or even 'approximately the same' as those of today." However, he still clings to uniformitarianism as a principle, though unprovable, because *it is scientifically necessary to assume its existence*: "Gravity would be immanent (an inherent characteristic of matter now) even if the law of gravity had changed, and it is impossible to prove that it has not changed. Uniformity, in this sense, is an unprovable postulate justified, or indeed required, on two grounds. First, nothing in our incomplete but extensive knowledge of history disagrees with it. Second, only on this postulate is a rational interpretation of history possible, and we are justified in seeking—as scientists we *must* seek—such a rational interpretation" (p. 133). Cf. Stephen Jay Gould, "Evolution: Explosion, Not Ascent," *New York Times* (Jan. 22, 1978); *Ever Since Darwin* (1977), and *The Panda's Thumb* (1980), both published by Norton, New York. Gould is a Harvard professor of paleontology, as Simpson was. See also Steven N. Stanley, *The New Evolutionary Timetable* (New York: Basic Books, 1982).

false inferences. The speed of light should not be used to estimate the age and size of the universe.²²

Genesis 1:14-16 has implications outside the discipline of astronomy. These verses are uniquely important for the biological and social sciences. First, they teach us that the origin of life was outside the cause-and-effect sequence of today's environment. Plant life appeared before the creation of the sun. If biological processes were the same then as now, then chlorophyll preceded the appearance of the sun. Light did not "call forth the plant"—not solar light, anyway. The biological processes of plant life were in operation before the existence of the star which today sustains all plant life. The sun, in this sense, was created for the present benefit of the plants. The Bible's account of creation reverses modern biological science's interpretation of cause and effect. Plants had capacities for reproduction and survival before the present basis of plant life was created. Nothing could be further removed from the hypothesis of modern biology. Such a creationist view of reality indicates the *future-orientation of cause and effect*, as if the plants called forth the sun. God, of course, called

22. An Associated Press report in mid-November, 1979, announced that three astronomers, two of them at Harvard, have discovered evidence that the universe is only half as old as earlier estimates had indicated. Hubble's Constant, the yardstick astronomers have used to estimate intergalactic distances, supposedly overestimated the size of the universe by 100%. Therefore, it is only half as old, or about nine billion years old, the astronomers announced. This indicates that they previously held to a very old universe, almost 20 billion years. The astronomers were John P. Huchra, Marc Aaronson, and Jeremy Mould. A story in the *New York Times* (Dec. 20, 1978), written by Walter Sullivan, reported on four quasars that appear to be moving through space at speeds far in excess of the speed of light. Scientists are frantically trying to find some sort of explanation for this phenomenon, since it challenges the modern world's only accepted constant, namely, the speed of light. Nevertheless, John Kolena, Assistant Professor of Astronomy at Duke University, in Durham, North Carolina, could write in total confidence in a letter to the Editor: "The earth's age is thus based neither on 'assumptions' nor on 'faith' but on a law of nature, experimentally verified literally millions of times without exception." He was referring to the radioactive decay of uranium atoms. He ends his letter with an appeal to the Deist's God of the eighteenth century: "Those of us who still need to believe in God should in fact, be even more impressed by his or her decision to make just a few natural laws and yet keep the universe running so well for so many billions of years without any necessity for active intervention." *Durham Morning Herald* (Nov. 1, 1979). It is inspiring to know that such a God (male or female) should be so smart as to create the world and then conveniently disappear for 10 + billion years, in order to demonstrate His (or Her) majestic sovereignty. Such was the state of astronomical science in 1979: the research professors had cut the age and size of the universe in half, while the assistant professors contented themselves with writing confident letters of explanation to the "laymen" reading the local newspapers. Meanwhile, the quasars went merrily along, at eight times the speed of light. Maybe.

forth both plants and sun, but from the point of view of chronology, the biblical account denies the past-orientation of secular theories of cause and effect. Science declares that every event has some set of prior causes. At least with respect to the creation of the world, the Bible denies that such causes were in any way environmentally determined by existing matter-energy.

A second implication, related to the first, is significant in the social sciences as well as in the biological sciences. The stars, sun, and moon were created in order to serve the needs of plants, animals, and men. Modern science does not permit the use of the words "in order to" except when a human being or thinking animal is seeking to achieve some goal. The concept of cosmic *purpose* is not allowed to exist in modern science except in relationship to man. The processes of hypothetically autonomous nature are explained by modern science strictly in terms of purposeless prior events. The universe's origins were purely random and therefore completely without purpose. What all modern science denies absolutely is the old Christian doctrine of *teleology*.

"Teleology" is not a commonly used word any longer. It refers to *final* causation. Modern science is concerned only with prior causation. Cosmic impersonalism has to exclude any concept of final causation, since there can be no personal, directing agent who has created our world in order to achieve certain ends. Without a directing agent — a conscious, powerful planner — the concept of purpose is meaningless. Modern science denies the doctrine of transcendent cosmic personalism, so it also has to deny teleology, except with reference to the goals of man or men. It is man, and only man, who has brought purpose into the rationalist's universe. Causation had to be purposeless causation prior to man. Final causation implies a personal agent who is directing creation towards a goal which was chosen prior to the appearance of man. This is precisely what the Bible affirms (Eph. 1). It is precisely what modern, rationalist science denies.

Teleology, the doctrine of final causation, was used by Aquinas as one of the five proofs of God. It became a popular apologetic device used by Protestants to defend the faith "rationally," especially after the appearance of William Paley's books, *A View of the Evidences of Christianity* (1794) and *Natural Theology* (1802). The signs of design in creation point to God's plan for the ages, Paley argued. He used the famous analogy of the clock and the universe: a designer must be

postulated in both cases. (The radical Deist, whose universe is mechanistic, can use this analogy to prove God's *neglect* of man's affairs, thereby denying the doctrine of providence, which is why Paley also relied on the evidence of miracles—providential discontinuities—to state the case for Christianity.) Paley's *Evidences* was still assigned to Cambridge University students just prior to World War I, though it is doubtful that many of them took it seriously. Muggeridge certainly was unimpressed.²³

Is the universe orderly because God has specific ends for it, and has therefore directed its operations? If the universe is orderly, can some other explanation be given besides conscious design? It has been the goal of the modern evolutionist, since the days of Darwin, to find a suitable alternate explanation. Darwin's answer was evolution through natural selection. George Bernard Shaw confidently stated that Darwin had thrown Paley's watch into the ocean. Marjorie Greene adds: "It was not really, however, the watch he threw away, but the watchmaker. Darwinism is teleologically decapitated; everything in nature is explained in terms of its purpose, but an unplanned purpose in which the organism is tool, tool user, and beneficiary all in one. And the artifact analogy is as basic to Darwinism, both old and new, as it is to natural theology: not only is the concept of natural selection grounded on the analogy with the great livestock breeders, but the organisms themselves are conceived in Paleyan terms as contrivances, aggregates of characters and functions of good—for what? For survival, that is, for going on and being good for, going on and being good for—and so on *ad infinitum*."²⁴ Instead of eternity, the Darwinist substitutes infinite extension (at least until all energy is dissipated in the final cold of entropy). Instead of immortality, he substitutes the survival of the species. Or rather, the old-fashioned, less consistent Darwinist did these things. The new ones are growing less confident about man's survival as they grow more consistent concerning man's autonomous power.

Whose Purposes?

The great enemy of modern science is purpose apart from man's purposes. As the Medawars state so clearly, "It is upon the notion of *randomness* that geneticists have based their case against a benevolent

23. Malcolm Muggeridge, *Chronicles of Wasted Time: The Green Stick* (New York: William Morrow, 1973), p. 75.

24. Marjorie Greene, "The Faith of Darwinism," *Encounter* (Nov., 1959), p. 53.

or malevolent deity and against there being any overall purpose or design in nature.”²⁵ The old-fashioned version of Darwinism did include an element of purposefulness, at least in its language. The so-called “survival of the fittest” indicated that there was upward progress inherent in the processes of evolution. This phrase was coined by Herbert Spencer, the nineteenth-century sociologist, in his 1852 essay, “A Theory of Population, deduced from the General Law of Animal Fertility,” and Darwin inserted the phrase into the fifth edition of *The Origin of Species*. Spencer’s language was ethical and teleological: “From the beginning, pressure of population has been the proximate cause of progress.” Again, “those left behind to continue the race, are those in whom the power of self-preservation is the greatest—are the select of their generation.”²⁶ The words “progress” and “select” are giveaways. Mere biological change is equated with progress, with all the nuances associated with “progress,” and the best are “selected” by nature, converting a random, impersonal process into something resembling purposeful action. One reason why Darwinism swept nineteenth-century thought was because of the seemingly teleological implications of the language of Darwinism. The public was not yet ready to abandon teleology as rapidly as the more consistent scientists were, and even today, the language of evolutionists is still clouded by the language of final causation and purpose. A. R. Manser writes: “Darwin’s theory is generally claimed to be non-teleological. But the very criterion of success in the ‘struggle for existence,’ survival and/or expansion, seems to put a teleological notion back into the center of evolutionary thought. This explains why it is generally assumed that evolution is in an ‘upward’ direction, that new species are an improvement of the old. . . . I am not claiming that this anthropomorphism is necessarily involved in Darwin’s theory itself, or that Darwin must have thought in these terms; all I claim is that this was one of the elements that made the theory acceptable both to scientists and to laymen. . . . From a historical point of view, it seems likely that many of the non-scientific supporters of Darwin would have been less willing to accept the theory if this prop had not been available.”²⁷ Further-

25. Peter and Jean Medawar, “Revising the Facts of Life,” *Harper’s* (Feb., 1977), p. 41.

26. Cited by William Irvine, *Apes, Angels, and Victorians: The Story of Darwin, Huxley, and Evolution* (New York: McGraw-Hill, 1955), p. 30.

27. A. R. Manser, “The Concept of Evolution,” *Philosophy*, XL (1965), p. 22.

more, he points out, "even now it is clear that many biologists have to make a conscious effort to prevent themselves from lapsing into such a mode of thought or expression."

From the beginning, Darwin had used the analogy of the professional breeder in defending the idea of natural selection, and it led to continuing confusion on the part of readers, both scientific and amateur, who had assimilated his explanation of the so-called mechanism of evolution. Again and again, popularizers (including Harvard's influential nineteenth-century biologist, Asa Gray) tried to combine some version of Paley's *Natural Theology* with an activist version of natural selection. Darwin over and over had to explain that his language was not to be taken literally, that Nature is not a planning, conscious entity which selects one or another species to survive. Yet in the first edition of *Origin of Species*, he had written that "Natural Selection, as we shall hereafter see, is a power incessantly ready for action, and is as immeasurably superior to man's feeble efforts, as the works of Nature are to Art."²⁸ No wonder he had to keep revising each edition to eliminate such language! (The sixth edition was so far removed from the first that something like 75 percent of the first was rewritten by the final edition — rewritten as many as five times each, in the case of some sentences. The sixth edition was one-third longer than the first.²⁹)

As a result of constant criticism, he steadily abandoned natural selection as the sole cause of evolution. He adopted elements of the idea of Lamarck, the "inheritance of acquired characteristics," an idea which has been repudiated by modern Darwinians. He referred back to an earlier statement in the first edition, in the conclusion of the sixth edition: "I am convinced that natural selection has been the main but not the exclusive means of modification."³⁰ Those who have seen the triumph of Darwinism forget that for half a century after the publication of the *Origin of Species*, the ideas of evolution and uniformitarianism came to be accepted universally, but the idea of natural selection as the mechanism (explanation) went into decline. As Robert M. Young has commented: "As a result of successive theoretical and experimental developments in biology which seemed

28. Cited by Robert M. Young, "Darwin's Metaphor: Does Nature Select?" *Monist*, LV (1971), p. 462.

29. *Ibid.*, p. 496.

30. Charles Darwin, *The Origin of Species* (6th ed.: New York: Modern Library, [1871]), p. 367.

inconsistent with Darwin's mechanism of natural selection, this aspect of his theory went into increasing decline, so much so that Nordenskiöld's standard *History of Biology* (written 1920-24 and still in print [as of 1970—G. N.]) included long chapters chronicling the decline of Darwinism, in the same period as evolution was being increasingly accepted. "To raise the theory of selection, as had often been done, to the rank of a "natural law" comparable in value with the law of gravity established by Newton is, of course, quite irrational, as time has already shown; Darwin's theory of the origin of the species was long ago abandoned.' Within ten years, however, biologists were generally convinced that Darwin had been right in the first place. . . ."31 But "in the first place" really means *in the first edition*, before he had begun to compromise the theory of natural selection so severely. What Darwin had accomplished was impressive: the presentation of a seeming mechanism which could explain evolution, but his book was tinged with teleological elements in its language, thereby making far easier the spread of the idea of evolution among people who still wanted to believe in a semi-providence-governed universe. The public did not understand the importance of natural selection, despite the fact that this was Darwin's supposed mechanism justifying belief in evolution, and even Darwin steadily abandoned it as an all-encompassing explanation. He seems to have abandoned confidence in chance as a meaningful explanation of origins in his last years. In the last letter which he wrote to Alfred Russel Wallace, the co-discoverer of "evolution through natural selection," Darwin commended a book by William Graham, *The Creed of Science*, which was straightforwardly teleological in approach. Graham had written: "We are compelled to interpret the course of evolution as being under guidance; to believe that the final results were aimed at; that Nature did not stumble on her best works by sheer accident, . . . Chance, as an explanation—and if design be denied, chance must be offered as the explanation—is a word expressing nothing, a word which, under pretence of explanation, affirms nothing whatever. It is this; but it is also much more serious; for it is the express denial of God and it is thus genuine atheism."32 Darwin wrote to Graham that "you have expressed my

31. Young, *Monist* (1971), p. 497. Cf. Simpson, *This View of Life*, pp. 14ff.

32. Cited by Young, *ibid.*, pp. 486-87.

inward conviction, though far more vividly and clearly than I could have done, that 'the universe is not the result of chance.'³³

But if not chance, then what? Modern science cannot accept explanations for events that are outside of nature itself. Modern science cannot accept final causation. Therefore, modern science had to abandon Darwin in the name of Darwinian presuppositions. Better the lawless laws of chance than God; better chaos than providence, says the secular scientist. In biology, and especially genetics, the element of randomness enters at the very beginning of life. The scientist knows no way of predicting either chromosome combinations or genetic mutations. Furthermore, he does not know which environmental factors will prove conclusive in the development of the particular species in question. He may speak about the "survival of the fittest," yet the only way to test the fittest is to see, in retrospect, which species actually do survive. The so-called *survival of the fittest* is a tautology; it means simply the *survival of the survivors*. There is no mechanism today that geneticists can use which will enable them to predict, in advance, which species will survive or which species will not. Darwin's theory is therefore a descriptive theory, not a theory useful in scientific prediction. The heart of the meaning of the "survival of the fittest," therefore, is not scientific but rather historical.³⁴ More to the point, it is more *religious* than anything. It is a statement about God and His relationship with the creation. "All that the statement 'It is the fit that survive' can mean is that for any kind of organism in any circumstances there are *some* possible features whose possession is more conducive to survival than that of their alternatives. But the phrase 'the survival of the fittest,' though it is something of a catchphrase, does indicate something of importance. It indicates that according to the theory there is nothing mysterious in the fact of the survival of some forms in preference to others; there is no need to postulate the unfathomable designs of a divine will."³⁵ God is eliminated from biological science. This is the very essence of all modern, anti-teleological science. This

33. Cited by Young, *ibid.*, p. 486. One difficulty in attributing this passage as a late opinion of Darwin's is that he had questioned the purely random universe in earlier correspondence, such as his Nov. 26, 1860, letter to Asa Gray: *The Life and Letters of Charles Darwin*, edited by Francis Darwin (New York: Basic Books, [1888] 1959), II, p. 146.

34. A. R. Manser, *Philosophy* (1965), pp. 24-25. Cf. Simpson, *This View*, p. 96.

35. A. D. Barker, "An Approach to the Theory of Natural Selection," *Philosophy*, XLIV (Oct., 1969), p. 274.

is why science must not be teleological, the secularist argues.

The secular scientist really does not want randomness all the time. He wants *predictable randomness*. He wants the operation of the law of large numbers. He wants the laws of probability. He wants sufficient order to give him power, but he usually wants sufficient randomness to preserve him from the power of others, especially God. When the biologist speaks of randomness, he means man's limited ability to predict the future, but no scientist clings to a theory of total randomness. As Barker writes concerning randomness as it applies to Darwinism: "It is an essential presupposition of the theory that variation should occur at random with respect to any advantage or disadvantage it may confer on the organism, in its relations with factors in its internal or external environment."³⁶ As he emphatically states, "any theory that did not postulate randomness of this kind, or at least which involved its denial, could not count as a scientific theory."³⁷ Here is the heart of the argument concerning teleology. Any trace of teleology must be scrapped by secular science. The secular scientists have *defined* science to exclude all forms of final, teleological causation. Darwin, however confused he may have been, or however attracted to the teleological arguments of William Graham he may have become at the end of his life, made it plain in the final edition of *Origin of Species* that he could not accept any trace of God-ordained benefits in the processes of nature: "The foregoing remarks lead me to say a few words on the protest lately made by some naturalists, against the utilitarian doctrine that every detail of structure has been produced for the good of its possessor. They believe that many structures have been created for the sake of beauty, to delight man or the Creator (but this latter point is beyond the scope of scientific discussion), or for the sake of mere variety, a view already discussed. Such doctrines, if true, would be absolutely fatal to my theory."³⁸ Indeed; they would be absolutely fatal for all forms of modern secular science. Or, should I say, would have been *up until now* fatal for modern secular science.

Man: The New Predestinator

There is an exception to the *a priori* denial of teleological causation in the universe. *Man* is this exception. The secularist has denied that

36. *Ibid.*, p. 278.

37. *Ibid.*, p. 283.

38. Darwin, *Origin*, p. 146.

there could be even a trace of final causation, meaning ends-dominated causation, anywhere in the origin of nature or in nature's products. But when we come to a consideration of man, now freed from God or any other form of conscious causation external to man, the position of the secularists changes. *Man is the new sovereign over nature*. Nature's otherwise mindless processes have now produced a thinking, acting creature, man. Man can learn the laws of nature — the laws of probability — and can subdue nature to his ends. He can plan and execute his plans. *Man proposes and man disposes*, to quote Karl Marx's partner, Frederick Engels.³⁹ Nature has therefore transcended its own laws. A series of uncreated random developments has resulted in the creation of a planning being. *Teleology has come into the world*. Man, the new predestinator, can take over the directing of evolution, even as the selective breeders who so fascinated Darwin took over the breeding of animals and plants. What modern science has denied to God and nature, it now permits to man.

The Bible affirms that the stars were created by God for the benefit of His creatures on earth. The Bible absolutely denies the first principle of all secular natural science, namely, that there can be no teleology in nature prior to man. But the Bible also subordinates man and the creation to God, the Creator. Modern secular science then comes to a new conclusion: there is teleology, but man — generic, collective mankind — is the source of this final causation. The Bible denies this. The Bible affirms that God proposes and God

39. Frederick Engels, *Herr Eugen Dühring's Revolution in Science (Anti-Dühring)* (London: Lawrence & Wishart, [1877] 1934), p. 348. Engels wrote: "We have already seen, more than once, that in existing bourgeois society men are dominated by the economic conditions created by themselves, by the means of production which they themselves have produced, as if by an extraneous force. The actual basis of religious reflex action therefore continues to exist, and with it the religious reflex itself. . . . It is still true that man proposes and God (that is, the extraneous force of the capitalist mode of production) disposes. Mere knowledge, even if it went much further and deeper than that of bourgeois economic science, is not enough to bring social forces under the control of society. What is above all necessary for this, is a social *act*. And when this act has been accomplished, when society, by taking possession of all means of production and using them on a planned basis, has freed itself and all its members from the bondage in which they are at present held by these means of production but which now confront them as an irresistible extraneous force; when therefore man no longer merely proposes, but also disposes — only then will the last extraneous force which is still reflected in religion vanish; and with it will also vanish the religious reflection itself, for the simple reason that then there will be nothing left to reflect" (pp. 347-48).

disposes, and that man is responsible before God (Rom. 9). God's ends are sovereign over both man and nature. The war between the first principles of the Bible's account of creation and secular science is absolute. No compromise is possible. Christians who happen to hold advanced degrees in biology and geology may think that some sort of working compromise is possible, but the humanists deny it. George Gaylord Simpson calls teleology "the higher superstition": "Another subtler and even more deeply warping concept of the higher superstition was that the world was created for man. Other organisms had no separate purpose in the scheme of creation. Whether noxious or useful, they were to be seriously considered only in their relationship to the supreme creation, the image of God."⁴⁰ Simpson is adamant: "There is no fact in the history of life that requires a postulate of purpose external to the organisms themselves."⁴¹ This is clearly *a statement of religious faith*. Simpson then asks: "Does this mean that religion is simply invalid from a scientific point of view, that the conflict is insoluble and one must choose one side or the other? I do not think so. Science can and does invalidate *some* views held to be religious. Whatever else God may be held to be, He is surely consistent with the world of observed phenomena in which we live. A god whose means of creation is not evolution is a false god."⁴² He thinks that the world of observed phenomena—observed by us, today—automatically teaches historical evolution. It does, *if* you assume, *a priori*, that evolution is always true, and that every fact of the universe is in conformity with this dogma.

What secular science has attempted is a sleight-of-hand operation. Denying any transcendent conscious purpose, and denying even the scientific consideration of such a transcendent conscious purpose, secular scientists conclude that there is no authority above man to deflect *man's* conscious purposes. You cannot be a respectable scientist and assume transcendent purpose, since "postulating the transcendental always stultifies inquiry."⁴³ *Nature must first be depersonalized*. "As astronomy made the universe immense, physics itself and related physical sciences made it lawful. Physical effects have physical causes, and the relationship is such that when causes are adequately known effects can be reliably predicted. We no longer

40. *This View of Life*, p. 7.

41. *Ibid.*, p. 175.

42. *Ibid.*, p. 232.

43. *Ibid.*, p. 170.

live in a capricious world. We may expect the universe to deal consistently, even if not fairly, with us. If the unusual happens, we need no longer blame *kanaima* (or a whimsical god or devil) but may look confidently for an unusual or hitherto unknown physical cause. That is, perhaps, an act of faith, but it is not superstition. Unlike recourse to the supernatural, it is validated by thousands of successful searches for verifiable causes. This view depersonalizes the universe and makes it more austere, but it also makes it dependable."⁴⁴ The depersonalization of nature was originally asserted in terms of a philosophy which proclaimed nature's autonomy; this autonomy for nature no longer will be permitted. *Once man achieves his freedom from undesigned nature by means of his knowledge of nature's laws, he can then assert his autonomous sovereignty over nature (including, of course, other men).* There are no conscious ends in the universe that can overcome the conscious purpose of the planning elite. There is no court of higher appeal. R. J. Rushdoony has summarized this new cosmology very well: "Humanistic law, moreover, is inescapably totalitarian law. Humanism, as a logical development of evolutionary theory, holds fundamentally to a concept of an evolving universe. This is held to be an 'open universe,' whereas Biblical Christianity, because of its faith in the triune God and His eternal decree, is said to be a faith in a 'closed universe.' This terminology not only intends to prejudice the case; it reverses reality. The universe of evolutionism and humanism is a closed universe. There is no law, no appeal, no higher order, beyond and above the universe. Instead of an open window upwards, there is a closed cosmos. There is thus no ultimate law and decree beyond man and the universe. Man's law is therefore beyond criticism except by man..In practice, this means that the positive law of the state is absolute law. The state is the most powerful and most highly organized expression of humanistic man, and the state is the form and expression of humanistic law. Because there is no higher law of God as judge over the universe, over every human order, the law of the state is a closed system of law. There is no appeal beyond it. Man has no 'right,' no realm of justice, no source of law beyond the state, to which man can appeal against the state. Humanism therefore imprisons man within the closed world of the state and the closed universe of the evolutionary scheme."⁴⁵

44. *Ibid.*, p. 5.

45. Rushdoony, Introduction to E. L. Hebden Taylor, *The New Legality* (Nutley, New Jersey: Craig Press, 1967), pp. vi-vii; the text of this citation was incorrectly printed in Taylor's book and was later corrected by Mr. Rushdoony.

George Gaylord Simpson, one of the most prominent paleontologists of the mid-twentieth century, has offered us this interpretation of man, the new sovereign: "Man is the highest animal. The fact that he alone is capable of making such a judgment is in itself part of the evidence that this decision is correct. . . . He is also a fundamentally new sort of animal and one in which, although organic evolution continues on its way, fundamentally a new sort of evolution has also appeared. The basis of this new sort of evolution is a new sort of heredity, the inheritance of learning."⁴⁶ Simpson contrasts *organic* evolution, nature's non-teleological, random development of non-human species, with the new *social* evolution of mankind. "Organic evolution rejects acquired characters in inheritance and adaptively orients the essentially random, non-environmental interplay of genetical systems. The new evolution peculiar to man operates directly by the inheritance of acquired characters, of knowledge and learned activities which arise in and are continuously a part of an organismic-environmental system, that of social organization."⁴⁷ A new Lamarckianism, with its inheritance of acquired characteristics, has arisen; it has brought with it a legitimate teleology. Man, the product of nature, can at last provide what autonomous nature could not: *conscious control*. "Through this very basic distinction between the old evolution and the new, the new evolution becomes subject to conscious control. Man, alone among all organisms, knows that he evolves and he alone is capable of directing his own evolution. For him evolution is no longer something that happens to the organism regardless but something in which the organism may and must take an active hand."⁴⁸ Man's control over future evolution is limited, of course. He cannot choose every direction of a new evolution, nor the rate of change. "In organic evolution he cannot decide what sort of mutation he would like to have,"⁴⁹ but he does have power, and therefore must make responsible decisions. "Conscious knowledge, purpose, choice, foresight, and values carry as an inevitable corollary responsibility."⁵⁰ Of course, we know that all ethics is relative, in fact, "highly relative."⁵¹ "The search for an absolute ethic, either

46. Simpson, *The Meaning of Evolution: A Study of the History of Life and of Its Significance for Man* (New Haven, Conn.: Yale University Press, [1949] 1969), p. 286.

47. *Ibid.*, p. 187.

48. *Ibid.*, p. 291.

49. *Idem.*

50. *Ibid.*, p. 310.

51. *Ibid.*, p. 297.

intuitive or naturalistic, has been a failure.”⁵² There are no fixed ethical principles. “They become ethical principles only if man chooses to make them such.”⁵³ Man, the creative force behind today’s evolution, becomes at the same time the creator and judge of his own ethics. “Man cannot evade the responsibility of choice.”⁵⁴ Whatever the outcomes of our search for ethical principles, this much is certain: “The purposes and plans are ours, not those of the universe, which displays convincing evidence of their absence.”⁵⁵ *We* are the new predestinators, the source of the universe’s new teleology. “Man was certainly not the goal of evolution, which evidently had no goal. He was not planned, in an operation wholly planless. . . . His rise was neither insignificant nor inevitable. Man *did* originate after a tremendously long sequence of events in which chance and orientation played a part. Not all the chance favored his appearance, none *might* have, but enough did. Not all the orientation was in his direction, it did not lead unerringly human-ward, but some of it came this way. The result is the most highly endowed organization of matter that has yet appeared on the earth—and we certainly have no good reason to believe there is any higher in the universe.”⁵⁶ Man proposes, and man, working with nature, also disposes.

Evolutionism’s Sleight-of-Hand

The humanistic philosophy of Darwinism is an enormously successful sleight-of-hand operation. It has two primary steps. *First*, man must be defined as no more than an animal, the product of the same meaningless, impersonal, unplanned forces that produced all the forms of life. This axiom is necessary in order to free man completely from the concept of final judgment. Man must not be understood as a created being, made in God’s image, and therefore fully responsible before God. Man is no more unique, and therefore no more responsible, than an amoeba. *Second*, man, once freed from the idea of a Creator, is immediately redefined as *the* unique life form in the universe. In short, he is and is not special, depending on which stage of the argument you consider.

52. *Ibid.*, p. 311.

53. *Idem.*

54. *Idem.*

55. *Ibid.*, p. 293.

56. *Ibid.*, pp. 293-94.

Simpson provides the argumentation for both steps. *First*, man is just another life form. "This world into which Darwin led us is certainly very different from the world of the higher superstition. In the world of Darwin man has no special status other than his definition as a distinct species of animal. He is in the fullest sense a part of nature and not apart from it. He is akin, not figuratively but literally, to every living thing, be it an amoeba, a tapeworm, a flea, a seaweed, an oak tree, or a monkey—even though the degrees of relationship are different and we may feel less empathy for forty-second cousins like the tapeworms than for, comparatively speaking, brothers like the monkeys. This is togetherness and brotherhood with a vengeance, beyond the wildest dreams of copy writers or of theologians."⁵⁷ Man has not been favored in any way by the impersonal and directionless process of evolution through natural selection. "Moreover, since man is one of many millions of species all produced by the same grand process, it is in the highest degree improbable that anything in the world exists specifically for his benefit or ill. . . . The rational world is not teleological in the old sense."⁵⁸

Nevertheless, man is unquestionably teleological in the new sense—the post-Darwin sense. Nothing was designed by God to meet the needs of man, but because man is now the directing agent of evolution, he can take control over everything. Furthermore, he does not need to humble himself as a steward before God. All the fruits of the meaningless universe are now man's, for he is the pinnacle, not of creation, but of evolution. Simpson moves to the *second* step of the argument a dozen pages later. "Man is one of the millions of results of this material process. He is another species of animal but not just another animal. He is unique in peculiar and extraordinarily significant ways. He is probably the most self-conscious of organisms, and quite surely the only one that is aware of his own origins, of his own biological nature. He has developed symbolization to a unique degree and is the only organism with true language. This makes him also the only animal who can store knowledge beyond individual capacity and pass it on beyond individual memory. He is by far the most adaptable of all organisms because he has developed culture as a biological adaptation. Now his culture evolves not distinct from and not in replacement of but in addition to

57. Simpson, *This View of Life*, pp. 12-13.

58. *Ibid.*, p. 13.

biological evolution, which also continues."⁵⁹ In other words, "The evolutionary process is not moral—the word is simply irrelevant in that connection—but it has finally produced a moral animal. Conspicuous among his moral attributes is a sense of responsibility. . . . In the post-Darwinian world another answer seems fairly clear: man is responsible to himself and for himself. 'Himself' here means the whole human species, not only the individual and certainly not just those of a certain color of hair or cast of features."⁶⁰ Man, meaning *collective man* or *species man*, is sovereign. Individuals are responsible to this collective entity.

Simpson makes his position crystal clear. "Man is a glorious and unique species of animal. The species originated by evolution, it is still actively evolving, and it will continue to evolve. Future evolution could raise man to superb heights as yet hardly glimpsed, but it will not automatically do so. As far as can now be foreseen, evolutionary degeneration is at least as likely in our future as is further progress. The only way to ensure a progressive evolutionary future for mankind is for man himself to take a hand in the process. Although much further knowledge is needed, it is unquestionably possible for man to guide his own evolution (within limits) along desirable lines. But the great weight of the most widespread current beliefs and institutions is against even attempting such guidance. If there is any hope, it is this: that there may be an increasing number of people who face this dilemma squarely and honestly seek a way out."⁶¹ With these words, Simpson ends his book.

Are Simpson and Dobzhansky representative of post-Darwinian evolutionism? They are. It is difficult to find biologists who do not take this approach when they address themselves to these problems. Many, of course, remain silent, content to perform the most prosaic tasks of what Thomas Kuhn has called "normal science."⁶² When they speak out on the great questions of cosmology, however, their words are basically the same as Simpson's.

59. *Ibid.*, p. 24.

60. *Ibid.*, p. 25.

61. *Ibid.*, p. 285.

62. Thomas Kuhn, *The Structure of Scientific Revolutions* (2nd ed.; Chicago: University of Chicago Press, 1970), coined this phrase. For an extended discussion of Kuhn's important distinction between "normal science" and "revolutionary science," see Imre Lakatos [LakaTOSH] and A. E. Musgrave (eds.), *Criticism and the Growth of Knowledge* (Cambridge University Press, 1970).

Thomas Huxley was one of those who began to make the case for step two. Darwin for the most part had been content to deal with step one, devoting himself to wrapping up the case for an anti-teleological universe, with its order-producing process of natural selection. Huxley, his contemporary and early defender, was ready to place man on the pinnacle of the evolutionary process. In his famous 1893 Romanes Lectures, "Evolution and Ethics," Huxley announced: "The history of civilization details the steps by which men have succeeded in building up an artificial world within the cosmos. Fragile reed as he may be, man, Pascal says, is a thinking reed: there lies within him a fund of energy, operating intelligently and so far akin to that which pervades the universe, that it is competent to influence and modify the cosmic process. In virtue of his intelligence, the dwarf bends the Titan to his will."⁶³ Huxley was no optimist. He was convinced that eventually, the law of entropy would triumph. "If, for millions of years, our globe has taken the upward road, yet, some time, the summit will be reached and the downward route will be commenced. The most daring imagination will hardly venture upon the suggestion that the power and the intelligence of man can ever arrest the procession of the great year. . . . But, on the other hand, I see no limit to the extent to which intelligence and will, guided by sound principles of investigation and organized in common effort, may modify the conditions of existence, for a period longer than that now covered by history. And much may be done to change the nature of man himself."⁶⁴ When Huxley spoke of man, he meant *collective man*: "Further, the consummation is not reached in man, the mere animal; nor in man, the whole or half savage; but only in man, the member of an organized polity. And it is a necessary consequence of his attempt to live in this way; that is, under those conditions which are essential to the full development of his noblest powers. Man, the animal, in fact, has worked his way to the headship of the sentient world, and has become the superb animal which he is, in virtue of his success in the struggle for existence. The conditions having been of a certain order, man's organization has adjusted itself to them better than that of his competitors in the cosmic strife."⁶⁵ Huxley strongly opposed Social Darwinism,

63. T. H. Huxley, "Evolution and Ethics," (1893), in *Touchstone for Ethics, 1893-1943* (New York: Harper & Bros., 1947), pp. 92-93. Arno Press has reprinted the book.

64. *Ibid.*, pp. 93-94.

65. *Ibid.*, p. 92.

with its ethic of individualism and personal competition in a free market, which he referred to as "fanatical individualism."⁶⁶ He reminded his listeners of "the duties of the individual to the State. . . ."⁶⁷ We cannot look, he said, to the competitive processes of nature (meaning other species) as a guide for human social ethics and social organization, since "the ethical progress of society depends, not on imitating the cosmic process, still less in running away from it, but in combatting it."⁶⁸ This thesis was the heart of his lecture: *the cosmic process of the struggle for existence has been overcome by man*.⁶⁹ The State of Nature is in opposition to man's State of Art.⁷⁰ Again, this is the familiar theme: *man has transcended nature and nature's law of struggle*. Man is in this sense above nature, even though man is the product of nature. Man is different.

The Theology of Self-Transcendence

Huxley's grandson, the biologist Sir Julian Huxley, delivered the Romanes lectures a half century after his grandfather had, in 1943. He attempted to reconcile the seeming dichotomy his grandfather had presented, namely, the conflict between cosmic evolution and human ethics. He did so by focusing on the leap of being which man represents, a new evolutionary power which can direct the cosmic processes by means of his own science and values. In other words, he argued for *continuity* of evolutionary processes—a denial of any conflict between ethics and evolution—by stressing the radical *discontinuity* represented by man. The first great discontinuity was the appearance of life (Dobzhansky's assertion, too⁷¹). As life developed, "there increased also the possibilities of control, of independence, of inner harmony and self-regulation, of experience."⁷² Animal brains made their advent. But then came nature's crowning glory, man, meaning *collective* man. As he wrote, "during the last half-million years or so a new and more comprehensive type of order of organization has arisen; and on this new level, the world-stuff is once more introduced to altogether new possibilities, and has quite new meth-

66. *Ibid.*, p. 92.

67. *Idem.*

68. *Idem.*

69. *Ibid.*, p. 61.

70. *Ibid.*, pp. 50, 59.

71. Theodosius Dobzhansky, "The Present Evolution of Man," *Scientific American* (Sept., 1960), p. 206.

72. Julian Huxley, "Evolutionary Ethics," (1943), in *Touchstone for Ethics*, p. 13.

ods of evolutionary operation at its disposal. Biological and organic evolution has at its upper end been merged into and largely succeeded by conscious social evolution."⁷³ This, of course, is the second great discontinuity in the history of evolution.

Earlier, I argued that evolutionists have reversed the order of creation. Instead of affirming that a sovereign, autonomous, omnipotent *personal* God created the universe, they argue that a sovereign, autonomous, omnipotent, and *impersonal* universe has created a now-sovereign personal god, mankind. Julian Huxley took this argument one step farther. He also abandoned uniformitarianism, the device by which God was supposedly shoved out of the universe. The slow time scale of cosmic evolution now speeds up, for it now has a planning agent directing it. The new god, mankind, has the power to speed up evolutionary processes, even as Christians have argued that God demonstrated His power over time in creating the world in six days. "With this, a new type of organization came into being—that of self-reproducing society. So long as man survives as a species (and there is no reason for thinking he will not) there seems to be no possibility for any other form of life to push up to this new organizational level. Indeed there are grounds for supposing that biological evolution has come to an end, so far as any sort of major advance is concerned. Thus further large-scale evolution has once again been immensely restricted in extent, being now it would seem confined to the single species man; but at the same time immensely accelerated in its speed, through the operation of the new mechanisms now available."⁷⁴ Why should this be true? Because man has replaced genetic mutation (ordered by natural selection) with language, symbols, and writing. "The slow methods of variation and heredity are outstripped by the speedier processes of acquiring and transmitting experience."⁷⁵ Therefore, "in so far as the mechanism of evolution ceases to be blind and automatic and becomes conscious, ethics can be injected into the evolutionary process."⁷⁶

Huxley, predictably, argued for ethical relativism. There can be no "Absolute" ethics.⁷⁷ "The theologian and the moralist will be

73. *Ibid.*, pp. 133-34.

74. *Ibid.*, p. 134.

75. *Ibid.*, p. 135.

76. *Idem.*

77. *Ibid.*, p. 129.

doing wrong so long as they cling to any absolute or unyielding certitude."⁷⁸ (We might ask the obvious questions: Would the "absolutizing" theologian or moralist *always* be wrong? Can Huxley be *absolutely certain* of this?) In a later essay, Huxley criticized his grandfather's view of ethics as being too static. "We can now say that T. H. Huxley's antithesis between ethics and evolution was false, because based on a limited definition of evolution and a static view of ethics. . . . More than that, we perceive that ethics itself is an organ of evolution, and itself evolves. And finally, by adopting this dynamic or evolutionary point of view of ethics as something with a time-dimension, a process rather than a system, we obtain light on one of the most difficult but also most central problems of ethics—the relation between individual and social ethics, and perceive that the antithesis between the individual and society can also be reconciled."⁷⁹ Evolution means, above all, *process*—the ethics of historical relativism.

How can these two forms of ethics be reconciled? In his 1943 lecture, Huxley had argued for the supremacy of individualistic ethics, since "it is clear on evolutionary grounds that the individual is in a real sense higher than the State or the social organism. . . . All claims that the State has an intrinsically higher value than the individual are false. They turn out, on closer scrutiny, to be rationalizations or myths aimed at securing greater power or privilege for a limited group which controls the machinery of the State."⁸⁰ He delivered this speech during World War II, and he made certain that his audience knew where he stood. "Nazi ethics put the State above the individual."⁸¹ The Nazi method is against evolutionism "on the grounds of efficiency alone."⁸² All of a sudden, evolutionism's ethics of relativism grew rock-hard: "Furthermore, its principles run counter to those guaranteed by universalist evolutionary ethics. . . ."⁸³ The Nazis are doomed to fail, he concluded.

78. *Ibid.*, p. 138.

79. *Ibid.*, p. 217.

80. *Ibid.*, pp. 138-39.

81. *Ibid.*, p. 147.

82. *Ibid.*, p. 148.

83. *Idem.* Huxley cannot resist taking a swing at the Old Testament for its exaltation of the idea of a special chosen people. "In this the Nazis merely translate into modern terms the ethics of tribes or peoples in an early barbarous phase of the world's history, such as the ancient Hebrews before the prophetic period" (p. 147).

Four years later, in 1947, Huxley was calling for a one-world State. The atomic bomb had appeared, and civilization now has the possibility of destroying itself. (While the evolutionists never call thermo-nuclear holocaust "theocide," this is what they mean: god can now commit suicide.) In short, "the separate regions of the world have, for the first time in history, shrunk politically into a single unit, though so far not an orderly but a chaotic one: and now the atomic bomb hangs with equal grimness over all parts of this infant commonwealth of man. . . . The threat of the atomic bomb is simple — unite or perish."⁸⁴ He goes on: "So long as the human species is organized in a number of competing and sovereign nation-states, not only is it easy for a group to pick another group to serve as enemy, but it is in the group's narrow and short-term interest that it should do so. . . . The specific steps which will have to be taken before we can reach this next stage of ethical evolution are somewhat various. There is first the practical step of discovering how to transfer some of the sovereign power of several nation-states of the world to a central organization. This has its counterpart in the moral world: for one thing, any practical success in this task will make it easier for men to abandon the tribalist ethics (for tribalist they still are, however magnified in scale) associated with the co-existence of competing social groups."⁸⁵ Even more strongly: "This is the major ethical problem of our time — to achieve global unity for man. . . . Present-day men and nations will be judged by history as moral or immoral according as to whether they have helped or hindered unification."⁸⁶ Huxley provides documentation for Rushdoony's assessment that "humanity is the true god of the Enlightenment and of French Revolutionary thought. In all religious faiths one of the inevitable requirements of logical thought asserts itself in the demand for *the unity of the godhead*. Hence, since humanity is a god, there can be no division in this godhead, humanity. Mankind must therefore be forced to unite."⁸⁷ This is another reason why Rushdoony has called the United Nations "a religious dream."⁸⁸ Huxley confirms this suspicion. Unity will advance mankind to the next stage of

84. *Ibid.*, p. 197.

85. *Ibid.*, pp. 247-49.

86. *Ibid.*, p. 255.

87. Rushdoony, *This Independent Republic: Studies in the Nature and Meaning of American History* (Fairfax, Virginia: Thoburn Press, [1964] 1978), p. 142.

88. Rushdoony, "The United Nations: A Religious Dream," in *Politics of Guilt and Pity* (Fairfax, Virginia: Thoburn Press, [1970] 1978), pp. 184-99. He has

evolution. "I would suggest that the secondary critical point in human evolution will be marked by the union of all separate traditions in a single common pool, the orchestration of human diversity from competitive discord to harmonious symphony. Of what future possibilities beyond the human this may be the first foundation, who can say? But at least it will for the first time give full scope to man's distinctive method of evolution, and open the door to many human potentialities that are as yet scarcely dreamed of."⁸⁹ And who will lead the orchestra?

Huxley ended this book on evolutionary ethics with a statement quite similar to the one introducing this appendix: "Man the conscious microcosm has been thrown up by the blind and automatic forces of the unconscious macrocosm. But now his consciousness can begin to play an active part, and to influence the process of the macrocosm by guiding and acting as the growing-point of its evolution. Man's ethics and his moral aspirations have now become an integral part of any future evolutionary process."⁹⁰

This theme became a familiar one in later books by Huxley. No statement is more forthright, however, than the opening chapter of his 1957 book, *Knowledge, Morality, and Destiny*, which he titled "Transhumanism": "As a result of a thousand million years of evolution, the universe is becoming conscious of itself, able to understand something of its past history and possible future. This cosmic self-awareness is being realized in one tiny fragment of the universe—in a few of us human beings."⁹¹ Here is the combination of "Flyspeck Earth" and "man, the new predestinator." There is nothing humble about residing on a tiny bit of dust in an immense universe, whether one is a Christian or an evolutionist. Huxley repeats the now-familiar themes: "For do not let us forget that the human species is as radically different from any of the microscopic single-celled animals that

written two other essays on the religious quest of the United Nations: "The United Nations," in Rushdoony, *The Nature of the American System* (Fairfax, Virginia: Thoburn Press, [1965] 1978), ch. 7, and "Has the U.N. Replaced Christ as a World Religion?" in *Your Church: Their Target* (Arlington, Virginia: Better Books, 1966), ch. 10.

89. Huxley, "Conclusion," *Touchstone for Ethics*, p. 255. This is a quotation from an earlier book by Huxley, published by the United Nations' Educational, Scientific, and Cultural Organization (UNESCO): *The Prerequisites of Progress* (Paris: Editions Fontaine, 1947).

90. *Ibid.*, p. 257.

91. Julian Huxley, *Knowledge, Morality, and Destiny* (New York: Mentor Book, [1957] 1960), p. 13.

lived a thousand million years ago as they were from a fragment of stone or metal."⁹² Again, the two great discontinuities in the uniformitarian universe were the appearance of life and the appearance of man. Evolutionists use uniformitarianism to push God back to the infinite past or into the infinite future, and to deny the six-day creation. They do not use uniformitarianism to refute these two great discontinuities.

We are now at another great period of evolutionary discontinuity. A new era is about to dawn. "The new understanding of the universe has come about through the new knowledge amassed in the last hundred years—by psychologists, biologists, and other scientists, by archaeologists, anthropologists, and historians. It has defined man's responsibility and destiny—to be an agent for the rest of the world in the job of realizing its inherent potentialities as fully as possible."⁹³ An amazing bit of luck for all of us, isn't it? It took 15 billion (or possibly 6 billion years, depending on how one views the Hubble Constant) to get from the "big bang" to the creation of life in the solar system. Then it took another 3.497 (or possibly 3.498) billion years to get from life's origin (3.5 billion until about 2 or 3 million years ago) to that second great cosmological discontinuity, man. And now, here we are, ready for stage three, the ascension of man to his position of universal—literally universal—power. If you had been born a Neanderthal man (let alone a brontosaurus), or even an eighteenth-century *Philosophe*, you would have missed it. Missed what? This: "It is as if man had been suddenly appointed managing director of the biggest business of all, the business of evolution—appointed without being asked if he wanted it, and without proper warning or preparation. What is more, he can't refuse the job. Whether he wants to or not, whether he is conscious of what he is doing or not, he *is* in point of fact determining the future direction of evolution on this earth. That is his inescapable destiny, and the sooner he realizes it and starts believing in it, the better for all concerned."⁹⁴ A new humanity is coming: "The human species can, if it wishes, transcend itself—not just sporadically, an individual here in one way, and an individual there in another way, but in its entirety, as humanity. We need a name for this new belief. Perhaps *trans-humanism* will serve: man remaining man, but transcending himself,

92. *Idem*.

93. *Idem*.

94. *Ibid.*, pp. 13-14.

by realizing new possibilities of and for his human nature."⁹⁵

In case readers fail to recognize this ancient heresy, it is called *gnosticism*. That, in turn, was simply a variation of the original sin, the desire of man to be as God, to transcend man's own creaturely limitations by seeking special knowledge. Adam sought the knowledge of good and evil. The gnostics, in the second and third centuries in Asia Minor and North Africa, sought mystical illumination. In the Middle Ages, alchemists sought self-transcendence through repetitive chemical rituals—the quest for the so-called “philosopher’s stone,” which was not simply a means of converting lead into gold, but a means of enabling the alchemist to transcend his own limits as a creature. It is not surprising, then, that with the rise of secular humanism—in the late-medieval and early modern periods, as well as today—has come occultism, sorcery, demonism, and the quest for mystical utopia, especially through the techniques of Eastern religion, which has always been evolutionary in philosophy.⁹⁶ Humanism, whether Renaissance humanism or post-Darwinian humanism, is in league with occultism.⁹⁷

It would be unproductive to multiply citations of the evolutionists’ sleight-of-hand operation. The point has been made. The Darwinists have used the dogma of cosmic purposelessness to free man from the constraints of biblical law and the threat of eternal judgment. Once freed from God, man is said to become the new predestinator. Dobzhansky, the Huxleys, Simpson, and others holding similar views have presented secular man with the humanists’ version of the dominion covenant. Man is to conquer. An old Buster Crabbe movie serial in the 1930’s lured kids back into the theaters of America each Saturday morning with 12 installments of “Flash Gordon Conquers the Universe.” Actually, Flash was content with overcoming the wily machinations of his old foe, Ming the Merciless. But modern man is not content to set his goals so low. He has his marching orders. With the discovery by Watson and Crick of the make-up of the DNA molecule, scientists are now in the process

95. *Ibid.*, p. 17.

96. C. S. Lewis, *The Abolition of Man* (New York: Macmillan, [1947] 1967), pp. 87-89. Cf. Thomas Molnar, *God and the Knowledge of Reality* (New York: Basic Books, 1973); Frances Yates, *Giordano Bruno and the Hermetic Tradition* (New York: Vintage, [1964] 1969).

97. Gary North, *Unholy Spirits: Occultism and New Age Humanism* (Ft. Worth, Texas: Dominion Press, 1986), ch. 10.

of creating new forms of life. The General Electric Company has even filed patents on one new life form, and an appeals court in 1979 upheld the firm's property right to this new species. The "gene splicers" are in our midst. Several books have been written, generally by non-scientists, all based on published scientific data, warning about the hazards of such research. These warnings are unlikely to stop the experimental mania of modern biological scientists. The technological imperative is too strong: "If it can be done, it must be done."⁹⁸ The hope of profits also lures research firms into the field. Pharmaceutical firms are financing numerous projects in the field of DNA research.⁹⁹ Financial success, which is likely over the short run at least, will bring in the competition. Recombinant DNA, the tool of the "gene splicers," discovered in 1973, has opened a true Pandora's box of moral, intellectual, medical, and legal problems.¹⁰⁰ As one popular book on the subject warns: "'Man the engineer' may soon become 'man the engineered.'"¹⁰¹ They go on to cite recent statements by biological scientists that are in line with everything that has been said since the days of Thomas Huxley: "Over these past three billion years, one hundred million species have existed on this planet. Of those, ninety-eight million are now extinct. Among the two million that remain today, only one, *Homo sapiens* ('wise man'), has evolved to the point of being able to harness and control its own evolutionary future. Many biologists welcome this possibility, seeing it as a great challenge that will ennoble and preserve our species. 'Modern progress in microbiology and genetics suggests that man can outwit extinction through genetic engineering,' argues Cal Tech biologist James Bonner. 'Genetic change is not basically immoral. It takes place all the time, naturally. What man can do, however, is to make sure that these changes are no longer random in the gigantic lottery in nature. . . . Instead, he can control the changes to produce better individuals.' Bonner's viewpoint is seconded by Dr. Joseph Fletcher, professor of Medical Ethics at the University of Virginia School of Medicine, who sees in genetic engineering the fulfillment of our cosmic role on earth. 'To be men,' he believes, 'we

98. The idea of the technological imperative is the foundation of the critical book by Jacques Ellul, *The Technological Society* (New York: Vintage [1964] 1967).

99. *Wall Street Journal* (May 10, 1979). Article by Marilyn Chase.

100. John Lear, *Recombinant DNA: The Untold Story* (New York: Crown, 1978).

101. Jeremy Rifkin and Ted Howard, *Who Should Play God?* (New York: Dell, 1977), p. 14.

must be in control. That is the first and last ethical word.' Promises a third scientist, our newly developed eugenic potential will lead humanity to 'a growth of social wisdom and glorious survival—toward the evolution of a kind of superman.'¹⁰² The book is well titled: *Who Should Play God?*

Darwin's Revolution

What a magnificent sleight-of-hand operation the defenders of evolution and humanism have accomplished! *First*, the universe was depersonalized. Darwin put it very forcefully: "It has been said that I speak of natural selection as an active power or Deity; but who objects to an author speaking of the attraction of gravity as ruling the movement of the planets? Every one knows what is meant and implied by such metaphorical expressions; and they are almost necessary for brevity. So again it is difficult to avoid personifying the word Nature; but I mean by Nature, only the aggregate action and product of many natural laws, and by laws the sequence of events as ascertained by us."¹⁰³ God was shoved out of the universe, leaving only humble man, whose power seems to be limited to "ascertaining laws," which are the sequence of events observed by us. *Second*, man was reduced to being a mere cog in a mighty machine, not the representative of an infinite God, governing the earth as a subordinate in terms of the dominion covenant. A few paragraphs later, Darwin wrote: "How fleeting are the wishes and efforts of man! how short his time! and consequently how poor will be his results, compared with those accumulated by Nature during the whole geological periods! Can we wonder, then, that Nature's productions should be far 'truer' in character than man's productions; that they should be infinitely better adapted to the most complex conditions of life, and should plainly bear the stamp of higher workmanship?"¹⁰⁴ Not the higher workmanship of the God of the Bible, or even the deistic god of Paley's *Natural Theology*, but the "higher workmanship" of planless, meaningless, "random, yet cause-and-effect-governed" geological and biological process. *Third*, evolutionists added a purposeful,

102. *Ibid.*, p. 21. See also Michael Rogers, *Biohazard* (New York: Knopf, 1977); June Goodfield, *Playing God: Genetic Engineering and the Manipulation of Life* (New York: Random House, 1977); Nicholas Wade, *The Ultimate Experiment: Man-Made Evolution* (New York: Walker & Walker, 1977).

103. Charles Darwin, *Origin of Species*, ch. 4; in *The Origin of Species and the Descent of Man* (Modern Library edition), p. 64.

104. *Ibid.*, p. 66.

meaning-providing conscious agent to this "random, yet cause-and-effect-governed," *previously* impersonal process. Darwin gave the intellectual game away in the concluding paragraph of *The Descent of Man* (2nd edition, 1874): "Man may be excused for feeling some pride at having risen, though not through his own exertions, to the very summit of the organic scale; and the fact of his having thus risen, instead of having been aboriginally placed there, may give him hope for a still higher destiny in the distant future."¹⁰⁵ But not so distant a future after all! In 1957, Sir Julian Huxley had concluded: "Assuredly the concept of man as instrument and agent of the evolutionary process will become the dominant integrator of all ideas about human destiny, and will set the pattern of our general attitude to life. It will replace the idea of man as the Lord of Creation, as the puppet of blind fate, or as the willing or unwilling subject of a Divine Master."¹⁰⁶

Man had lowly origins, but man is now the source of direction and meaning for the evolutionary process. This is Darwin's intellectual legacy. As he concluded *The Descent of Man*, "We must, however, acknowledge, as it seems to me, that man with all his noble qualities, with sympathy which feels for the most debased, with benevolence which extends not only to other men but to the humblest living creature, with his god-like intellect which has penetrated into the movements and constitution of the solar system—with all these exalted powers—Man still bears in his bodily frame the indelible stamp of his lowly origin."¹⁰⁷ He is no longer the image of God, but the image of apes, pre-apes, amoebae, and meaningless cosmic process. Still he has this "god-like intellect," which shows sympathy and benevolence. He is therefore "exalted." But lowly, always the product of humble origins. In fact, *it is precisely man's humble, impersonal origins that provide him with his credentials of being the sole source of cosmic meaning.* After all, there is no one higher than man, for there is no one—no self-aware Creator—who preceded man. (Did you notice that Darwin chose to capitalize the word "man" in his final reference to this exalted being, as befits the name of one's deity?)

Anyone who is not familiar with this monumental sleight-of-hand operation will fail to grasp *the single most important intellectual transfor-*

105. *Ibid.*, p. 920.

106. Julian Huxley, *Knowledge, Morality, and Destiny*, p. 54.

107. Darwin, *op. cit.*, p. 920.

matation in the heart and soul of the religion of humanism. Marxism was an important subordinate stream in this intellectual transformation, but by the late twentieth century, few people outside of a handful of Western intellectuals really believed in the tenets of original Marxism. They may well believe in exercising power in the name of the Marxist intellectual heritage, but the priests, no less than the laymen, have lost faith in the old dogma. They have not abandoned faith in Darwin's dogma. In 1959, Hermann J. Muller could write that *The Origin of Species* "was undoubtedly the greatest scientific book of all time. . . . The result has been that this revolutionary view of life now stands as one of the most firmly established generalizations of science. . . ." ¹⁰⁸ It is a religion, as Muller's words indicate: "We dare not leave it to the Soviets alone to offer to their rising generation the inspiration that is to be gained from the wonderful world view opened up by Darwin and other Western biologists." ¹⁰⁹ On both sides of the Iron Curtain, the priesthoods are enlisting the faithful, offering them salvation by means of evolution. It is a religion that supposedly will provide meaning, and the objections of anti-evolutionists must be stifled for the sake of the masses: "The history of living things, and its interpretation, can be made a fascinating story that will give our young people a strong sense of the meaning of life, not only for plants and animals in general, but for mankind in particular, and for them themselves. . . . We have no more right to starve the masses of our youth intellectually and emotionally because of the objections of the uninformed than we have a right to allow people to keep their children from being vaccinated and thus endanger the whole community physically." ¹¹⁰ (Statement after statement like this one can be found in the extraordinarily revealing book, *Darwin: A Norton Critical Edition*, edited by Philip Appleman and published by W. W. Norton Company in 1970.)

The humility of post-Darwin humanists is a myth—a myth fostered by them, and one which has its roots in Darwin's own sleight-of-hand operation. Anyone who thinks that man was anything but elevated by Darwinism has deluded himself. He has swallowed only the first bit of bait tossed to him by the Darwinians.

108. Hermann J. Muller, "One Hundred Years Without Darwinism Are Enough," *The Humanist*, XIX (1959); reprinted in Philip Appleman (ed.), *Darwin: A Norton Critical Edition*, p. 545.

109. *Idem*.

110. *Ibid.*, p. 547.

Thomas H. Huxley, Darwin's first great promoter, and Sir Julian's grandfather, could write about earth, "the speck," or the supposed fact that man is not the "centre of the living world, but one amidst endless modifications of life,"¹¹¹ but this was (and is) part of an enormous deception. To use the terminology of the baseball pitcher, this humility routine is part of "the long, slow curve," but then comes "the fast break." If you want to understand the "fast-breaking pitch" of modern evolutionism, consider the words of Philip Handler, who was the president of the National Academy of Sciences in 1976. He delivered this speech to the General Assembly of the International Council of Scientific Unions, so it was not intended to be too off-beat, too radical, or too embarrassing to its author. You will not find his view of man's role particularly long on humility. "How very privileged we are—we who have lived through the last half-century of science, that historic few decades in which the mind of man first came really to understand the nature of the atomic nucleus; first learned the history of our planet and identified the forces that continue to refigure its surface, the habitat of our species; the time when man's mind first engaged the immense sweep and grandeur of the cosmos in what we believe to be its true dimensions; the time when our species commenced upon the physical exploration of the solar system. Ours is the fortunate generation that, for the first time, came to understand the essential aspects of the marvelous phenomenon which is life, a phenomenon describable only in the language of chemistry; came to understand the mechanisms that have operated over the eons of biological evolution. In short, ours may well be the first generation that knows what we are and where we are. That knowledge permitted the acquisition of new capabilities whereby we utilize an extraordinary assemblage of synthetic materials, each created for a specific purpose, whereby we manipulate our environment, communicate, move about, protect our health, avoid pain and even extend the power of our own intellects. . . . In a historic sense, the scientific endeavor began only yesterday, yet we have come a wondrous distance from our primeval ignorance in so short a time. . . ." This remarkable testimony of a prominent biologist's faith appeared in *The Washington Post* (Dec. 22, 1976), the most widely read newspaper in the political capital of the United States. (Most amusing was its headline, "*For the Record.*")

111. Thomas H. Huxley, "On Improving Natural Knowledge" (1866), *Essays*, p. 227.

Evolution is the religion of modern humanism. It was also the religion of ancient humanism. The explanation is different—evolution by natural selection—but the religion's *really* important dogma has not been changed significantly since the primary version was presented to mankind by Satan: *Ye shall be as gods* (Gen. 3:5).

Fictional Science, Science Fiction

One of occultism's universal themes is the appearance of a new creation, some sort of positive human mutation.¹¹² But do serious scientists take this vision very seriously? Some do, as indicated by their explicit statements concerning recombinant DNA and genetic engineering. Another bit of evidence appeared in *The Wall Street Journal* (Sept. 10, 1979), on the back page. An expensive advertisement was run by Pertec Computer Corporation, apparently some sort of "public service" advertisement. It featured a photograph of America's most prolific author, Dr. Isaac Asimov, who had written over 200 books at the time the ad appeared.¹¹³ He holds a Ph.D. in biochemistry, but he is more famous for his science fiction stories and his popularizations of modern natural science. During one period of 100 months, Asimov turned out 100 books. He does all his own typing (90 words a minute), almost every day, for most of the day. One librarian pointed out that he has a book in each of the ten major Dewey decimal system classifications.¹¹⁴ In short, he is no raving lunatic. The advertisement read: "Will computers take over?"

Asimov addressed himself to the question of computer intelligence. Could they ever become more intelligent than men? Asimov's answer: the knowledge stored by a computer is not the same as man's knowledge. They are two separate developments. "The human brain evolved by hit-and-miss, by random mutations, making use of subtle chemical changes, and with a forward drive powered by natural selection and by the need to survive in a particular world of given qualities and dangers. The computer brain is evolving by deliberate design as the result of careful human thought, making use of subtle electrical charges, and with a forward drive powered by technological advancement and the need to serve particular human requirements." From the "hit-and-miss" random evolution of man's brain, to man the battling and planning survivor, to

112. Cf. Gary North, *Unholy Spirits*, ch. 10.

113. *Time* (Feb. 26, 1979).

114. *New York Times Book Review* (Jan. 28, 1979).

the forward-driven computer (impersonal, purposeless mechanism, to purposeful organic agent, to personalized mechanism): here is the standard, post-Darwin account. But Asimov blazes new trails. The two forms of intelligence are too different to be compared on the same scale. We cannot make such comparisons. We must keep the systems distinct. Each should specialize. "This would be particularly true if genetic engineering was deliberately used to improve the human brain in precisely those directions in which the computer is weak." We must avoid wasteful duplication he says. "Consequently the question of 'taking over' need never arise. What we might see, instead, would be symbiosis or complementation, human brain and computer working together, each supplying what the other lacks, forming an intelligence pair that would be greater than either could be alone, an intelligence pair that would open new horizons, not now imaginable, and make it possible to achieve new heights, not now dreamed of. In fact, the union of brains, human and human-made, might serve as the doorway through which human beings could emerge from their isolated childhood into their combination adulthood."

The advertisement sells no product, asks the reader nothing, and does not instruct him to clip a coupon or take any sort of action. It simply offers a message—a message of a new evolution.

The same theme is found in the \$40 million movie, released in December of 1979, *Star Trek*. The movie's science advisor was Asimov. The movie deals with a future space ship crew which confronts an unimaginably powerful intelligence. This intelligence turns out to be an enormous machine, one which in turn was built by a civilization run entirely by machines. It literally knows everything in the universe, yet it is travelling back to earth to seek the "Creator" and to join with the "Creator" in a metaphysical union (Eastern mysticism). The machine is perfectly rational, totally devoid of feeling, and is a "child" at the very beginning of its evolution. It turns out that the center of the machine's guidance system is a centuries-old U.S. space probe, the Voyager, which had been sent into space to seek knowledge and send back that knowledge to earth. Hence, the "Creator" was man. The movie ends when an officer of the crew joins in metaphysical union with the machine, along with a mechanical robot built by the machine—a robot which duplicated his ex-lover. The officer, the female robot, and the enormous machine then disappear. The science officer (a human-Vulcan

genius — a mutant product of two races) announces that a new being has just evolved from the fusion of man, man-made machinery, machinery-made machinery, and a machine-made robot that is “almost human” (actually, Deltan, whatever the planet Delta produces; the lady had a shaved head to match her vow of chastity). The human-Vulcan scientist, Mr. Spock (a cult figure from the mid-1960’s until, and presumably after, the release of the movie), who had been seeking total rationalism (his Vulcan side) to the exclusion of feeling (his human side), now is content to remain with the humans on board the Starship Enterprise, apparently satisfied with his somewhat schizophrenic mind-emotion dualism. Why not? He had seen the perfectly rational (the huge machine), and it had been lonely, seeking its “Creator.” To make the next evolutionary step, it required fusion with mankind. Spock, with his pointed ears and his computer-like mind, is as close to that next evolution as any Vulcan-human could ever hope for. The movie, based on a popular television series of the late 1960’s, immediately attracted ticket buyers among the millions of “trekkies,” their cult-like fans. (The television series, as of 1979, was still being shown in 50 nations, in something like 47 languages; the reruns almost certainly outlive the actors.)

If Asimov’s vision does not border on the occult, what does? If the message of that computer company’s advertisement and the *Star Trek* movie does not represent a religious position, what else should we call such a message? Science? Science fiction? “Mere” entertainment? Or a combination of all three, which in addition is also a religion?

Christian Orthodoxy vs. Process Philosophy

Readers may think that I am belaboring a point, but this point must be understood. Charles Darwin created an intellectual revolution. That intellectual revolution still affects us. He did not simply provide interesting new evidence concerning historical geology or biological reproduction; he created a new world-and-life view. It was this new perspective on man’s origins, not the factual data, that made Darwin’s *Origin of Species* an instant best-seller.

The clergy in Darwin’s day recognized the threat to the biblical world-and-life view which was posed by the *Origin*. As Philip Appleman observes: “Theologians worried because they saw, perhaps more clearly than others, the philosophical implications of post-Darwinian thought. It was not just that Darwin had complicated the

reading of Genesis; or even that he had furnished impressive scientific authority for the nineteenth-century habit of thinking in terms of wholes and continuities rather than in discrete parts and rigidities; or that the evolutionary orientation stressed context and complexity — though all of these influences could be bothersome when used by ‘materialists.’ The worst threat of all was that Darwin’s universe operated not by Design but by natural selection, a self-regulating mechanism. . . . Natural selection pictured the world in a constant process of change, but without any prior intention of going anywhere in particular or of becoming anything in particular. This was a devastating proposition to the conventional theologian — more so, perhaps, than the Copernican theory had been, because it struck so close to home. Natural selection therefore seemed, to many, hopelessly negative, fraught with blasphemy and conducive of despair.”¹¹⁵ This despair was initially covered by optimism concerning the power of man to take over the direction of the evolutionary process, an optimism which still survives, though not without fear and foreboding on the part of some scientists and philosophers, in the late twentieth century.

Appleman’s point, however, is well taken. “So it *made a difference* to philosophers and theologians that man not only evolved, but evolved by natural selection rather than by a vital force or cosmic urge of some sort. Darwinism seemed uncompromisingly non-teleological, non-vitalist, and non-finalist, and that basic fact could not help but affect the work of philosophers. ‘Once man was swept into the evolutionary orbit,’ Bert James Lowenberg has written, ‘a revolution in Western thought was initiated. Man was seen to be a part of nature, and nature was seen to be a part of man. The Darwinian revolution was not a revolution in science alone; it was a revolution in man’s conception of himself and in man’s conception of all his works.’”¹¹⁶ Appleman chronicles the decline in the opposition to Darwinism on the part of Roman Catholics and other theologians. “The activities of science, relentlessly pushing back the margins of the unknown, have in effect been forcing the concept of ‘God’ into a perpetual retreat into the still-unknown, and it is in this condition that ‘God’ has frequently come to have meaning for modern man.”¹¹⁷

115. Philip Appleman, “Darwin: On Changing the Mind,” Epilogue in Appleman (ed.), *Darwin*, pp. 636-37.

116. *Ibid.*, p. 637.

117. *Ibid.*, pp. 638-39.

The modern evolutionist is a defender of a concept of process that removes God and His control from the universe, so that man and man's sovereignty can be substituted for the supposedly non-existent God. It is meaningless process which is the evolutionist's god of origins. Only when a meaningful God who created the universe in terms of His *eternal, unchanging decree* is finally removed from our thought processes, can our thought processes take control of all other processes, the modern evolutionist argues. Evolutionary process is the humanist's god of origins, a god whose crucial purpose for man is to remove from the question of origins any concept of purpose. Man's monopoly of cosmic purpose is supposedly assured as a direct result of the non-purposeful origins of the universe. This is why Rushdoony has taken such pains to contrast *process philosophy* and *creationism*.¹¹⁸ It is startling, therefore, to read the "refutation" of Rushdoony written by a self-proclaimed orthodox Christian geologist (who argues for a 4.6 billion-year-old earth).¹¹⁹ "Rushdoony's fears are unfounded. An affirmation of process in itself certainly does not constitute an attack on the sovereignty of God. Scripture

118. Rushdoony, *The Mythology of Science* (Fairfax, Virginia: Thoburn Press, [1967] 1978), pp. 38-39, 64. Process philosophy, which is basic to all evolutionary systems, leads inescapably into relativism. The implicit relativism of evolutionism cannot be reconciled with the implicit authoritarianism of the biblical doctrine of creation. Rushdoony's discussion of evolutionism is fundamental: "In this concept, being is evolving and is in process. Because being is in process, and being is seen as one and undivided, truth itself is tentative, evolving, and without finality. Since being has not yet assumed a final form, since the universe is in process and not yet a finished product, truth itself is in process and is continually changing. A new movement or 'leap of being' can give a man a new truth and render yesterday's truth a lie. But, in an order created by a perfect, omnipotent, and totally self-conscious Being, God, truth is both final, specific, and authoritative. God's word can then be, and is inevitably, infallible, because there is nothing tentative about God himself. Moreover, truth is ultimately personal, because the source, God, is personal, and truth becomes incarnate in the person of Jesus Christ and is communicated to those who believe in Him. Jesus Christ as Lord and Savior, as the way, the truth, and the life, is also the Christian principle of continuity. The Christian doctrine, therefore, involved a radical break with the pagan doctrine of continuity of being and with the doctrine of chaos. It also involved a break with the other aspect of the dialectic, the pagan, rationalistic concept of order. Order is not the work of autonomous and developing gods and men but rather the sovereign decree of the omnipotent God. This faith freed man from the sterile autonomy which made him the helpless prisoner of Fate, or the relentless workings of a blind order." Rushdoony, *The One and the Many: Studies in the Philosophy of Order and Ultimacy* (Fairfax, Virginia: Thoburn Press, [1971] 1978), p. 143.

119. Davis A. Young, *Creation and the Flood: An Alternative to Flood Geology and Theistic Evolution* (Grand Rapids, Michigan: Baker Book House, 1977), p. 87.

reveals in [sic] the sovereignty of God in history, in day-to-day affairs, in the ordinary rising and setting of the sun. Process is going on all about us now, and God is every whit as sovereign as He was in the creation."¹²⁰ But what kind of creation does Dr. Young have in mind? A creation in which the sun, moon, and stars were created after the earth? Not necessarily.¹²¹ The six-day creation? No, because "*we have no human interpretation of Genesis 1 that is infallible.*"¹²² A view of Genesis 1 which says that Adam and Eve were created on the sixth day? No, because the genealogies in the Bible do not tell us enough to say that man is only a few thousand years old.¹²³ "On the basis of these considerations it is probably virtually impossible for the Christian to identify, from the fossil record, the time when special creation occurred."¹²⁴ In short, everything the Bible says is *indeterminate* with respect to chronological time. Therefore, Dr. Young could continue to use the 4.6 billion-year-old date as his operating presupposition, thereby providing himself with full acceptability within the state university faculty of secular humanists where he was employed. If he believed otherwise, he might have to give up that work which he has chosen as his profession, namely, providing explanations for the hypothetically one-billion-year-old rocks. He says as much: "If Scripture really does teach unequivocally that the universe was miraculously created in 144 hours a few thousands of years ago, then I, as a Christian geologist, will be willing to stop scientific interpretation of the supposedly one-billion-year-old rocks of northern New Jersey which I have been studying for the past several years. Obviously my only task now is to describe those rocks and to find valuable resources in them. If the mature creationist interpretation of Genesis 1 is correct, I am wasting my time talking about magmas and metamorphism inasmuch as these rocks were created instantaneously in place."¹²⁵ Those of us who, like myself, believe in the Bible's narrative of a six-day creation, must conclude that Dr. Young has indeed wasted his time by studying those rocks in terms of a uniformitarian presupposition. He has also used money confiscated from me (as a former resident of North Carolina, where

120. *Ibid.*, p. 49.

121. *Ibid.*, pp. 128-29.

122. *Ibid.*, p. 133.

123. *Ibid.*, p. 151.

124. *Ibid.*, p. 155.

125. *Ibid.*, p. 82.

Dr. Young taught) and other six-day creationists in order to indoctrinate students with uniformitarianism. And then he writes an intellectual defense of his uniformitarian faith, so that other Christians might be convinced! Confiscated tax dollars were promoting Dr. Young's professional religion, uniformitarianism. (His *professed* religion has been compromised by his professional, academic religion. Today, he teaches at Calvin College.)

We must not be naive. The uniformitarian interpretation of geological processes is a religion. It has led to a more consistent religion, that of evolution through natural selection. The god of uniformitarian, meaningless, directionless process was created by nineteenth-century humanists and compromising Christian geologists—whose intellectual and spiritual heirs are still publishing books—to provide an explanation of this world which did not require full allegiance to the plain teaching of Genesis 1. The god of uniformitarian geology, whose high priest was Charles Lyell, metamorphosed (evolved?) into a far stronger deity, the god of evolution through natural selection. Charles Darwin became the founder and high priest of this new god, whose kingdom is the whole academic and scientific world in the final decades of the twentieth century. Finally, Darwin's god of meaningless process has developed into the modern god, mankind, who will take over the operations of evolutionary process. Anyone who fails to recognize the satanic nature of uniformitarianism's process divinity is hopelessly naive, for it is this divinity who has torn the eternal decree of God from the presuppositions of modern man, leaving man with only random process, or man-directed tyrannical process, to comfort him. Christians cannot afford to be hopelessly naive, even if that self-imposed naiveté is their justification for remaining on the faculties of state university geology or biology departments. The price of such naiveté is still too high, for them and for their equally naive Christian readers, who do not recognize a theological battle when they see it.

The Predestinating State

The social philosophers of the late nineteenth century grappled with the same fundamental intellectual problems that faced the biologists. What is the nature of evolution? Is the species *Homo sapiens* governed by the same laws as those governing other species? Is "survival of the fittest" a law applying to mankind? If so, in what ways? Is competition primarily individualistic—man vs. man, man

vs. environment—or primarily collectivist, with mankind as a united species seeking to conquer all other opponents for the domination of the external world?

There is no question concerning the existence of purpose. The economists and sociologists of the late nineteenth century, no less than those of the twentieth, accepted the reality of human purpose. Like today's professional social thinkers, the leading defenders of the "new evolutionism" were often atheists and agnostics, in their methodology certainly, and usually in their private beliefs. They did not rely on grandiose concepts of cosmic purpose. Man's purpose was sufficient to explain human cause and effect. But the word "man" posed a major problem: Was collective man, meaning mankind, the proper focus of concern, or was the individual man the source of purpose? Are we to speak of some sort of overarching purpose of man the species, or should we be content to explain the workings of political economy in terms of multiple individualistic purposes? Is our methodology to be holistic or individualistic? Are we to proclaim the sovereignty of "man, the purposeful, planning individual" or "man, the purposeful, planning species"? Are we talking about the survival of the fittest species, or about the survival of the fittest individuals *within* a particular species? Can we speak of the survival of the fittest species without stating the conditions for the survival of the most fit individuals within the species? What, in other words, is meant by "fit"?

The Social Darwinists of the late nineteenth century, led by the British sociologist-philosopher Herbert Spencer and Yale University's sociologist William Graham Sumner, focused on the individual. It is individual action which is primary. Individuals have purposes, not collective wholes. Sumner stated the case for individual rights in his book, *What Social Classes Owe to Each Other* (1883): "The notion of civil liberty which we have inherited is that of a status created for the individual by laws and institutions, the effect of which is that each man is guaranteed the use of all his own powers exclusively for his own welfare. It is not at all a matter of elections, or universal suffrage, or democracy. All institutions are to be tested by the degree to which they guarantee liberty. It is not to be admitted for a moment that liberty is a means to social ends, and that it may be impaired for major considerations. Any one who so argues has lost his bearing and relation of all the facts and factors in a free state. A human being has a life to live, a career to run. He is a centre of powers to work, and of

capacities to suffer."¹²⁶ His conclusion is straightforward: "It is not at all the function of the State to make men happy. They must make themselves happy in their own way, and at their own risk."¹²⁷

As a Darwinist, Sumner believed in the survival of the fittest. (Spencer, of course, had coined the phrase in 1852.) Sumner criticized social reformers who believed that the civil government should intervene to help the weak and defenseless members of society. "They do not perceive, furthermore, that if we do not like the survival of the fittest, we have only one possible alternative, and that is the survival of the unfittest. The former is the law of civilization; the latter is the law of anti-civilization. We have our choice between the two, or we can go on, as in the past, vacillating between the two, but a third plan—the socialist desideratum—a plan for nourishing the unfittest and yet advancing in civilization, no man will ever find."¹²⁸ Spencer was so worried about the survival of the least fit, that he questioned even private charity, although he accepted the legitimacy of such charity because its alternative, allowing the poor to reproduce their kind without guidance from those giving the charity, frightened him. But as he said, "the problem seems insoluble."¹²⁹ There is only one possible answer: *suffering*. We cannot alleviate the misery of the poor. "Each new effort to mitigate the penalties on improvidence, has the inevitable effect of adding to the number of the improvident."¹³⁰ Charity leads to more mouths to feed. "Having, by unwise institutions, brought into existence large numbers who are unadapted to the requirements of social life, and are consequently sources of misery to themselves and others, we cannot repress and gradually diminish this body of relatively worthless people without inflicting much pain. Evil has been done and the penalty must be paid. Cure can come only through affliction. The artificial assuaging of distress by state appliances, is a kind of social opium eating, yielding temporary mitigation at the eventual cost of intenser misery."¹³¹ Ultimately, it would be best even to eliminate private

126. William Graham Sumner, *What Social Classes Owe to Each Other* (Caldwell, Idaho: Caxton, [1883] 1961), p. 30.

127. *Ibid.*, p. 31.

128. Sumner, cited by Richard Hofstadter, *Social Darwinism in American Thought* (rev. ed.; New York: George Braziller, 1959), p. 57.

129. Herbert Spencer, *The Principles of Ethics* (Indianapolis, Indiana: Liberty Classics, [1897] 1978), II, p. 409.

130. *Ibid.*, II, p. 408.

131. *Ibid.*, II, p. 409.

charity. "If left to operate in all its sternness, the principle of the survival of the fittest, which, as ethically considered, we have seen to imply that each individual shall be left to experience the effects of his own nature and consequent conduct, would quickly clear away the degraded."¹³²

Through the competition of individuals in a free market, the greatest possible output will be achieved, and this leads to greater wealth for those who survive, as well as greater strength for the species as a whole. Social Darwinism did not argue that there is not purpose in the universe, or that individuals do not belong to a species. Through voluntary cooperation in production, the division of labor increases each participant's wealth. Yet the higher a species, the more an individual member must live in terms of his own production and skills.¹³³ Man cannot escape this law of nature, Spencer wrote. "Of man, as of all inferior creatures, the law by conformity to which the species is preserved, is that among adults the individuals best adapted to the conditions of their existence shall prosper most, and that the individuals least adapted to the conditions of their existence shall prosper least—a law which, if uninterfered with, entails the survival of the fittest, and the spread of the most adapted varieties. And as before so here, we see that, ethically considered, this law implies that each individual ought to receive the benefits and the evils of his own nature and consequent conduct: neither being prevented from having whatever good his actions normally bring to him, nor allowed to shoulder off on to other persons whatever ill is brought to him by his actions."¹³⁴ This is the methodological individualism of Social Darwinism.

The Social Darwinists had to assume that there is a relationship between the prosperity of the productive individual and the prosperity of the species. In other words, the prosperity of the effective competitor leads to an increase of strength for the species. One obvious and troublesome exception seems to be success at offensive warfare, where the most courageous and dedicated men wind up killing each other, leaving the cowards and weaklings to return home to reproduce. Spencer realized this and specifically denied that offensive wars are a productive form of intra-species competition.¹³⁵ On

132. *Ibid.*, II, p. 408.

133. *Ibid.*, II, p. 278.

134. *Ibid.*, II, p. 33.

135. *Ibid.*, II, pp. 37-39.

the whole, though, individuals who compete successfully will be able to take the society along with them. The human race therefore ensures its survival by permitting the full competition of all its members. The *one* (society) is strengthened by the continual competition of its *parts* (individuals). This is the message of Darwin, the Social Darwinists asked late nineteenth-century readers to believe.

This faith involved confidence in the integrating capacity of the free market. The "cut-throat" competition of individuals leads to social progress. Men need capital to equip them for the battle against nature, Sumner said. Capital is man's great tool of survival. "Undoubtedly the man who possesses capital has a great advantage over the man who has no capital, in the struggle for existence. . . . This does not mean that the one man has an advantage *against* the other, but that, when they are rivals in the effort to get the means of subsistence from Nature, the one who has capital has immeasurable advantages over the other. If it were not so, capital would not be formed. Capital is only formed by self-denial, and if the possession of it did not secure advantages and superiorities of a high order, men would never submit to what is necessary to get it."¹³⁶ This sounds plausible, until you realize that the disadvantaged man *is*, in fact, in direct competition for scarce resources, and if one man gets more of nature's goods out of the earth, then in some circumstances, his neighbor *may* be harmed (e.g., in a drought, when only one man can buy water, or in a famine, when only one of them can buy food). Since the neighbor is also a part of impersonal nature, then one aspect of man's struggle with nature is the defeat of his neighbor in the struggle for limited resources. Why, then, should we be so confident in the law of the survival of the fittest? Can we say for sure that the inheritors of the rich man's capital will use it for the survival of the species, in the same way that evolutionists argue that the heirs of a successful mutant amoeba will have a better chance of surviving? (And even here, is it really the original species that survives, or is the mutant a stepping stone in a new development which will not benefit the non-mutant original species? May not the mutant subspecies wipe out the original species in the competition for survival? Isn't that precisely what the survival of the fittest is all about—not the survival of species, but survival of mutant or genetically better equipped members of a particular species?)

136. Sumner, *Social Classes*, p. 67.

Let us consider an impossibility. What if the members of some lower species a billion years ago recognized the advent of a mutant member? The original members see that the newcomer possesses certain genetic advantages which will enable it to compete more successfully for the limited supply of food, shelter, and space. It will pick off the most desirable females (if it is male). Its progeny will survive, while the progeny of the original members of the older "about-to-be-superseded" population will be less likely to survive. The new member, with its mutant genes, is the first representative of a somewhat different future species. After all, that is what evolution is all about. The members of the older species recognize that whatever comes out of the "loins" of the mutant a million years or billion years down the evolutionary road, the heirs will not be the same species. In fact, if such an heir walked down the path right now, it would be regarded by everyone in the community as an enemy, dangerously different, and fit to be killed in the competition. In short, what would be the most rational response of the original members of the species? Wouldn't the smart thing be the immediate execution of the mutant, that herald of a conquering alien race, that emissary of future foreign conquerors?

The modern evolutionist would say that such a hypothetical scenario is preposterous. Why? Because lower species are ignorant. They do not understand evolution. They do not recognize mutants. Quite true, but man does. Men do know these supposed laws of evolution. How, then, do we convince today's species, *Homo sapiens*, not to kill off the mutants? If the primary form of evolution is now cultural and intellectual—a familiar theme among all evolutionists—then how does the average man protect himself against the "mutant" intellectual? How does the average man defend himself against the gene-splicing experts who proclaim themselves to be capable of altering the course of evolution, who say that some time in the future, they will be able to create a new race of supermen? How do the average members escape Aldous Huxley's *Brave New World*? And if the Social Darwinists are correct, how does the poor man without capital guarantee the survival of his progeny, if he sees that the success of his rich neighbor is a threat to his family's success? *If we recognize the mutants will we kill them?* And if we do, will the race survive? But if we don't, will the race—*Homo sapiens*—survive, or will some mutant heirs win out?

The answer of modern social evolutionists and non-Social

Darwinists is not all that clear. Generally, they have countered the Social Darwinists in the name of a higher reason, a collective human reason. Man is the capstone of an unplanned evolutionary process. He has transcended this undirected process, or at least may be about to transcend it. Through conscious planning, elite members of the race will be able to integrate the plans of all the members into an overarching whole, and this overarching whole will guarantee the survival of all, including the "least fit," who might otherwise be prepared to kill off the "mutants."

What other approach would be better? If you believed that you are a "mutant"—an expert, a rich man, the member of the planning elite—wouldn't you come before the "about-to-be-superseded" masses and tell them that you are "just one of the boys," and "we're all in this together," and that we all need to buckle down "for the sake of humanity"? In other words, wouldn't you devise a social philosophy which would promise to the masses sufficient benefits to guarantee their survival in the competition? Would you continue to shout them down as members of an about-to-be-superseded species, and would you tell them that it is their responsibility to play the game by your ferocious rules or get off the playing field, when getting off the field means death? If you were really a mutant, then the one thing you would not have is numerical superiority. The one thing you could not risk would be a head-on collision with the massive numbers of "about-to-be-superseded" voters, troops, or whatever. You would make your pitch in terms of the greatest good for the greatest number. And you would tell the masses that the greatest good for the greatest number involves playing the game by your rules, which on the surface seem to be democratic, but which in fact are radically elitist. You would deny that blood lines count, or that the feudal principle is valid. You would offer them democracy, bureaucracy, universal free education, welfare redistribution, and so forth. Then you would select only those members of the masses who showed themselves willing and able to compete in terms of the elitist system. You would give a few of them scholarships to the best universities, and you would recruit them into what they believe (and you may even believe) is "the inner circle." You would expand the power of the government, and then you would open high-level positions in that government only to those specially chosen by the ruling power. What you would do, in short, is to construct precisely the statist system which exists today in every major industrial nation—a sys-

tem which in the 1930's was called fascism, but which can also be called socialism, communism, the corporate state, the business-industrial complex, the new federalism, the Programming, Planning and Budgeting System (PPBS), or just to make your real goals explicit, the New World Order. *What you would construct, in the name of man-controlled evolution, is a new Tower of Babel.*

The logic of the Social Darwinists was bound to fail. The "robber barons" (an unfortunate term) of the late nineteenth century might appreciate the ruthless logic of Social Darwinism during the period of their upward mobility, but once they were established as the dominant forces in the market, they would abandon the market's competition in the name of "economic stability." In short, they would prefer monopoly to competition. This is exactly what happened; by 1900, the large American conglomerates began to look to government intervention, all in the name of protecting the consumer, for protection against newer, innovative, "cut-throat" firms.¹³⁷ Almost at the same time, the Progressive movement in the United States began to make itself felt. This political-intellectual movement was run by elitists for elitists, and it proclaimed a philosophy of economic interventionism. The State was now to replace the free market as the engine of evolution. The market was too free, too uncontrolled, too individualistic for the Progressives. They wanted to direct market forces for national, and later international, ends. They lost faith in the progress-producing automatic forces of market competition. The free market was too much like the hypothetical competition of evolutionary change. There was no way to guarantee the survival of humanity if humanity proved less fit. *The external environment had to be manipulated to conform to the needs of mankind*, thereby reversing the purposeless, anti-teleological processes of natural selection. Man, the new source of direction and meaning, must assert his dominance by means other than random competition. Random competition was fine for pre-human, pre-teleological evolution, but it will no longer suffice. The "survival of the fittest" henceforth would mean "the survival of the *fitters*." Planning man (collective man) would fit the environment (including other men) to fit his needs, aspirations, and skills.

One intellectual, perhaps more than any other, was responsible for shifting American evolutionists' outlook from Social Darwinism's

137. Gabriel Kolko, *The Triumph of Conservatism: A Reinterpretation of American History* (New York: Free Press, [1963] 1977); Frederic C. Howe, *Confessions of a Monopolist* (Dearborn, Michigan: Alpine, [1906] 1977).

free market competition to modern statism's central planning and interference with market forces. It was not Karl Marx. It was a long-forgotten government bureaucrat, one of the founders of American sociology, Lester Frank Ward.

Lester F. Ward's Planned State

Lester Frank Ward wrote *Dynamic Sociology* (1883), the first comprehensive sociological treatise written in the United States.¹³⁸ He has been described as the father of the American concept of the planned society.¹³⁹ He was born in Illinois in 1841. His father was an itinerant mechanic and his mother the daughter of a clergyman. He was poor as a youth, but he still found time to teach himself Latin, French, German, biology, and physiology. He was self-disciplined. He joined the U. S. Treasury Department in 1865. He continued his studies at night school, and within five years he had earned degrees in medicine, law, and the arts. In the mid-1870's he worked for the Bureau of Statistics, and it was at this time that he concluded that a study of statistics could lead to the formulation of laws of society, which in turn could be used in a program of social planning. He continued his self-education in the field of paleontology, and in 1883, the year *Dynamic Sociology* appeared, he was appointed chief paleontologist of the U. S. Geological Survey. Finally, after publishing five books in sociology, he was appointed to the chair of sociology in 1906 at Brown University, the same year that he was elected the first president of the newly formed American Sociological Association.¹⁴⁰

Ward's *Dynamic Sociology* was ignored for a decade after its publication, selling only 500 copies.¹⁴¹ In 1897, a second edition was issued, and within three years he was considered one of the leaders in the field. After his death in 1913, his reputation faded rapidly. He had laid the groundwork for American collectivism in the name of progressive evolution, but he was forgotten by the next and subsequent generations.

Ward broke radically with Spencer and Sumner. He had two great enemies, intellectually speaking: the Social Darwinist move-

138. Hofstadter, *Social Darwinism*, p. 69.

139. Clarence J. Karier, *Shaping the American Educational State: 1900 to the Present* (New York: Free Press, 1975), p. 139. Cf. Sidney Fine, *Laissez-Faire and the General Welfare State* (Ann Arbor: University of Michigan Press, 1956), p. 253-64.

140. Ward's biography is supplied by Hofstadter, pp. 68-71.

141. *Ibid.*, p. 70.

ment and all supernatural religion. It is difficult to say which he hated more, although religion received the more vitriolic attacks. *Dynamic Sociology* stands as the first and perhaps the most comprehensive defense of government planning in American intellectual history. It was published about 15 years too early, but when his ideas caught on, they spread like wildfire. In fact, they became the "coin of the realm" in planning circles so rapidly that the source of these ideas was forgotten. Because the book is almost unknown today, and because Ward's concepts and language are so graphic, I am providing an extended summary and analysis of his thought. In *Dynamic Sociology*, we have the heart and soul of modern, post-Darwin social evolutionist philosophy. Ward did not pull any punches. He did not try to evade the full implications of his position. Modern thinkers may not be so blatant and forthright, but if they hold to the modern version of evolution—man-directed evolution—then they are unlikely to reject the basic ideas that Ward sets forth. If you want to follow through the logic of man-directed evolution, you must start with Ward's *Dynamic Sociology*.

Ward was forthright. He made it clear that the enemy is revealed religion, which in the United States in the early 1880's, meant Christianity. In the 82-page introduction to the book, in which he outlined his thesis, Ward announced that those people claiming to have received divine inspiration, and those who have founded religious systems, have been found by modern medicine to be not only "pathological" but to be burdened by "an actually deranged condition of their minds."¹⁴² Because of the power these religious leaders have wielded historically, "we can only deplore the vast waste of energy which their failure to accomplish their end shows them to have made."¹⁴³ (Waste, above all, was what Ward said his system of social planning would avoid.) There is no evidence, he wrote in volume two, that religion provides any moral sanctions whatever. As a matter of fact, we find in the advanced countries that individuals who avow no religion are the true moral leaders. "The greater part of them are found among the devotees of the exact sciences. Yet there is no more exemplary class of citizens in society than scientific men. . . ."¹⁴⁴ Furthermore, the "criminals and the dangerous classes of society are

142. Lester Frank Ward, *Dynamic Sociology; or Applied Social Science, as Based Upon Statistical Sociology and the Less Complex Sciences* (New York: Appleton, [1883] 1907), I, p. 12. (Reprinted by Johnson Reprints and Greenwood Press.)

143. *Ibid.*, I, p. 17.

144. *Ibid.*, II, pp. 281-82.

generally believers in the prevailing faith of the country which they infest. . . ."¹⁴⁵ In any case, morals precede religion. "It is morality which has saved religion, and not religion which has saved morality."¹⁴⁶ Prayer is a social evil, because it is "inconsistent with that independence and originality of mind which accompany all progressive movements."¹⁴⁷ It deters effective action. He then devoted several pages to a demonstration of the anti-progressive influences of all religion, but he provided examples primarily from paganism and animism.¹⁴⁸ He said religion leads to a retreat from this world and a divorce between man and nature.¹⁴⁹ There are two methods for modifying the external world to make it conform to man's needs: science and religion. There is a perpetual conflict between these two methods, and religion will lose this war.¹⁵⁰

Ward's second intellectual enemy was Social Darwinism. The Social Darwinists have misunderstood evolution, he argued. Nature's ways are not man's way. The progress of nature is too slow, and it is so inefficient that earth's resources will not be able to support such slow progress forever. What is needed is "something swifter and more certain than natural selection," and this means man.¹⁵¹ We need a new *teleology*, he argued—the crucial argument of all post-Darwin social and even biological evolutionists. The evolutionary process needs a sure hand to guide it. We must adopt, he said at the end of the second volume, "the teleological method."¹⁵² We must reject Social Darwinism (although he never used this phrase to designate his opponents). Here is *the familiar and absolutely central argument of modern evolution*, predictably formulated first by a social scientist rather than a natural scientist: "Again, it becomes necessary to combat the views of those scientists who, having probed deep enough to perceive how nature works, think they have found the key to the way man should work, thus ignoring the great distinguishing characteristic of intellectual labor. Having found the claims of those who believe that nature is a product of design and outside contrivance to be unsound, they conclude that there is no design or contrivance, and

145. *Ibid.*, II, p. 282.

146. *Ibid.*, II, p. 283.

147. *Ibid.*, II, p. 286.

148. *Ibid.*, II, pp. 287ff.

149. *Ibid.*, II, p. 298.

150. *Ibid.*, II, p. 305.

151. *Ibid.*, I, p. 16.

152. *Ibid.*, II, p. 627.

having seen that results in the organic world are produced through rhythmic differentiations, they infer that results in the superorganic world should be left to the same influences. Nothing could be more false or more pernicious. Scientists of this school, from the weight which their opinions must have, are really doing more to counteract the true tendencies of social progress than those who openly oppose them. All social progress is artificial. It is the consequence of teleological foresight, design, and intellectual labor, which are processes diametrically opposed in principle to the processes of nature. If in learning the law of evolution we must apply it to society, it would have been better to have remained ignorant of that law."¹⁵³ Since the chief opponents of Social Darwinism were orthodox Christians, this statement indicates that Ward hated Social Darwinists' ideas more than he hated orthodoxy. Who was he challenging? Spencer and Sumner. He was attacking Sumner's whole methodology of investigating the conflicts found in nature and then transferring this conflict principle to human society. After all, it was Sumner who wrote in *What Social Classes Owe to Each Other* that "We cannot get a revision of the laws of human life. We are absolutely shut up to the need and duty, if we would learn how to live happily, of investigating the laws of Nature, and deducing the rules of right living in the world as it is."¹⁵⁴ Not so, announced Ward. "Civilization consists in the wholesale and ruthless trampling down of natural laws, the complete subordination of the cosmical point of view to the human point of view. Man revolutionizes the universe. . . . The essential function of Knowledge is to aid him in accomplishing this revolution."¹⁵⁵ Man must exercise dominion.

Ward set forth the basic conflict between the two forms of evolutionary thought. It is a question of properly interpreting the concept of *adaptation*, the central idea in Darwinian evolution. No one has made the issues any clearer. "All progress is brought about by *adaptation*. Whatever view we may take of the cause of progress, it must be the result of correspondence between the organism and the changed environment. This, in its widest sense, is adaptation. But adaptation is of two kinds: One form of adaptation is *passive* or *consensual*, the

153. *Ibid.*, II, p. 628.

154. Sumner, *Social Classes*, p. 14.

155. Ward, II, p. 473.

other form is *active* or *previsional*. The former represents *natural* progress, the latter *artificial* progress. The former results in a *growth*, the latter in a *manufacture*. The one is the *genetic* process, the other a *teleological* process."¹⁵⁶ Ward was clearly a proponent of activism.

How did Ward refute the "passive" evolutionists (Social Darwinists) in the name of Darwin? Ward came up with this fundamental idea: *nature's processes are wasteful*.¹⁵⁷ This is completely in accord with Darwin and Wallace. It was their recognition of the enormous pressure of multiplying populations — a multiplication which pressed upon the limits of the environment — which led to the survival of certain genetically advantaged members of any given species. It was the failure to survive that caught their attention — the millions of extinct species that did not gain the advantage of random genetic changes that would have enabled them to compete successfully in the slowly changing environment, as well as the enormous number of non-survivors in each generation. The idea began with Malthus: the assertion that populations multiply far more rapidly than the food supply necessary to ensure the survival of all members of the multiplying species. Darwin cited Malthus' observation in the first paragraph of Darwin's 1858 essay which appeared in the Linnean Society's *Journal*.¹⁵⁸ Waste is nature's way. And waste was Ward's sworn enemy. "The prodigality of nature is now a well-understood truth in biology, and one that every sociologist and every statesman should not only understand but be able to apply to society, which is still under the complete dominion of these same wasteful laws. No true economy is ever attained until intellectual foresight is brought to bear upon social phenomena. Teleological adaptation is the only economical adaptation."¹⁵⁹ Here was Ward's battle cry against Social Darwinism: *the civil government alone is capable of stamping out unplanned, natural, non-teleological waste*.

Where do we find waste? In natural processes and in the free market. Free trade is enormously wasteful. "Free trade is the impersonation of the genetic or developmental process in nature."¹⁶⁰ He also understood that free trade is the archetype of all free market

156. *Ibid.*, I, p. 72.

157. *Ibid.*, II, p. 494.

158. Charles Darwin, "The Linnean Society Papers," in Appleman (ed.), *Darwin*, p. 83.

159. Ward, I, pp. 74-75.

160. *Ibid.*, I, p. 74; II, p. 398.

processes, and that defenders of the free market, from David Hume and Adam Smith to Spencer and Sumner, had used free trade to defend the idea of market freedom. Therefore, Ward concluded, market freedom is a great social evil. Do people establish private schools to educate children? Stop this waste of educational resources; the State alone should educate children, for the State alone is teleological, truly teleological. Better no education than private education since "no system of education not exclusively intrusted to the highest social authority is worthy of the name."¹⁶¹ Here is a key phrase: *the highest social authority*. If true foresight, true design, and true planning are to be brought into the wasteful world of nature and free markets, the State, as the highest social authority, must bring them. Therefore, "education must be exclusively intrusted to the state. . . ."¹⁶² *The State is the highest social authority in Ward's system.*

There are other forms of economic waste. Take the example of the railroads. "That unrestricted private enterprise can not be trusted to conduct the railroad system of a rapidly growing country, may now be safely said to be demonstrated."¹⁶³ The State should operate them, as is done in Europe. Ward was America's first sociologist—though hardly the last—who called for the total sovereignty of the State in economic affairs. Here is his reasoning. His reasoning is shared, to one extent or another, by modern evolutionists. "While the railroad problem is just now the most prominent before the world, and best exemplifies both the incapacity of private individuals to undertake vast enterprises like this, and the superior aggregate wisdom of the state in such matters, it is by no means the only one that could be held up in a similar manner and made to conform to the same truth."¹⁶⁴ Ward's next paragraph presents his basic conclusion: "Competition is to industry what 'free trade' is to commerce. They both represent the wasteful genetic method, destroying a large proportion of what is produced, and progressing only by rhythmic waves whose ebb is but just less extensive than their flow."¹⁶⁵ But is the State truly economical? Unquestionably! "Now, of all the enterprises which the state has thus appropriated to itself,

161. *Ibid.*, II, p. 572.

162. *Idem.*

163. *Ibid.*, II, p. 576.

164. *Ibid.*, II, p. 578.

165. *Idem.*

there is not one which it has not managed better and more wisely than it had been managed before by private parties.”¹⁶⁶ These include transportation, communications, and education. The greater the profitability of any private enterprise, the more need there is for State control, he concluded.¹⁶⁷ In fact, *the purpose of State interference is to make business unprofitable!* For instance, the State-operated railroads offer lower rates than private firms did, “which, from the standpoint of the public, is the kernel of the whole matter. The people should look with suspicion upon extremely lucrative industries, since their very sound financial condition proves that they are conducted too much in the interests of the directors and stockholders and too little in that of the public.”¹⁶⁸ Ward then set forth the guiding principle of government bureaucrats and State-operated businesses, from his day to ours: *losses testify to efficiency*. “The failure of the state to make them lucrative should also be construed as an evidence of the integrity and proper sense of duty of the officers of the state.”¹⁶⁹ (Yes, he really wrote this. I am not quoting it out of context. It is the end of the paragraph, and he stated in the next paragraph that it is a fact “that whatever the state does is usually better, if not more economically, done than what is done by individuals.” And just to make sure his readers got the picture, he wrote on the same page: “It might similarly be shown that all the functions of government are usually performed with far greater thoroughness and fidelity than similar functions intrusted to private individuals.”)

Despite his praise of the State, he admitted that in his day, the State had not advanced sufficiently to become truly scientific. In the introduction to his book he freely admitted that governments have always avowed that they were working for the benefit of mankind, but government “has almost without exception failed to realize the results claimed. . . .”¹⁷⁰ In fact, Ward went so far as to write this amazing paragraph: “Let us admit, however, as candor dictates, that almost everything that has been said by the advocates of *laissez faire* about the evils of government is true, and there is much more that has not been said which should be said on the same subject. Let us

166. *Ibid.*, II, p. 579.

167. *Ibid.*, II, p. 580.

168. *Ibid.*, II, pp. 581-82.

169. *Ibid.*, II, p. 582.

170. *Ibid.*, I, p. 31.

only take care not to admit the principle in its abstract essence, which is the only hope there is for the ultimate establishment of a teleological progress in society."¹⁷¹ Why this failure in practice (in volume I, anyway)? Answer: the failure of legislators to understand the laws of society, which are "so deep and occult that the present political rulers have only the vaguest conception of them. . . ." ¹⁷² The practical answer is to train legislators in the laws of sociological science. "Before progressive legislation can become a success, every legislature must become, as it were, a polytechnic school (vol. II, p. 252), a laboratory of philosophical research into the laws of society and of human nature (vol. II, p. 249). No legislator is qualified to propose or vote on measures designed to affect the destinies of millions of social units until he masters all that is known of the science of society. Every true legislator must be a sociologist, and have his knowledge of that most intricate of all sciences founded upon organic and inorganic science."¹⁷³ Not the philosopher-king, as Plato had hoped for, but the *sociologist-legislator*, will bring true teleology into the affairs of man.

This brings us to the question of *elites*. Ward's conception of teleology requires scientific planning and scientific legislation. There must be experts who can provide the necessary teleological leadership. We find in Ward's book a characteristic dualism between the capacities of the elite and the capacities of the masses. The elite are unquestionably superior. Ward did not say that they are genetically superior, but they are nevertheless superior. Yet the masses outnumber the elite. What the elite must do, then, to gain the confidence of the masses whose lives will be directed by the elite, is to proclaim their devotion to the needs of the masses. What twentieth century statists of all shades of opinion have proclaimed as their ultimate goal, Ward set forth in *Dynamic Sociology*. And Ward's commitment to the elite as a class is also their commitment.

The first step is to assert *the beneficence of the elite*. They are working for us all. They are the true altruists. "It is only within a few centuries that such [altruistic] sentiments can be said to have had an existence in the world. They now exist in the breasts of a comparatively few, but it is remarkable how much power these few have

171. *Ibid.*, I, pp. 54-55.

172. *Ibid.*, I, p. 55.

173. *Ibid.*, I, p. 37.

been able to wield."¹⁷⁴ You see, "The normal condition of the great mass of mankind, even in the most enlightened states, is one of complete indifference to the sufferings of all beyond the circle of their own immediate experience. In moral progress, almost as much as in material progress, it is a relatively insignificant number of minds that must be credited with the accomplishment of all the results attained."¹⁷⁵ This is the grim reality: "A very few minds have furnished the world with all its knowledge, the general mass contributing nothing at all."¹⁷⁶ However, we need not worry about this problem today. Public education is overcoming this uneven distribution of knowledge.¹⁷⁷ In fact, public education is making this distribution of knowledge far easier, since this process is "a comparatively simple and easy one."¹⁷⁸ In other words, the elitist planners, best represented by scientists and teachers, are raising the level of knowledge and consciousness possessed by the masses. The elite planners are really working to produce *a new evolution*, and the masses will be allowed to participate in this elevation of humanity. They will not perish in a non-teleological, natural evolutionary leap. There are two ways of elevating man: 1) scientific propagation of human beings (artificial selection) and 2) rational change of environment, which means an increase of human knowledge.¹⁷⁹ "The amount of useful knowledge possessed by the average mind is far below its intellectual capacity. . . ."¹⁸⁰ This is a key to evolutionary advance: "That the actual amount of such knowledge originated by man, though doubtless still below his ability to utilize it, is sufficient, if equally distributed, to elevate him to a relatively high position, and to awaken society to complete consciousness."¹⁸¹

The *public schools* are therefore fundamental in the teleological evolutionary process. *They are the change agents of the new evolution.* Competitive private schools are evil.¹⁸² The State must have an educational monopoly. "The system of private education, all things considered, is not only a very bad one, but, properly viewed, it is absolutely worse than none, since it tends still further to increase the inequality in the existing intelligence, which is a worse evil than a general state of intelligence would be."¹⁸³ Fortunately, he argued, private education has no academic standards, since parents control

174. *Ibid.*, II, p. 448.175. *Idem.*176. *Ibid.*, II, p. 485.177. *Ibid.*, II, pp. 597-98.178. *Ibid.*, II, p. 486.179. *Ibid.*, II, p. 487.180. *Idem.*181. *Idem.*182. *Ibid.*, II, p. 584.183. *Ibid.*, II, p. 588.

or at least heavily influence private education. Therefore, with respect to private education, "The less society has of it the better, and therefore its very inefficiency must be set down as a blessing."¹⁸⁴ The radical elitism here should be obvious, but Ward was kind enough to spell out the implications (something later elitist evolutionists have not always been willing to do). "Lastly, public education is immeasurably better for society. It is so because it accomplishes the object of education, which private education does not. What society most needs is the distribution of the knowledge in its possession. This is a work which can not be trusted to individuals. It can neither be left to the discretion of children, of parents, nor of teachers. It is not for any of these to say what knowledge is most useful to society. No tribunal short of that which society in its own sovereign capacity shall appoint is competent to decide this question."¹⁸⁵ Are there to be teachers? Yes, but very special kinds of teachers, namely, teachers totally independent from "parents, guardians, and pupils. Of the latter he is happily independent. This independence renders him practically free. His own ideas of method naturally harmonize more or less completely with those of the state."¹⁸⁶ True freedom, true independence, is defined as *being in harmony with the State*. This, of course, is the definition of freedom which Christianity uses with respect to a man's relation to God.

Was Ward a true egalitarian, a true democrat? Did he really believe that the masses would at last reach the pinnacle of knowledge, to become equal with the scientific elite? Of course not. Here is the perennial ambivalence of the modern evolutionists' social theory. Society needs planning and direction, and "society" is mostly made up of individuals, or "the masses." So *they* need direction. They need guidance. They cannot effectively make their own plans and execute them on a free market. *Teleology is too important to be left to the incompetent masses, acting as individuals on a free market*. They simply are not intelligent enough. "Mediocrity is the normal state of the human intellect; brilliancy of genius and weight of talent are exceptional. . . . This mass can not be expected to reach the excessive standards of excellence which society sets up. The real need is to devise the means necessary to render mediocrity, such as it is, more comfort-

184. *Idem*.

185. *Ibid.*, II, p. 591.

186. *Ibid.*, II, p. 590. Cf. Ward, "Education," (1871-73), in Karier (ed.), *Shaping the American Educational State*, pp. 145-59.

able.”¹⁸⁷ (Aldous Huxley, brother of Sir Julian Huxley, and grandson of Thomas Huxley, saw this clearly. He wrote *Brave New World* to describe the techniques usable by some future State to “render mediocrity, such as it is, more comfortable”: drugs, orgiastic religion, and total central control.)

Then the goal of total educational equality is really a myth. Why, then, the emphasis on public education? *Control!* Teachers are to serve as the new predestinators. “One of the most important objects of education, thus systematically conducted, should be to determine the natural characteristics of individual minds. The real work of human progress should be doubled with the same outlay of energy if every member of society could be assigned with certainty to the duty for whose performance he is best adapted. . . . Most men are out of place because there has been no systematic direction to the inherent intellectual energies, and the force of circumstances and time-honored custom have arbitrarily chalked out the field of labor for each.”¹⁸⁸ Ward’s next paragraph tells us how we can overcome this lack of external directions. “The system of education here described affords a means of regulating this important condition on strictly natural principles. . . . A school should be conducted on scientific principles.” Teachers can discover “the true character of any particular mind,” and then a safe conclusion can be drawn “as to what mode of life will be most successful, from the point of view of the interest both of the individual and of society.”¹⁸⁹

There is another important function of public education, and indeed of all public information services: *the total control of information and its distribution*. We cannot make progress compulsory, Ward said. “No law, no physical coercion, from whichever code or from whatever source, can compel the mind to discover principles or invent machines. . . . To influence such action, other means must be employed.”¹⁹⁰ Men act in terms of their opinions, “and without changing those opinions it is wholly impossible perceptibly to change such conduct.”¹⁹¹ Here is the planner’s task: “Instill progressive principles, no matter how, into the mind, and progressive actions will

187. *Ibid.*, II, p. 600.

188. *Ibid.*, II, pp. 623-24.

189. *Ibid.*, II, p. 624.

190. *Ibid.*, II, p. 547.

191. *Idem.*

result.”¹⁹² But there are pitfalls. “The attempt to change opinions by direct efforts has frequently been made. No one will now deny that coercion applied to this end has been a signal failure.”¹⁹³ Is there some answer to this dilemma? Can the planner find a way to alter men’s opinions without using coercion? Yes; *the planner must restrict access to competing ideas*—another form of evil competition. “There is one way, however, in which force may and does secure, not a change of existing opinion, but the acceptance of approved beliefs; but this, so far from weakening the position here taken, affords a capital defense of it. The forcible suppression of the utterance or publication in any form of unwelcome opinions is equivalent to withholding from all undetermined minds the evidence upon which such views rest; and, since opinions are rigidly the products of the data previously furnished the mind, such opinions cannot exist, because no data for them have ever been received.”¹⁹⁴ In other words, another key to social progress is *systematic censorship*. “It is simply that true views may as easily be created by this *method of exclusion* as false ones, which latter is the point of view from which the fact is usually regarded. The more or less arbitrary exclusion of error, *i.e.*, of false data, is to a great degree justifiable, especially where the true data supplied consist of verified experiences, and all the means of re-verifying them are left free. But the same end is practically attained by the intentional supply, on a large scale and systematically carried out, of true data without effort to exclude the false. This, however, is the essence of what is here meant by education, which may be regarded as a systematic process for the manufacture of correct opinions. As such, it is of course highly inventive in its character, and the same may be said of all modes of producing desired belief by the method of exclusion.”¹⁹⁵ *The public schools guarantee that competing data are excluded.* “Assume an adequate system of education to be in force, and the question of the quantity and quality of knowledge in society is no longer an open one.”¹⁹⁶ What about the freedom of the teacher? Basically, there is none. “To the teacher duly trained for his work may be left certain questions of method, especially of detail; but even the method must be in its main features unified with a view to

192. *Idem.*

193. *Idem.*

194. *Idem.*

195. *Ibid.*, II, p. 548.

196. *Ibid.*, II, p. 549.

the greatest economy in its application. This must necessarily also be the duty of the supreme authority."¹⁹⁷ As Ward said, "The state education implied in the foregoing remarks is, of course, the ideal state education."¹⁹⁸ Of course it is, *if* you are a teleological evolutionist.

The elites who control the education system are the agents of social change and progress. "The knowledge which enables a very few to introduce all the progressive agencies into civilization tends not in the least to render the mass of mankind, though possessing equal average capacity for such service, capable of contributing any thing to that result."¹⁹⁹ Then what are the *masses*, really? "In contrast to this small, earnest class, we behold the great swarming mass of thoughtless humanity, filled with highly derivative ideas vaguely and confusedly held together; eagerly devouring the light gossip, current rumor, and daily events of society which are intensely dwelt upon, each in itself, and wholly disconnected from all others; entertaining the most positive opinions on the most doubtful questions; never looking down upon a pebble, a flower, or a butterfly, or up at a star, a planet, or a cloud; wholly unacquainted with any of the direct manifestations of nature, . . . passing through a half-unconscious existence with which they keep no account, and leaving the world in all respects the same as they found it."²⁰⁰

Ward understood quite well that the self-proclaimed scientist and change agent would anger the masses—at least the masses in 1883—and they would ridicule his pretensions. "The unscientific man looks upon the scientific man as a sort of anomaly or curiosity. . . . The man of science is deemed whimsical or eccentric. The advanced views which he always holds are apt to be imputed to internal depravity, though his conduct is generally confessed to be exemplary."²⁰¹ How does the man of science, the elite determiner of the next evolutionary social advance, rid himself of guilt about his feelings? And perhaps more important, how should he deflect the suspicion concerning his intentions among these masses of emotional incompetents? One very good way is to tell them that you are on *their* side! Ward did. "It will be a long time before the world will

197. *Ibid.*, II, p. 591.

198. *Idem.*

199. *Ibid.*, II, p. 535.

200. *Ibid.*, II, p. 505.

201. *Ibid.*, II, p. 503.

recognize the fundamental truth that it is not to apotheosize a few exceptional intellects, but to render the great proletariat comfortable, that true civilization should aim."²⁰² It has been the self-imposed task of the believers in statist planning by elites to buy off the proletariat by making proletarians comfortable—or promising to make them comfortable soon, *just as soon as the evolutionary leap of social being takes place*—throughout the twentieth century.

Ward, like all evolutionists, believed in the covenant of dominion, or rather *a* covenant of dominion. That covenant of dominion is knowledge. Man elevates himself through knowledge. *Man is therefore saved by knowledge*. This is Satan's temptation: ye shall be as gods, if ye eat of the tree of the knowledge of good and evil. Ward wrote: "We see in this brief sketch what a dominion man exercises over all departments of nature, and we may safely conclude that he has not yet reached the maximum limit of his power in this direction. But that power is wholly due to his intellectual faculty, which has guided his act in devising indirect means of accomplishing ends otherwise unattainable."²⁰³ Men are not innately evil. "Mankind, as a whole, are honest."²⁰⁴ Man's problem is not sin; it is ignorance. "If all the people *knew* what course of action was for their best interest, they would certainly pursue that course."²⁰⁵ It would be possible, through education, to eliminate crime. "The inmates of our prisons are but the victims of untoward circumstances. The murderer has but acted out his education. Would you change his conduct, change his education."²⁰⁶

What we must do, then, is to *raise society's consciousness*. Consciousness, not conscience, is the problem. "After dynamic opinions of the universe, of life, and of man have been formed, it is easy to rise to the position from which society can be contemplated as progressive and subject to a central control. The duties of society toward itself are manifest enough so soon as its true character can be understood. . . . The great problem remains how to bring society to consciousness. Assuming it to have been brought to consciousness, the dynamic truths with which it must deal are comparatively plain. The

202. *Ibid.*, II, p. 368.

203. *Ibid.*, II, p. 385.

204. *Ibid.*, II, p. 508.

205. *Ibid.*, II, p. 238.

206. *Ibid.*, II, p. 241.

mouthpiece of a conscious society is the legislature."²⁰⁷ In short, *the visible symbol of a fully conscious society is the self-conscious divinity of the State*. Society must agree about any particular course of action, but once unanimity of opinion is reached—and it is the function of public education to promote it—then debate ends. "Let there be no excuse for any one to debate a question which has at any time or place, or in any manner, been once definitively answered."²⁰⁸ Like the laws of the Medes and the Persians, once the divine ruler has made a law, it must not be broken (Dan. 6:8, 12).

Does this mean that democracy will allow all men to have a veto power over the decisions of the rulers? Of course not. The elite must continue to rule. "Deliberative bodies rarely enact any measures which involve the indirect method. If individual members who have worked such schemes out by themselves propose them in such bodies, the confusion of discordant minds, coupled with the usual preponderance of inferior ones, almost always defeats their adoption. Such bodies, miscalled deliberative, afford the most ineffective means possible of reaching the maximum wisdom of their individual members. A radical change should be inaugurated in the entire method of legislation. By the present system, not even an average expression of the intelligence of the body is obtainable. The uniform product of such deliberations falls far below this average. True *deliberation* can never be reached until all partisanship is laid aside, and each member is enabled to work out every problem on strictly scientific principles and by scientific methods, and until the sum total of truth actually obtained is embodied in the enactment. The real work can not be done in open session. The confusion of such assemblies is fatal to all mental application. There need be no open sessions. The labor and thought should be performed in private seclusion, the results reached by others should in this way be calmly compared by each with those reached by himself, and in a general and voluntary acquiescence by at least a majority in that which really conforms with the truth in each case should be deliberately embodied as law. The nature of political bodies should be made to conform as nearly as possible with that of scientific bodies. . . ."²⁰⁹ What, then, becomes of unanimity, of open covenants openly arrived

207. *Ibid.*, II, p. 467.

208. *Ibid.*, II, p. 407.

209. *Ibid.*, II, p. 395.

at (to cite President Woodrow Wilson's unheeded principle of diplomacy)? It should be obvious. When Ward said that he wanted unanimity, he really meant *scientific planning without opposition*. "The legislature must, therefore, as before maintained, be compared with the workshop of the inventor."²¹⁰ There is no opposition to the inventor in his workshop, it should be pointed out.

Scientists must lead the legislators. Men of informed opinion must tell them what needs to be done. Then the legislators can pass laws that will compel the masses to follow the lead of the scientists into a new realm of "comfort." Ward was quite explicit about this: "The problem is a difficult and complicated one. While legislators as a class are far behind the few progressive individuals by whose dynamic actions social progress is secured, it is also true that, as a general rule, they are somewhat in advance of the average constituent, sometimes considerably so. This is seen in many quasi-scientific enterprises that they quietly continue, which their constituents, could they know of them, would promptly condemn. The question, therefore, arises whether the legislators may not find means, as a work of supererogation, to place their constituents upon the highway to a condition of intelligence which, when attained, will in turn work out the problem of inaugurating a scientific legislature and a system of scientific legislation."²¹¹ With these words, he ended chapter XI, "Action." (The *Oxford English Dictionary* defines "supererogation" as "The performance of good works beyond what God commands or requires, which are held to constitute a state of merit which the Church may dispense to others to make up for their deficiencies." Ward may have known what he was writing; the State, as the dispenser of salvation, needs saints to build up merit to pass along to the proletariat, who can do nothing by themselves. Scientists and legislators are the saints.)

When Ward wrote "society," he meant the State. "When we speak of society, therefore, we must, for all practical purposes, confine the conception to some single automatic nation or state or, at the widest, to those few leading nations whose commercial relations have to a considerable extent cemented their material interests and unified their habits of thought and modes of life." Yet even this is too loose a definition, he wrote. "Only where actual legislation is con-

210. *Ibid.*, II, p. 396.

211. *Ibid.*, II, p. 399.

ducted can there be said to exist a complete social organism. Wherever any such complete social organism exists, it is possible to conceive of true scientific legislation."²¹² *Where there is no scientific legislation, therefore, there is no true society.*

There was one, and only one, area of life where *laissez faire* was said to be legitimate. That was the area we call *morality*. Morality "is a code which enforces itself, and therefore requires no priesthood and no manual. And strangely enough, here, where alone *laissez faire* is sound doctrine, we find the *laissez faire* school calling loudly for 'regulation.'"²¹³ For example (we could easily have predicted this example), "It is a remarkable fact that loose conduct between the sexes, which is commonly regarded as the worst form of immorality, seems to have no influence whatever upon the essential moral condition of those races among whom it prevails."²¹⁴ (When J. D. Unwin's studies showing the conflict between polygamy and cultural progress were published in the 1920's and 1930's, they were systematically ignored. The fornicators and adulterers who are the self-proclaimed scientific elite prefer not to have this dogma of the irrelevance of adultery shattered by historical research.²¹⁵)

Ward rejected the non-teleological (personal and individual teleology) Darwinism of the Social Darwinists. He rejected entirely their thesis that social progress must involve personal misery and competition. That is the way of nature, not mankind, Ward argued. A proper society, meaning State, "aims to create conditions under which no suffering can exist." This may involve the coercive redistribution of wealth by the State, for a good social order "is ready even to sacrifice temporary enjoyment for greater future enjoyment—the pleasure of a few for that of the masses."²¹⁶ Sumner was correct when he described this sort of social policy: "The agents who are to direct the State action are, of course, the reformers and philanthropists. Their schemes, therefore, may always be reduced to this type—that A and B decide what C shall do for D. . . . I call C the Forgotten Man, because I have never seen that any notice was taken

212. *Ibid.*, II, p. 397.

213. *Ibid.*, II, p. 373.

214. *Ibid.*, II, p. 455.

215. J. D. Unwin, "Monogamy as a Condition of Social Energy," *The Hibbert Journal*, XXV (Winter, 1927); reprinted in *The Journal of Christian Reconstruction*, IV (1977-78); *Sex and Culture* (Oxford University Press, 1934).

216. *Ibid.*, II, p. 468.

of him in any of the discussions."²¹⁷ Ward called citizen C "the rich," and let it go at that. His intellectual heirs have not improved much on this strategy, especially when they run for public office.

Let us understand precisely what Ward was trying to create: *a totalitarian State*. As he wrote, "the present empirical, anti-progressive institution, miscalled the art of government, must be transformed into a central academy of social science, which shall stand in the same relation to the control of men in which a polytechnic institute stands to the control of nature."²¹⁸ He was a defender of despotism.

Is it surprising, then, that he should have been elected the first president of the American Sociological Association?

There is one final feature of his system which bears mentioning. The basis of Darwin's analysis of evolution through natural selection was Malthus' observation that species reproduce too fast for their environments. Then only a few will survive, concluded Darwin and Wallace. Ward accepted this as it pertained to nature. But man is a new evolutionary life form, and man's ways are not nature's ways. Man's successful heirs are not supposed to be those individuals who by special genetic advantages or inherited wealth will be able to multiply their numbers. Man, unlike the animals, advances by means of State planning. If society is to prevent suffering, as Ward said is necessary, then the multiplication of those who receive charity must be prohibited. (This was the same problem that baffled Spencer.) "This fact points to the importance of all means which tend to prevent this result."²¹⁹ Three children are probably the maximum allowable number. "In an ignorant community this could not be enforced, but in a sufficiently enlightened one it could and would be."²²⁰ In short, "What society needs is restriction of population, especially among the classes and at the points where it now increases most rapidly."²²¹ But who are these classes? The masses, of course, since the present moral code (1883) of having large families "is tacitly violated by intelligent people, but enforced by the ignorant and the poor, a state of things which powerfully counteracts all efforts to enlighten the masses."²²² The State needs to provide universal

217. Sumner, *Social Classes*, p. 22.

218. Ward, II, pp. 251-52.

219. *Ibid.*, II, p. 307.

220. *Ibid.*, II, p. 465.

221. *Ibid.*, II, p. 466.

222. *Ibid.*, II, p. 465.

education to the masses to uplift them, but there are so many that the State's resources are strained to the limit. The answer: *population control*. In short, in Ward's version of the dominion covenant, "be fruitful and multiply" must be abolished, and the State, not individuals acting in voluntary cooperation, is to exercise dominion over nature. The rise of the family planning movement in Ward's era, and the appearance of zero population growth advocates in the mid-1960's, can be explained by means of the same arguments used in understanding Ward's humanistic version of the dominion covenant.

What Ward proclaimed in the name of man-directed evolution is what Rushdoony has described as the society of Satan. Rushdoony's four points apply quite well to the outline of the society sketched by Ward. "First, it is held that man is not guilty of his sin, not responsible for his lawlessness, for the sources of his guilt are not personal but social and natural. . . . Second, a society is demanded in which it is unnecessary for man to be good. Everything is to be provided so that man may attain true blessedness, a problem-free life. . . . Third, a society is demanded in which it is impossible for men to be bad. This is a logical concomitant of the second demand. It is a demand that there be no testing. . . . Fourth, a society is demanded in which it is impossible for men to fail. There must be no failure in heaven or on earth. All men must be saved, all students must pass, all men are employable, all men are entitled to rights. As Satan stated it baldly in the wilderness, giving in short form the program for the 'good' State, 'If thou be the Son of God, command that these stones be made bread.' Make it unnecessary for man to work, unnecessary for man to be good, impossible for man to be bad. Provide man with such a cushion of social planning, the temptations asserted, that man might neither hunger nor thirst, work or suffer, believe or disbelieve, succeed or fail, be good or evil. Let his every need be met and his world ordered in terms of his wishes. Let it be a trouble-free world, cradle-to-grave security; let there be no failure. No failure is tolerable, and none recognized, save one, God's, for having dared to create a world in which we can suffer for our sins, in which we can be tried and tested, in which we can be good or evil, in which we can and must be men. Let us through communism, socialism or our welfare state construct a world better than God's, a world in which failure is impossible and man is beyond good and evil."²²³

223. R. J. Rushdoony, "The Society of Satan," (1964); reprinted in *Biblical Economics Today*, II (Oct./Nov., 1979), p. [2].

What are some of the basic themes of the society of Satan, the evolutionist's new paradise, as described by Ward? What are the principles—cosmological principles—by which such a society is deduced? Here is a brief summary:

- No teleology (purpose) in the natural realm (I, 57; II, 32)
- Human consciousness is teleological (II, 9)
- Human teleology is opposed to *laissez faire* (I, 55)
- Man now directs nature and evolution (I, 29; II, 89)
- The State directs social evolution (I, 37)
- The State is society (II, 397)
- Science is the basis of progress (II, 497, 507)
- A scientific elite directs progress (II, 504, 535)
- The masses are thoughtless (II, 506, 600)
- Masses can be taught (II, 598, 602)
- The State must monopolize education (II, 572, 589, 602)
- Censorship is mandatory (II, 547)
- Nature wastes; man should not (II, 494)
- Competition is wasteful (I, 74; II, 576, 584)
- Competition is *laissez faire* (I, 74)
- Mankind is honest (II, 508)
- Man's problem is lack of knowledge (II, 238)
- Ignorance produces crime (II, 241)
- Dominion is by means of the intellect (II, 385)
- Government is to be founded on secrecy (II, 395)
- Dissent can be illegitimate (II, 407)
- Morality is strictly an individual matter (II, 373)
- Scientists are selfless (II, 583)
- Believers in God's teleology are immoral (II, 508)
- State administration is almost always better (II, 579)
- Profitless management is honest management (II, 582)
- Population control is mandatory (II, 307, 465)
- The masses must be made comfortable (II, 368)
- The social goal is zero suffering (II, 468)

The society of Satan is the kingdom of autonomous man. This is the continuing theme of post-Darwin evolutionists. Again, let us see what Ward has to say: "In his pursuit of information with regard to the nature of the universe and his position in it, he must be deterred by no fears. If he can evade the action of natural laws, he has no other source of apprehension. Nature has neither feeling nor will, neither consciousness nor intelligence. He can lay open her bowels and

study her most delicate tissues with entire impunity. Except as the great creative mother of all things, she is absolutely passive toward all sentient beings. Man's right to probe and penetrate the deepest secrets of the universe is absolute and unchallenged. It is only he himself who has ever ventured to question it. . . . He has been the servant of Nature too long. All true progress has been measured by his growing mastery over her, which has in turn been strictly proportional to his knowledge of her truths."²²⁴ Man is autonomous, the rightful master over nature. Here is autonomous man's self-assigned dominion covenant: "This is why, in the second place, man should assume toward Nature the attitude of a master, or ruler."²²⁵ Man can seek *exhaustive knowledge* and therefore *total power*. He can claim the right to attain the attributes of God.

The universe was not created by God. It was not designed for man. Man must be thrown into the mud of insignificance only for a moment—to sever him from the idea of a personal God—and then he can become master of the earth. Satan also tempted Jesus along these same lines: Worship me, and all this world shall be yours (Luke 4:7). Ward allowed man only one brief paragraph to grovel in the mud of insignificance: "Anthropocentric ideas are essentially immoral. They puff their holders with conceit and arrogance, and lead to base, selfish abuses of power, warped by interest and passion. The old geocentric theory had the same tendency. All narrow views about nature not only contract in the mind, but dwarf and disfigure the moral nature of man. It is only when the eyes commence to open to the true vastness of the universe and the relative insignificance of human achievements, that it begins to be thought not worth while to boast, to oppress, or to persecute."²²⁶ And once freed of God and meaning—personal significance which is established in terms of the decree of God and man's status as God's image-bearer—then it is up, out of the mud, and on to the stars. (It is a familiar theme in science fiction to speculate that man, through technology, will overcome the last remaining barrier of nature, the speed of light, to guarantee his dominion of the entire universe, and not just the solar system and those stars close enough to make sub-speed-of-light travel conceivable. Man will conquer the last remaining uniformitarian limit, since it has achieved its goal: shoving God out of the universe of time

224. Ward, II, pp. 12-13.

225. *Ibid.*, II, p. 13.

226. *Ibid.*, II, p. 508.

and space. Man will direct the processes of time.)

Conclusion

Man cannot escape the dominion covenant. It is inherent to his being. He can only modify it. The evolutionists also operate in terms of Genesis 1:28. Let us reread the words: "And God blessed them, and God said unto them, Be fruitful, and multiply, and replenish the earth, and subdue it: and have dominion over the fish of the sea, and over the fowl of the air, and over every living thing that moveth upon the earth." The entire scheme of modern post-Darwin evolution is built upon the premise that animals do, in fact, multiply to the limits of their environments. And post-Darwin scientists also argue that by means of mastering the scientific laws of evolution, man can have dominion over the creation, including other men. When men start talking about "Man taking control of man," as the C. S. Lewis character warned in *That Hideous Strength*, watch out: some men are planning to take control of others. But now that man has achieved mastery, or is about to, he must stop reproducing so fast, stop multiplying, so that he can demonstrate to himself that he is no longer governed, as the animals are, by the Malthusian law of population growth. Man must not fulfill this part of the covenant of dominion, for a process of compound population growth points inevitably to the limits of the environment, which is finite. It means that man will face either the limits to population growth—a sign of his own finitude—or else the limit of time, namely, the day of judgment. Both limits thwart autonomous, evolution-directing man. Man must thereby voluntarily limit his population, meaning that some men—the elite—will have to pass laws limiting the population growth of the stubborn, traditional, uneducated masses. Man must exercise dominion through genetic engineering, power politics, centralized economic planning, public education, and other techniques of control. He must act as God does, not multiplying but directing, not pressing against the limits of a finite environment, but mastering it for his own ends. And, to paraphrase Lewis, when you hear men speak about mastering the environment for the benefit of man, watch out: it will be the confiscation of the productivity of the environment for the uses of the elitist planners.

The overwhelming intellectual success of the philosophy of interventionism has been due, in large part, to the greater consistency the logic of interventionism has with post-Darwin evolutionism. The

free market economists like Mises and Hayek, who still cling to evolutionism, have suffered an academic fate similar to that suffered by the Social Darwinists, namely, their case for the reliability of spontaneous market forces cannot compete with the case for man's directing hand through State power. Men want meaning, purpose, and confidence in their own survival. While Mises and Hayek reject the old "dog eat dog, man eat man" philosophy of Social Darwinism, they have not succeeded in convincing the modern evolutionists of the validity of the competitive, unhampered market. That sort of institutional arrangement does not seem to be in synchronization with the modern evolutionists' vision of man-directed, elite-directed, teleological evolution. Israel Kirzner, Mises' disciple, can write his theory of capital in terms of teleology. He can say that "The principal point to be emphasized is that capital goods, thus defined, are distinguished in that they fall neatly into place in a *teleological* framework."²²⁷ He is speaking of *men's* teleological frameworks, however, not Man's teleological framework.

Modern economists, including Kirzner and the "Austrian School" economists, want the luxury of using statistical aggregates in their work, and Kirzner has demonstrated that the methodological presupposition undergirding all economic aggregates is the premise, stated or unstated, that there exists a single planning agent, with a single integrated plan. The quest for that single planning agent, with his single integrated plan, is enhanced when we operate in terms of the assumption, stated or unstated, that this planning mind does, in fact, have to exist. Couple this quest, whether implicit or explicit, with modern evolutionism's longing for a new evolution—the emergence of a new personal sovereign who can offer this impersonal, meaningless universe a comprehensive plan with comprehensive meaning—and you have created serious problems for the defenders of the free market. The case for the free market as an impersonal, spontaneous, unplanned institution which can nevertheless successfully integrate the multitudinous plans of acting men, is generally at odds with the intellectual spirit of the twentieth century. When men are seeking cosmic purpose, having been told that collective mankind is capable of imposing such purpose by means of scientific planning and even genetic engineering, they are less likely to abandon this quest in exchange for the free market's decentralized planning

227. Israel Kirzner, *An Essay on Capital* (New York: Augustus Kelley, 1966), p. 38.

mechanism, its freely fluctuating price system, and its system of economic calculation for private individuals. The price that post-Darwin evolutionists are asked to pay, religiously speaking, is simply too high. *In short, the defenders of the free market have priced themselves out of secular humanism's marketplace of ideas.*

This is not to say that every modern economist is self-consciously a defender of the kind of planning outlined by Lester Frank Ward. Not very many economists are *that* confident about centralized economic planning. This is also not to say that the majority of men, or even a majority of trained social scientists, understand fully the sleight-of-hand operation of modern evolutionism, with its shift from purposeless origins to man-directed evolutionary process. Nevertheless, the climate of opinion in the twentieth century is strongly influenced by this sleight-of-hand operation, and its conclusions regarding the sovereignty of planning over collective mankind have permeated the thinking of those who probably do not fully understand the epistemological and metaphysical presuppositions of these conclusions. The fact is, autonomous men want their godhead unified, and the hydra-headed, impersonal, spontaneous institution we call the free market is not sufficiently conscious and purposeful to satisfy the longings of modern men for cosmic personalism, meaning humanism's version of cosmic personalism, meaning deified Man.

In conclusion, we cannot hope to succeed in making a successful case for the free market by using the logic of Kant, the logic of Darwin, or the logic of Mises, Hayek, Friedman, and other Kantian Darwinists. We cannot hope to convert modern evolutionists to the free market, if we ground that defense in terms of a less consistent version of evolutionism. *The older Darwinist heritage simply does not gain large numbers of adherents, precisely because modern evolutionists are involved in a religious quest for man-directed cosmic evolution, and this quest is at odds with the logic of decentralized markets.* If the case for the free market is to be successful in the long run, it must be made in terms of a fully consistent philosophy of creationism and theocentric cosmic personalism. The case for the free market must be made in terms of the doctrines of divine providence, biblical revelation, the image of God in man, and the covenant of dominion. While this intellectual defense may not impress today's humanistic evolutionists, including Christian scholars whose methodology is still grounded in humanistic evolutionism, it will enable Christians to have a foundation that will survive the predictable disruptions of the economic, political,

intellectual, and social universe of the modern evolutionists. We must not try to establish the intellectual foundations of the kingdom of God in terms of the presuppositions of a dying evolutionist religion. We may be able to use the conclusions of selected secular economists, when these conclusions are in conformity with biblical premises, but it is we who must pick and choose in terms of the Bible, not they. We must abandon evolutionary presuppositions in every area of human thought, including economics.

Appendix B

THE EVOLUTIONISTS' DEFENSE OF THE MARKET

The Book of Genesis cannot be reconciled with the books of Darwin. This is the leading presupposition of this volume. Those who prefer to compromise Christian orthodoxy for the sake of academic respectability, or for the sake of their own commitment to the claims of modern science, have made various attempts to mix the two systems. Without exception, Christian orthodoxy is sacrificed on the altar of Darwinism. The Darwinists will accept no compromises with the creationism of Genesis 1. Far too many Christians have been less adamant about the intellectual claims of their religion's premises.

Throughout this book, I have been arguing in terms of a framework that is radically opposed to modern economics' epistemology. Modern schools of economics rest on the presuppositions of Darwinism: Marxism, socialism, free enterprise (both Austrian and Chicagoan), and the various mixtures. They begin with the mind of man. They assume that the laws of nature and the laws of thought have evolved over countless eons, with the mind of man being able *where necessary* to grasp and use the regularities of nature. Not that the human mind can grasp everything; but it can grasp enough to create a science of economics. All systems officially accept some version of *process philosophy*: as conditions change, and the process of evolution continues, the *laws of thought* could conceivably change. Mises has put it quite well: "Human knowledge is conditioned by the power of the human mind and by the extent of the sphere in which objects evoke human sensations. Perhaps there are in the universe things that our senses cannot perceive and relations that our minds cannot comprehend. There may also exist outside of the orbit we call the universe other systems of things about which we cannot learn any-

thing because, for the time being, no traces of their existence penetrate into our sphere in a way that can modify our sensations. It may also be that the regularity in the conjunction of natural phenomena we are observing is not eternal but only passing, that it prevails only in the present stage (which may last millions of years) of the history of the universe and may one day be replaced by another arrangement.”¹ At least as an official position, *the mind of man may become something different in the future*. “Man—up to now, at least—has always gone lamentably amiss in his attempts to bridge the gulf that he sees yawning between mind and matter, between the rider and the horse, between the mason and the stone. It would be preposterous to view this failure as a sufficient demonstration of the soundness of a dualistic philosophy. All that we can infer from it is that science—at least for the time being—must adopt a dualistic approach, less as a philosophical explanation than as a methodological device.”² This logical dualism is *post-Kantian dualism*: the split between thought and matter, and between the phenomena of science (scientific regularity) and the noumena of ethics (beyond rational categories). Somehow the two realms are connected (if man is to retain *power*), yet unconnected (if man is to retain his *freedom*). This *nature-freedom dualism* is basic to all modern philosophy.³ Secular economics cannot escape this dualism.⁴

As I have begun to demonstrate in this book, and as I hope to demonstrate more thoroughly in the commentaries that will follow, the Bible establishes as a social norm a system of civil government and personal responsibility which leads to the formation of a free market economy. I have drawn heavily from the writings of economists who favor the free market in order to explain certain relationships and consequences of such a market system. Predictably, those who argue that the Bible does not establish foundations that lead toward capitalism tend also to reject the logic of free market econom-

1. Ludwig von Mises, *Theory and History: An Interpretation of Social and Economic Evolution* (Washington, D.C.: Mises Institute, 1985), p. 8. This book was first published by Yale University Press in 1957.

2. *Ibid.*, p. 1.

3. Herman Dooyeweerd, *In the Twilight of Western Thought: Studies in the Pretended Autonomy of Philosophical Thought* (Philadelphia: Presbyterian & Reformed, 1960), pp. 46-52.

4. Gary North, “Economics: From Reason to Intuition,” in North (ed.), *Foundations of Christian Scholarship: Essays in the Van Til Perspective* (Vallecito, Calif.: Ross House Books, 1976).

ics. They wind up citing secular economists who favor Keynesian intervention by the civil government into economic affairs, or they cite even more radical secular economists. But both sides rely heavily on the conclusions of the warring camps of humanistic economists.

If I have rejected environmental determinism, evolutionism, and humanism in general, how can I legitimately use the arguments of environmental determinists, evolutionists, and humanists to support my case for a free market social order? Can I evade the accusation of the "Christian socialists" and "liberation theologians" that what I propose is simply a disguised version of secular capitalism, a baptized version of anarchism? The only way I can legitimately evade this criticism is to show that I do not accept Darwinian evolution as the scientific foundation of Christian economics, and then demonstrate that to the extent that the defenders of the free market accept such a foundation, they wind up without a logical position to defend. I also have tried to show in Appendix A, on Social Darwinism and Lester Frank Ward's refutation of Social Darwinism, that the demise of nineteenth-century Classical liberal economics was assured from the start, precisely because Darwinism really does not believe in the "survival of the fittest" and "evolution through natural selection," once *man, the rational planner*, appears in history. In other words, to paraphrase Cornelius Van Til, the humanistic economists have borrowed their accurate conclusions from Christianity. They cannot tell us why human minds agree, or why such minds can interpret the universe, or why the universe is coherent (since it has its origins in randomness or chaos), or why there is human freedom in a deterministic universe, or why the noumenal realm of ethics (outside of the determined realm of scientific law) can determine affairs in the external, cause-determined world of matter. Yet they say they can make all kinds of statements about economic events. How can they do this? They do not say.

The Christian economist *can* say. He points to a sovereign God who is the Creator. He points to a record of the creation in Genesis, chapter 1. He points to man, who is made in the image of God. He points to God's assignment to man in Genesis 1:28 to subdue the earth. He points to man's ability to name the animals. All of these facts of the Genesis account provide the foundation of Christian thought in general and Christian economics in particular. The orderly creation reflects an orderly, sovereign God. Man has been

made in God's image, so he can understand the external world, for which he is responsible before God as a steward. Nature and man are not chance-determined, for how can anything be *determined* in a chance universe? Nor are nature and man determined by a law-chained system of impersonal, freedom-denying cause and effect. God is *sovereign*, man is *responsible*, and nature is *orderly*. The Christian announces this in confidence. The humanistic economists deny the first assertion, so they have found no logical, universally acceptable arguments to affirm the second and third. They are intellectually defenseless.

Hayek's Evolutionism

F. A. Hayek won the Nobel Prize in economics in 1974, sharing the award with the Swedish socialist, Gunnar Myrdal. (It was widely rumored that Hayek never expected to win it, and Myrdal never expected to share it.) Hayek's award was made specifically for his early work in economics, which lent a degree of irony to the award, since so much of Hayek's early writings on trade cycles and capital theory was dependent upon the pioneering work of Ludwig von Mises.⁵ Mises had died in relative obscurity in 1973, ignored by the economics profession, an outcast who had never been given a full professorship in the United States, even at New York University, which was not one of the more prestigious universities in America. He had remained a pariah in his own department, subsidized by outside funds, and officially a "visiting professor"—whose visit lasted from the mid-1940's until his retirement in the late 1960's.⁶ Yet Mises had established himself as one of the world's most eloquent defenders of free market economics⁷—a post-Kantian rationalist who was unwilling to adopt the modern Darwinian view of Man, the sovereign central planner.

Hayek devoted a decade of his academic career to the construction of monetary and capital theory based on Mises' "Austrian"

5. F. A. Hayek, *Prices and Production* (London: Routledge & Kegan Paul, [1931] 1960); *Monetary Theory and the Trade Cycle* (New York: Augustus Kelley, [1933] 1966); *Profits, Interest, and Investment* (London: Routledge & Kegan Paul, 1937); *The Pure Theory of Capital* (London: Routledge & Kegan Paul, [1941] 1962).

6. Margit von Mises, *My Years with Ludwig von Mises* (New Rochelle, New York: Arlington House, 1976), ch. 10.

7. Ludwig von Mises, *The Theory of Money and Credit* (Indianapolis, Indiana: Liberty Press, [1912] 1981). The first American edition was published in 1953 by Yale University Press. This book established Mises' reputation.

premises. The second phase of Hayek's career was more deeply social and philosophical, and it began in the 1940's. He is far more famous for the books and essays that he produced during this later period, especially *The Road to Serfdom* (1944). Hayek has offered us the finest statement of late-nineteenth-century classical social theory in his later books. They are erudite, heavily footnoted, eloquent defenses of post-Darwin, post-Kantian social philosophy. They all rest on an explicit foundation of evolutionism.

One of the recurring themes in Hayek's writings is this one: there have been *two forms of rationalism* in the West. The *first* form is best represented by the writings of the Scottish social theorists of the eighteenth century, most notably Adam Ferguson, who wrote: "Nations stumble upon establishments, which are indeed the result of human action, but not the execution of any human design."⁸ Hayek uses this phrase repeatedly, most notably in an essay "The Results of Human Action but not of Human Design" (1967). The *second* form of rationalism is the rationalism of the central planner. Human action is seen as being rational only when it is the result of human design, namely, the design of a sovereign, rational, scientific planning agency. The origin of this second position, as far as the history of the modern West is concerned, is the French Revolution. Hayek's book, *The Counter-Revolution of Science: Studies on the Abuse of Reason* (1952), is an historical study of the origin and development of "designing rationalism" in social theory.⁹ He calls this "constructivist rationalism." Men rationally *construct* social institutions.

If we can use Darwinian categories, we can better understand the two rationalisms. The *first* form, which Hayek favors, is that propounded by Adam Ferguson, Adam Smith, Edmund Burke, and other eighteenth-century social theorists. Their view is that human institutions are the product of long years of unregulated development. Legal, economic, and other institutional arrangements were not consciously designed by any human planning agency. Nevertheless, they are coherent, rational, and productive. It was this argument which impressed the early evolutionists, who took the paradigm and

8. Adam Ferguson, *An Essay on the History of Civil Society* (1797), p. 187; cited by Hayek, "The Results of Human Action but not of Human Design" (1967), in his book, *Studies in Philosophy, Politics and Economics* (University of Chicago Press, 1967), p. 96n.

9. Hayek, *The Counter-Revolution of Science: Studies on the Abuse of Reason* (Indianapolis, Indiana: Liberty Press, [1952] 1979).

transferred it to geology and biology. A process of undesigned competition produced the biological world in which man finds himself, they argued. What must be understood from the beginning is that eighteenth-century social theory influenced the development of nineteenth-century scientific evolutionary thought, not the other way around. Hayek makes this explicit. The goal of the social theorists was to find the source of institutional regularity in man rather than God. The same motivation—eliminating God from theory—was basic to nineteenth-century scientific evolutionism. Hayek says:

From these conceptions gradually grew a body of social theory that showed how, in the relations among men complex and orderly and, in a very definite sense, purposive institutions might grow up which owed little to design, which were not invented but arose from the separate actions of many men who did not know what they were doing. This demonstration that something greater than man's individual mind may grow from men's fumbling efforts represented in some ways an even greater challenge to all design theories than even the later theory of biological evolution. For the first time it was shown that an evident order which was not the product of a designing human intelligence need not therefore be ascribed to the design of a higher, supernatural intelligence, but that there was a third possibility—the emergence of order as the result of adaptive evolution.

Since the emphasis we shall have to place on the role that selection plays in this process of social evolution today is likely to create the impression that we are borrowing the idea from biology, it is worth stressing that it was, in fact, the other way around: there can be little doubt that it was from the theories of social evolution that Darwin and his contemporaries derived the suggestion for their theories.¹⁰

Man becomes the sovereign acting and planning agent in such a framework, but not man, the central planner. The Scottish philosophers were seeking for the origins of purposeful institutions outside of purposeful and comprehensive designs, either by men or God. Most of them were not willing to abandon the concept of God entirely, but they did want to eliminate a continuing series of miracles from the record of man's institutions. They did not want to eliminate the idea of providence, but they also did not want to base their historical accounts of man's progress on miracles or other kinds of divine intervention. They were headed in the direction of cosmic

10. Hayek, *The Constitution of Liberty* (University of Chicago Press, 1960), pp. 58-59.

impersonalism, and the scientific evolutionists a century later finally arrived, briefly, at their destination, only to substitute man as the new source of cosmic personalism.

The *second* form of rationalism also can be seen in the writings of the scientific evolutionists. Darwin was impressed with the skills of horticulturalists and animal breeders in breeding new variations of plants and animals.¹¹ He recognized that there is a role for conscious planning. Natural selection's co-discoverer, Wallace, was aware of the anomaly in the theory of natural selection, namely, the power of man's mind, which did not come from a slow, steady, continuous interaction with his environment, but which must have been the result of a *discontinuous leap in being*—a violation of the very heart of the theory of evolution through natural selection.¹² Man, the thinker, can begin to replace the purposeless, impersonal processes of nature. This same sort of transformation of the theory—from purposelessness to man's sovereignty—took place in biological theory as well as social theory. *This is the heart of modern humanism.*

Hayek recognized the error of the late-nineteenth-century Social Darwinists: "It is unfortunate that at a later date the social sciences, instead of building on their beginnings in their own field, re-imported some of these ideas from biology and with them brought in such conceptions as 'natural selection,' 'struggle for existence,' and 'survival of the fittest,' which are not appropriate in their field; for in social evolution, the decisive factor is not the selection of the physical and inheritable properties of the individuals but the selection by imitation of successful institutions and habits. Though this operates also through the success of individuals and groups, what emerges is not an inheritable attribute of individuals, but ideas and skills—in short, the whole cultural inheritance which is passed on by learning and imitation."¹³ It should be obvious what Hayek is trying to do.

11. "We cannot suppose that all the breeds were suddenly produced as perfect and as useful as we now see them; indeed, in many cases, we know that this has not been their history. The key is man's power of accumulative selection: nature gives successive variations; man adds them up in certain directions useful to him. In this sense he may be said to have made for himself useful species." Darwin, *The Origin of Species* (New York: Modern Library edition), p. 29. This statement is taken from the first chapter of the book, "Variation Under Domestication."

12. Cf. Loren Eiseley, *Darwin's Century: Evolution and the Men Who Discovered It* (Garden City, New York: Doubleday Anchor, [1958] 1961), ch. 11: "Wallace and the Brain."

13. Hayek, *Constitution of Liberty*, p. 59.

He is trying to return social theory to the Scottish evolutionism of the eighteenth century. He is trying to get the model of impersonal, physical competition in biology out of market theory. He wants to return to eighteenth-century social evolutionism. But he has been unsuccessful in his attempt. The modern version of evolutionistic social theory goes ahead, not backward; its promoters want to bring to the forefront Man, the purposeful central planner—a source of coherence and design in an otherwise impersonal universe. Man, the decentralized actor is not sufficiently powerful to assure the species of survival, let alone domination and *Godless dominion*. Modern socialists want the dominion covenant, but they do not want God, except insofar as man as a species is God. Men *want* design: they just refuse to believe in a sovereign, supernatural Designer.

Hayek's defense of the free market social order rests on his concept of human knowledge. He argues for the division of labor in knowledge.¹⁴ Men are not omniscient. Each individual knows his own talents and weaknesses, challenges and successes, better than anyone else. What is needed is an *integrating system* to call forth the most accurate and relevant knowledge that each man possesses to deal with the economic problems of a universe of scarce resources. This system needs a *feedback process*, so that erroneous information of inapplicable approaches is not funded endlessly, thereby wasting resources. Men need to learn from their mistakes. They also need to imitate successful strategies. Only by *decentralizing the decision-making process*, Hayek argues, can mankind call forth its greatest reserves in order to achieve. . . . what? Each individual's highest personal goals. Hayek is an individualist. He believes that we begin our social analysis with the individual decision-maker, and the social order should permit him to pay to achieve his goals. Through allowing each person to achieve his goals by whatever voluntary and non-coercive approach he decides is best-fitted to his skills and capital, we create a social order which allows each of us to prosper. What is best for a majority of economic actors is best for the society as a whole. Out of individual competition comes collective prosperity. This is the essence of Adam Smith's *Wealth of Nations*, and it is still the essence of modern free market social theory. Hayek defends the whole idea.

14. Hayek, "The Use of Knowledge in Society" (1945); reprinted in Hayek, *Individualism and Economic Order* (University of Chicago Press, 1948), ch. 4. This remains one of the seminal essays in economic theory.

This social philosophy requires *faith*. It is not self-evident. Men must believe that the voluntaristic exchange system is, in fact, a system. They must believe that beneficial results stem from individual decisions to truck and barter. Out of the voluntary, self-centered decisions of the *many* will come a social order beneficial to the *one* of human society. This is the religion which Hayek offers to us. Very few post-Darwin intellectuals believe in this eighteenth-century religion.

"It is through the mutually adjusted efforts of many people that more knowledge is utilized than any one individual possesses," Hayek writes, "or than it is possible to synthesize intellectually; and it is through such utilization of dispersed knowledge that achievements are made possible greater than any single mind can foresee. It is because freedom means the renunciation of direct control of individual efforts that a free society can make use of so much more knowledge than the mind of the wisest ruler can comprehend."¹⁵ *This is the heart of Hayek's defense of human freedom: the better use of that most precious of scarce resources, knowledge.* "It is therefore no argument against individual freedom that it is frequently abused. Freedom necessarily means that many things will be done which we do not like. Our faith in freedom does not rest on the foreseeable results in particular circumstances but on the belief that it will, on balance, release more forces for the good than for the bad."¹⁶

Here is an undefendable faith indeed. "Our faith in freedom" rests on our "belief" that freedom will "on balance" produce more good than bad. Yet as we have surveyed at some length in Chapter 4, the secular economist cannot possibly assess either good or bad in a social order, since it is not possible to make interpersonal comparisons of subjective utility — assuming we are speaking about what rational, autonomous, scientific economics can do. The same problem faces the ethicist. It is the old problem of aggregates: Is the total pleasure I get from sticking pins into you greater than the total pain you receive? How can we add and subtract good and bad? Modern subjectivist economics cannot possibly permit such aggregation, yet it must make such judgments in order to defend the validity of the free market's social order. "The benefits of this system, *on balance*,

15. Hayek, *Constitution of Liberty*, pp. 30-31.

16. *Ibid.*, p. 31.

are greater than the costs." On *what* balance? Evaluated by *whom*? Hayek appeals to something he knows is irrational and inconsistent with the very foundations of modern subjectivist economics. He appeals to an aggregate that by definition cannot possibly exist, if we accept the logic of subjectivism. In short, he cannot logically defend the free market's benefits.

The socialists and interventionists do not take Hayek's faith seriously. They see it as irrational. How can we possibly believe that an unplanned, undesigned, individualistic economic system is beneficial, when we know some participants get hurt, or lose money? Why not allow the greater vision of central planners to intervene and remove the evils, while leaving the benefits? Not possible, says Hayek: to call forth men's best knowledge and best efforts, they must know that the civil government will not intervene and redistribute the gains any man makes. Nonsense, say the interventionists; people want to live in a "fair" regime, in which nobody is faced with total disaster. We can "clean up" the market's failures. We can "balance" its inequities. If Hayek's unnamed and undefined balance undergirds his system, the concept of the equitable nature of the civil government undergirds the socialists' system. Each side appeals to logic in order to convince us that such a balance exists. Yet neither side can show us how such a balance operates in a world devoid of a method of adding and subtracting individual assessments of utility.

Hayek's system rests on the idea that undesigned human institutional arrangements are reliable. The socialist wants us to believe that man-designed, centrally administered human institutions are reliable. Hayek wants *species man*, the purposeful planners. The socialists want *scientific elites* who plan for the benefit of species man. The implicit and even explicit humanism of both camps should be obvious. Neither side is willing to appeal to *fixed standards* of ethics, economics, or civil government in the Bible. Neither side wants to consider *the balance* as being in the hand of an omniscient God. Men or Man, individuals or planning elites, must be understood to possess the balance. They can see good or evil in the aggregate. God is an irrelevant hypothesis for both camps. They both agree: *man* is the starting point for economic and political analysis.

The socialist wants to pass laws against sticking pins into people, so to speak—laws against "excessive" or "obscene" profits, laws against price competition, and so forth. The free market defender says that such "pins" are a lot better than the "pins" of unemployment

(minimum wage laws), gluts (price floors), shortages (price ceilings), weak competition (restricted profits), and so forth. Which are the real "pins"? The two sides cannot agree. They cannot appeal to a reliable, eternal definition of pins, coercion, and immoral activity. They cannot define pin-sticking, let alone tally up pleasure and pain from pin-sticking.

In an excellent essay by one of Hayek's former students, the author points to an important contradiction in Hayek's thought. He does not point out that this same contradiction is basic to every humanist system, but the point is nonetheless well taken. Hayek rejects historicism: the theory that the mind of man changes with the stages of history. Yet he also rejects the idea of fixed categories of thought or sensory perception in the human mind. Hayek uses the idea of fixed ideas in order to refute those who go too far for him in this area of historical change and its effects on human perception, thought, and action. Yet he is dependent on some variation of "mild" historicism in order to defend himself against the charge of static idealism. As he summarizes Hayek's dualism: "On the one hand, Hayek wants to retain the idea that science can give a reliable explanation of regularities in the objective physical world. Indeed, his account of human cognition presupposes the validity of his physiological explanation of the principles that underlie the cognitive processes. On the other hand, his general conclusions about the character of human cognition seem to undermine the very possibility of objective knowledge and to concede the basic premises of extreme historicism. He argues that all perception and reasoning are predetermined by a classificatory system or 'map' that varies from one individual and group to another and changes over time."¹⁷ Hayek's epistemology is therefore *dualistic*.

Hayek argues explicitly that *all values are evolutionary*. They are determined by the interaction of the changing environment and our civilization. He explicitly rejects radical historicism—the doctrine that each stage of history has its own values, laws, and perceptions—yet he implicitly adopts precisely this outlook. He writes, "the basic conclusion that the whole of our civilization and all human values are the result of a long process of evolution in the course of which values, as the aims of human activity appeared, continue to change, seems inescapable in the light of our present knowledge. We

17. Eugene F. Miller, "Hayek's Critique of Reason," *Modern Age* (Fall, 1976), p. 390.

are probably also entitled to conclude that our present values exist only as the elements of a particular cultural tradition and are significant only for some more or less long phase of evolution—whether this phase includes some of our pre-human ancestors or is confined to certain periods of human civilization. We have no more ground to ascribe to them eternal existence than to the human race itself.”¹⁸ Hayek believes in morals, since morality is the foundation of the free market order, but he wants *morals derived from tradition*—the products of human action but not human design. In fact, he excoriates the “rationalism” of Descartes and the French Revolutionaries for having insisted that morality be subject to logical proof. He writes: “This moral system on which the formation of a worldwide market rested increasingly lacked credence and was partly destroyed, with the assistance of a new philosophy. In the seventeenth century, Hobbes, and particularly Descartes, at first in the intellectual, and then in the moral, field stated that one must not believe anything which cannot be proved. This view gradually spread, especially in the eighteenth century, and in the nineteenth century this philosophical doubt about traditional morals suddenly became practically effective. The loss of the moral beliefs which had been essential for the maintenance of the existing market system was suddenly given a sort of intellectual foundation. It came to be believed that the ruling moral beliefs were unfounded, were pretenses contrary to instinct and reason, and were invented for the protection of those who would profit by them. The young decided that since nobody could explain why they should obey these morals rather than others, they were going to make their own morals. Only morals which had been deliberately designed for a recognized common good purpose could really be accepted as worthy of a fully adult human race. And the purpose would have to be the satisfaction of the innate natural instincts of man.”¹⁹

But how can you defend yourself against the accusation that your morality is irrational or relative? What if the socialist argues that we are entering into a new era? The old laws of capitalism, including bourgeois morality, are now being superseded by a new era of proletarian production, proletarian morality, and proletarian econom-

18. Hayek, “The Theory of Complex Phenomena” (1964); reprinted in Hayek, *Studies*, p. 38.

19. *A Conversation with Friedrich A. von Hayek: Science and Socialism* (Feb. 9, 1978) (Washington, D.C.: American Enterprise Institute, 1979), p. 11.

ics! This is precisely what Marx and his followers have been arguing since the 1840's. This has been an extremely successful argument. It is the argument of all historicist systems: eras change, and morals change with them. How can Hayek, as an evolutionist, deal with historicism? He states his preference for the traditionalism of Ferguson and Burke, which "is based on an evolutionary interpretation of all phenomena of culture and mind and on an insight into the limits of the powers of the human reason."²⁰ Miller comments: "The fact is, however, that 'tradition' is not a single, unified phenomenon. What we call 'Western civilization' is but one of many traditions of mankind; and internal to it are many divergent and conflicting strands. Hayek himself acknowledges that the tradition of constructivist [designing] rationalism is as old and as strong within Western civilization as the tradition of critical [evolutionary] rationalism. What are we to do in the face of this conflict among and within traditions? Hayek leaves us only with the options of submitting humbly to the tradition which makes the most forceful claim upon us or else of choosing boldly but blindly among competing traditions. He eliminates the possibility that we can make a rational choice among traditions on the basis of what is true or good by nature. Reason cannot judge among traditions, because it can function only within such a matrix as tradition itself supplies; and this matrix is non-rational and devoid of meaning. Moreover, there are no permanent values by reference to which reason could make this judgment. All human values are the result of a long process of evolution, and they continue to change in the course of this process."²¹ Hayek's system, like all other modern systems of economics, is epistemologically committed to *process philosophy*, better known as historicism. It leaves his defense of the market intellectually defenseless against those more self-consistent historicists who boldly proclaim a change in eras, the arrival of a new world order.

Hayek, for all his immense erudition, is caught in a familiar bind of all humanistic scholarship: *the problem of structure and change*. He wants a moral order, but he does not want it imposed by a sovereign God who is outside the processes of history. He wants a moral order which provides stability, so that the free market has recognized "rules of the game." His later career was marked by a series of studies relat-

20. Hayek, *Studies*, p. 161.

21. Miller, "Hayek's Critique," *op. cit.*, pp. 392-93.

ing to the way in which such rules are established, and how a society can enforce them without changing them unrealistically, or tampering with them too much, or converting them into arbitrary pieces of legislation. Without structure, there can be no orderly social and economic progress. Without a moral standard, it is not possible to determine whether any given social change is progressive. If everything is flux, then whirl is king, and Hayek never argues for whirl. But he does argue that all morality is, ultimately, the product of an interaction between *decentralized acting men* and a *changing environment*.²² What kind of foundation is this? What kind of stable moral and legal order can result from such a concept of morality? How can any variety of process philosophy (evolutionism) produce a reliable, universally recognized, widely accepted moral framework? Hayek winds up calling for men to believe in the *morality of selfishness*, the benefits of which "we cannot see": "There is, ultimately, a moral justification for selfishness, if you care to call it that, for just obeying the commands of the market system. If we can make people understand this, we may revive the kinds of general rules of behavior which, a hundred years ago, governed the Western world and which have become largely discredited, but without which our capacity to benefit others will decline. We can tell people that the rules which we are rapidly discarding do serve the benefit of mankind, although we cannot see it; we must not imagine that we can choose what to do in order to serve the benefit of mankind. All we can do is to obey the rules which have established themselves and produce the worldwide division of labor and perhaps gradually try to improve these rules."²³

How can Hayek expect to win the battle for men's minds with this kind of a defense of the market? It is initially repulsive morally (selfishness), until we consider the sophisticated arguments that undergird it. Yet even these arguments ultimately fail, for he cannot demonstrate the benefits scientifically (no interpersonal comparisons of subjective utility), and he cannot demonstrate that the moral and legal rules of the game should not be changed in some future social

22. "Every change in conditions will make necessary some change in the use of resources, in the direction and kind of human activities, in habits and practices. And each change in the actions of those affected in the first instance will require further adjustments that will gradually extend throughout the whole of society." Hayek, *Constitution of Liberty*, p. 28.

23. *Conversation*, pp. 14-15.

order—or even in today's social order, which is no longer the environment of the late nineteenth century, let alone Scotland in the mid-eighteenth century. *Evolutionism is another variety of historicism*, and historicism offers man no fixed, reliable, universal, and perpetually binding principles of law, legislation, and liberty (to use the title of Hayek's trilogy). How can any decentralist version of evolution win men's minds, in an era in which the second stage of evolutionism, the infamous "sleight of hand"—elitist planners as the source of future evolution for the benefit of species man—has become the reigning faith?

Men must believe in some authority. They must obey that authority if they are to survive. It may be the market economy, or the civil government, or the Bible, but men need a source of reliable authority to commit themselves to. There can be no division of labor without such subordination. *Men necessarily obey someone*. Hayek fully understands this principle of human action. He calls men to obey the laws and conventions of the undesigned free market order. They are to exercise faith in the benefits and reliability of this order. They are to believe that it is, in fact, a true order, and not a capricious, random, and destructive anti-system. Hayek does not minimize the individual's obligation to obey: ". . . the individual, in participating in the social processes, must be ready and willing to adjust himself to changes and to submit to conventions which are not the result of intelligent design, whose justification in the particular instance may not be recognizable, and which to him will often appear unintelligible and irrational."²⁴ Men must, in short, exercise *blind faith*. They must subordinate themselves faithfully to social processes that they do not understand, and that even appear irrational to them. They must do this if the free market order is to survive.

If survival is the criterion of success, then the free market order in the twentieth century has begun to resemble a social dodo bird, headed for extinction. If success in the open marketplace of ideas is the criterion, then the free market's *undesigned* structure has not produced the intellectual defenses that might insure its survival. Perhaps someday people will believe in the market as fervently as Hayek wants men to believe—a blind faith in an undesigned order—but throughout the twentieth century, such faith has been shrink-

24. Hayek, "Individualism: True and False" (1945); reprinted in Hayek, *Individualism and Economic Order*, p. 22.

ing. Men are far more ready to believe in a designed social order — a social order in conformity to the second stage of the Darwinian *sleight of hand*, with scientific planners taking control of the forces of evolution, in order to secure man's place in the cosmos as the provider of cosmic personalism. Hayek's decentralized rationalism runs against the grain of the dominant schools of post-Darwin social philosophy. Hayek's arguments, one could say, are not rationally designed to be successful in an era which wants to believe in rational designs.

The great intellectual contribution of the so-called Austrian School of economics is the focus on *purposeful human action*. The Austrian School economists have again and again called attention to the individual decision-making of acting men. They have argued that a system of voluntary exchange enables men to call forth the productivity of others, as well as to evaluate the economic value of their own contributions. The free market order has produced more wealth and more freedom, as well as more personal responsibility in economic affairs, than any other economic system in man's history. But the Austrians, being humanists, evolutionists, and radical subjectivists, cannot logically prove any of this. The "designing rationalists" who want the power of the civil government to direct human actions, can point to the obvious coherence of the idea of national economic planning. They seldom find people who understand that the imposed rationalism of socialism creates what Mises has called "planned chaos," while the seemingly uncoordinated efforts of men voluntarily exchanging goods and services on a free market produce an integrated, growth-oriented production system. The "top-down" rationalism produces just the opposite of what the intellectual defenders of central planning promise; it produces an uncoordinated, fragmented system of disrupted production. The "bottom-up" system of decentralized planning is alone capable of producing social order, for it places greater responsibility for decision-making in the hands of the individual. But without a concept of *a fixed moral order with its source outside of man*, and imposed as an ideal for man by a sovereign Creator, Hayek and the other humanist economists cannot prove that a decentralized economic order can produce a just, productive, and desirable social order. Without standards of performance, men cannot make wise decisions.

Mises has argued eloquently that without a market economy, men cannot make accurate economic calculations. The Christian points

out that without a system of *permanent, universal morality*, there is also no way to make accurate economic calculations, for there is no constant which survives over time—from the beginning of acting man's plan to its conclusion—by which any man can evaluate the success of his efforts. As the Bible says, what does it profit a man if he gains the whole world and loses his soul? Here is the most crucial of all economic decisions—the question of profitable stewardship before God—and secular man cannot make this decision accurately. He has no fixed moral standards by which to evaluate his success. *Process philosophy cannot provide standards*, for no man can be sure that he has not entered into a new world order between the time he began to plan and the time he believes he has brought it to completion. *Continuity over time*—moral, epistemological, social, economic—cannot be affirmed by means of any evolutionary philosophy.

How do we know that the market order still works? How do we avoid Marx's argument that capitalism was far more productive than feudal production methods, but its day has come at last, now that proletarians are about to bring in a new world order? Hayek cannot tell us. How do we know that our capitalist tools still are performing better than socialist tools? Hayek writes:

. . . we command many tools—in the widest sense of that word—which the human race has evolved and which enable us to deal with our environment. These are the results of the experience of successive generations which are handed down. And, once a more efficient tool is available, it will be used without our knowing why it is better, or even what the alternatives are.

These "tools" which man has evolved and which constitute such an important part of his adaptation to his environment include much more than material implements. They consist in a large measure of forms of conduct which he habitually follows without knowing why; they consist of what we call "traditions" and "institutions," which he uses because they are available to him as a product of cumulative growth without ever having been designed by any one mind. Man is generally ignorant not only of why he uses implements of one shape rather than of another but also of how much is dependent on his actions taking one form rather than another. . . . Every change in conditions will make necessary some change in the use of resources, in the direction and kind of human activities, in habits and practices. And each change in the actions of those affected in the first instance will require further adjustments that will gradually extend throughout the whole of society. Thus every change in a sense creates a "problem" for society, even though no single individual perceives it as such; and it is gradually

"solved" by the establishment of a new over-all adjustment. . . . Who will prove to possess the right combination of aptitudes and opportunities to find the better way is just as little predictable as by what manner or process different kinds of knowledge and skill will combine to bring about a solution of the problem.²⁵

Now, to use the same kind of reasoning, what if we are today at one of those periods in which new intellectual tools are replacing the old ones? What if the Marxists are correct, that man is entering a new moral age? As Irving Kristol said in a speech in 1981, one of the important products in all capitalist systems is socialism. Joseph Schumpeter said the same thing in 1942.²⁶ Why should we resist the obvious and universal transformation of capitalist social orders into socialist orders? Irrelevant; we cannot, as methodological individualists, make interpersonal comparisons of subjective utility. People are adopting socialist ideas. Isn't that proof enough of the development of a "new tool," the intellectual tool of socialism? Why fight it?

Darwin argued that species evolved into new species. Marx argued the same thing concerning societies, although he expected a discontinuous leap—revolution—to mark such transitions. Hayek argues that tools are evolved through imitation and competition to deal with environmental changes, or men's new perceptions of environmental possibilities. How can he legitimately argue that socialism is an invalid "tool" in today's post-Darwinian society, if the planners can predict the future better, arouse moral indignation more efficiently, and erase the flaws of the older, pre-modern capitalist order? If you cannot legitimately appeal to fixed human nature (evolutionism denies any such thing), and you cannot appeal to fixed moral standards (process philosophy denies any such standards), and you cannot appeal to the greater output of capitalism (no interpersonal comparisons of subjective utility are scientifically valid), then how are you able to defend the free market? Who is going to pay any attention? When mankind faces the possibility of extinction if we fail to compete successfully with other species, isn't

25. Hayek, *Constitution of Liberty*, pp. 27-28.

26. Joseph Schumpeter, *Capitalism, Socialism, and Democracy* (New York: Harper Torchbook, [1942] 1965), especially chapters 12 and 13. See also Ben Rogge, *Can Capitalism Survive?* (Indianapolis, Indiana: Liberty Press, 1979).

it sensible to adopt social, economic, and genetic planning in order to guarantee man's triumph? Aren't we in a war against other species? Can any army be successful that has no chain of command, no centralized leadership? The social impulse of Darwinism is to establish man's position as the new sovereign over nature. *Man, the central planner* is a powerful image. How can Hayek's version of evolutionism — analogous to the pre-human, purposeless, undesigned evolutionary process — compete with "the real thing," namely, elitist planning by scientific experts? Hayek's reasoning has failed to convince men in the marketplace of ideas. What other standard can be used by Hayek or his followers to appeal to beyond the marketplace of ideas? Mises, Hayek's teacher, knew there was no such appeal for a true Austrian economist, which is why he was incapable of optimism regarding the future of man: "Whatever is to be said in favor of correct logical thinking does not prove that the coming generations of men will surpass their ancestors in intellectual effort and achievements. History shows that again and again periods of marvelous mental accomplishments were followed by periods of decay and retrogression. We do not know whether the next generation will beget people who are able to continue along the lines of the geniuses who made the last centuries so glorious. We do not know anything about the biological conditions that enable a man to take one step forward in the march of intellectual advancement. We cannot preclude the assumption that there may be limits to man's further intellectual ascent. And certainly we do not know whether in this ascent there is not a point beyond which the intellectual leaders can no longer succeed in convincing the masses and making them follow their lead."²⁷ Or as he wrote in a manuscript as he was about to flee Switzerland in 1940: "Occasionally I entertained the hope that my writings would bear practical fruit and show the way for policy. Constantly I have been looking for evidence of a change in ideology. But I have never allowed myself to be deceived. I have come to realize that my theories explain the degeneration of a great civilization; they do not prevent it. I set out to be a reformer, but only became the historian of decline."²⁸ The historian of decline: a sad task for an economist. His Darwinian evo-

27. Mises, *The Historical Setting of the Austrian School of Economics* (New Rochelle, New York: Arlington House, 1969), p. 38.

28. Mises, *Notes and Recollections* (South Holland, Illinois: Libertarian Press, 1978), p. 115.

lutionism was too old-fashioned; it did not honor Man, the central planner, or Man, the new predestinator. Hayek and Mises have won few followers.

Purposeless Evolutionism

Hayek's most notable contribution to the epistemology of economics is his continuing development of the concept of purposeful action within the legal framework of a free market. It is the market *process* which provides acting men with a maximum of information, especially information necessary to the dovetailing of competing plans by individuals. The focus on purposeful action marks the Austrian School of economists more than any other academic group.

The other group of free market economists, generally referred to as the Chicago School (since so many of the members attended, or have taught at, the University of Chicago), is more forthrightly empiricist in its epistemology. They want to discuss economic facts. They want economic theory to prove itself by its performance in making verifiable predictions. They regard themselves as defenders of positivist economics: empirical, inductivist economics, as contrasted to logical, deductivist economics (the Austrian School's approach). Because they cling to a scientific idea which is much closer to the logic of the natural sciences, they are less concerned about unmeasurable, unverifiable concepts such as "human purpose." The post-Kantian dualism between the phenomenal realm of science and the noumenal realm of human personality has led to the formation of rival schools of free market economists. The Chicago School economists are attempting to be "hard" science advocates, so they are less concerned about the "noumenal." Milton Friedman wrote *Free to Choose*, but Armen Alchian is more consistent with the methodology of natural science. He tries to avoid a word like "choice," since it is supposedly irrelevant to a discussion based on science.²⁹ It implies too much independence from the law of cause and effect. Human choice as an independent factor cannot be tested; all we can do is speak about demonstrated preference or actual actions made by men.

Because of his devotion to empirical science, Alchian is committed to a concept of economics which is based on *results* of human actions.

29. In a seminar held at Claremont Men's College in June of 1969, sponsored by the Institute for Humane Studies, Alchian lectured graduate students. He explicitly refused to use the word "choice." He said that choice is not economically distinguished from impulsive, instinctively motivated action. There is no choice. I attended the conference and kept my notes. That was my choice.

He is a committed evolutionist. Nevertheless, Hayek's brand of decentralized but purposeful evolutionism does not appear in Alchian's version of evolutionistic economics. Hayek's system involves heavy reliance on the idea of human purposefulness. Alchian's essay relies heavily on the idea that the results of human action are what matter, not purposeful behavior. Alchian has returned economics to Stage One of the Darwinian paradigm: the *purposeless competitive process*. This stage, for Darwin and his scientific disciples, was exclusively confined to *pre-human evolution*, meaning a world of cosmic purposelessness. Once man appeared on the scene, Darwin and his disciples concluded, the rules of evolution changed. Human purposeful choice became the new source of evolutionary change. Man the planning being, man the communicator, man the maker of recorded information, became the source of evolutionary directionality. Alchian's approach, therefore, is an anachronism: a throwback to the methodology of pre-human evolution.

The classic statement of this methodology is found in his 1950 article, "Uncertainty, Evolution, and Economic Theory." It should be pointed out from the beginning that few significant new approaches have been achieved through the use of this methodology. One essay by Gary Becker, which I will discuss a bit later, is just about all we have to show for Alchian's pioneering work. But the original article is important, for it points to the all-pervasive nature of the evolutionary paradigm in modern economic thought. No school of economics has escaped from this paradigm. Alchian's article simply presses one phase of the evolutionary model—the pre-human purposeless phase—to a uniquely depersonalized conclusion.³⁰

The criterion for success is *survival*, Alchian concludes. *The economic system as a whole determines the survivors*. "It does not matter through what process of reasoning or motivation such success was achieved. The fact of its accomplishment is sufficient. This is the criterion by which the economic system selects survivors: those who realize *positive profits* are the survivors; those who suffer losses disappear."³¹ We are back to Social Darwinism. Yet Alchian's version is

30. I have read other materials written by Alchian, and they show little or no sign of influence from this pioneer essay. It is possible—I think it is likely—that Alchian wrote the 1950 essay as a kind of intellectual exercise, just to make a scientific and radically theoretical point.

31. Armen Alchian, "Uncertainty, Evolution and Economic Theory" (1950); reprinted in Alchian, *Economic Forces at Work* (Indianapolis, Indiana: Liberty Press, 1977), p. 20.

even more radical, for he is not in the least concerned about the motivation of the survivors. "The preceding interpretation suggests two ideas. First, success (survival) accompanies relative superiority; and, second, it does not require proper motivation but may rather be the result of fortuitous circumstances. Among all competitors, those whose peculiar conditions happen to be the most appropriate of those offered to the economic system for testing and adoption will be 'selected' as survivors."³²

Alchian's language, like Darwin's before him, personalizes an impersonal process. The impersonal economic system, like the equally impersonal pre-human process of evolution through natural selection, is described as *adopting* or *selecting* survivors. Yet this process cannot be personal. It surely cannot be purposeful. The cold impersonalism of such a process alienated Darwin, as it alienates his disciples, once man appears on the scene. Alchian is more coldly, rigorously logical in his commitment to cosmic impersonalism. The ideal of personality must be sacrificed to the ideal of science. "All individual rationality, motivation, and foresight will be temporarily abandoned in order to concentrate upon the ability of the environment to *adopt* 'appropriate' survivors even in the absence of any adaptive behavior. This is an apparently unrealistic, but nevertheless very useful, expository approach. . . ."³³ Survival may very well be *chance-based*. He speaks about "the richness which is really inherent in chance. First, even if each and every individual acted in a haphazard and nonmotivated manner, it is possible that the variety of actions would be so great that the resulting collective set would contain actions that are best, in the sense of perfect foresight. For example, at a horse race with enough bettors wagering strictly at random, someone will win on all eight races. Thus individual random behavior does not eliminate the likelihood of observing 'appropriate' decisions. Second, and conversely, individual behavior according to some foresight and motivation does not necessarily imply a collective pattern of behavior that is different from the collective variety of actions associated with a random selection of actions."³⁴

Is the market process comparable to a large horse race? Is entrepreneurship, and the market process which rewards or penalizes various degrees of entrepreneurship, really comparable to a game of

32. *Idem*.

33. *Ibid.*, p. 21.

34. *Ibid.*, p. 24.

chance? A zero-sum game (winners take all, losers lose all) cannot be assumed to be the same as the uncertainty-reducing process of the market. Games of chance are based on probability distributions. They involve *risk*. They rely on the law of large numbers. There is a class probability associated with individual flips of a coin or roll of the dice. But *uncertainty* is different. The class probability aspect of games of chance does not apply to future events that are truly uncertain. They cannot be known in advance through the application of statistics. How can Alchian be sure that the analogy of the horse race applies to the competitive struggle of the market — a struggle which is the product of human action? We know that people plan; they act in terms of plans. They have motivations. Does the logic of impersonal chance apply to the processes of personal decision-making, simply because the market process rewards and punishes? Alchian writes that "it is possible," but is it probable? Is there any way of *testing* the probability of his theory? Is there an empirical method that can tell us whether or not the market process is statistically identical to a large game of chance? No empiricist from the economics profession has offered such a test, although Alchian thinks that such a test is possible.³⁵

The scientism of Alchian's position should be obvious. He is equating men with atoms, biological evolution with market selection. Alchian does not shrink back from his radical methodology: ". . . It is not even necessary to suppose that each firm acts as if it possessed the conventional diagrams and knew the analytical principles employed by economists in deriving optimum and equilibrium conditions. The atoms and electrons do not know the laws of nature; the physicist does not impart to each atom a willful scheme of actions based on laws of conservation of energy, etc. The fact that an economist deals with human beings who have sense and ambitions does not *automatically* warrant imparting to these humans the great degree of foresight and motivations which the economist may require for his customary analysis as an outside observer or 'oracle.' The similarity between this argument and Gibbsian statistical mechanics, as well as biological evolution, is *not* mere coincidence."³⁶

The continuing reliance on the language of personalism to describe a hypothetically impersonal process is revealing. Alchian

35. *Ibid.*, p. 25.

36. *Ibid.*, p. 26n.

dismisses trial and error as a standard of economic success. This is too purposeful a process. It involves "conscious adaptive behavior."³⁷ This allows far too much importance for the decisions of acting men. Trial and error, he asserts, cannot serve as a success indicator in a changing environment. "As a consequence, the measure of goodness of actions in anything except a tolerable-intolerable sense is lost, and the possibility of an individual's converging to the optimum activity via a trial-and-error process disappears. Trial and error becomes survival or death. It cannot serve as a basis of the *individual's* method of convergence to a 'maximum' or optimum position. Success is discovered by the economic system through a blanketting shotgun process, not by the individual through a converging search."³⁸ Success is *discovered* by the economic system. Survival is the sole criterion. The aggregate process screens the survivors. *There is nothing rational or purposeful about this process.* It is altogether impersonal.

What is left? *Imitation.*³⁹ Men seek profits. The economic system screens out the successful imitators and innovators from the unsuccessful. "The economic counterparts of genetic heredity, mutations, and natural selection are imitation, innovation, and positive profits."⁴⁰ Alchian does not deny purposeful actions on the part of individuals, he says, but he asserts that "the precise role and nature of purposive behavior in the presence of uncertainty and incomplete information have not been clearly understood or analyzed. It is straightforward, if not heuristic, to start with complete uncertainty and nonmotivation and then to add elements of foresight and motivation in the process of building an analytical model."⁴¹

Gary Becker, who acknowledges his intellectual debt to Alchian's article, has attempted to do just this. In a pathbreaking essay—although nobody has followed him down his path—Becker argues that it is not necessary to assume that men act purposefully or rationally in order to conclude that aggregate market demand curves are negatively inclined (that is, that at lower prices, people in the aggregate will purchase more of the scarce resource in question). We do not need to assume that either individuals or households are eco-

37. *Ibid.*, p. 30.

38. *Ibid.*, p. 31.

39. *Ibid.*, p. 29.

40. *Ibid.*, p. 32.

41. *Ibid.*, p. 34.

nomically rational—that they, too, have negatively inclined demand curves—in order to demonstrate that market demand curves are negatively sloping. “Hence the market would act as if ‘it’ were rational not only when households were rational, but also when they were inert, impulsive, or otherwise irrational.”⁴² He compares his model to the physicist’s model, as Alchian did before him. We can have a rational market even when we have irrational individualistic decisions. “If we may join the trend toward borrowing analogies from the currently glamorous field of physics, the theory of molecular motion does not simply reproduce the motion of large bodies; the smooth, ‘rational’ motion of a macrobody is assumed to result from the erratic, ‘irrational’ motions of a very large number of microbodies.”⁴³ The post-Kantian ideal of science is here triumphant: men are treated as atoms.

Israel Kirzner, the most respected member of the remnant of the Austrian School, subjected Becker’s analysis to a withering critique. As an “Austrian,” Kirzner focuses on *individuals* who must *make decisions* concerning an *uncertain future*. The Austrian School begins with methodological individualism. When people go to buy a good or service, they make bids. If a man bids too low, he cannot buy all of the scarce resource that he wants. He is outbid by other consumers. So he must revise his plans. “The *essence* of this market process, it will be observed, is the *systematic way in which plan revisions are made as a consequence of the disappointment of earlier plans*.”⁴⁴ More important for economic theory, “Such a pattern of plan revision can be conceived of only for rational buyers. If buyers were afflicted with chronic inertia, they would presumably come to market each day with the same low bids as yesterday, and return home with the same disappointments. If buyers made bids in a purely random manner, there is again no assurance that ‘the’ market price would rise at all. Only by assuming that buyers purposefully seek to achieve given goals can we predict that their thwarted plans of yesterday will lead to their systematically offering more attractive choices to sellers today.”⁴⁵ Acting men are rational. They learn.

42. Gary Becker, “Irrational Behavior and Economic Theory,” *Journal of Political Economy*, LXX (Feb., 1962), p. 7. This was the lead article for this issue. The *JPE* is published by the University of Chicago.

43. *Ibid.*, p. 8.

44. Israel Kirzner, “Rational Action and Economic Theory,” *Journal of Political Economy*, LXX (Aug., 1962), p. 381.

45. *Ibid.*, p. 382.

Becker relies heavily on the logic of equilibrium. Equilibrium assumes that all men are omniscient about the future, and therefore they are *responders* to the supply and demand conditions of the market. They are all *price-takers*. As Kirzner states, "The *essence* of the market process is precisely what happens *before* equilibrium has been reached."⁴⁶ Uncertainty prevails in real life. Men are not simply price-takers. They offer new bids, both as buyers and sellers (since every buyer is a seller of something else). "As soon, therefore, as one begins to analyze the consequences of the absence of the conditions for equilibrium, it becomes apparent that plan revisions must be the focus of attention. It is primarily upon the systematic revisions of disappointed plans that the market process depends."⁴⁷

If I understand what Becker is really saying (he never says this explicitly), he is arguing that the market process eliminates those economic decision-makers who waste resources, it rewards those who do not waste resources, and it does not matter why members of each group made their respective decisions. Maybe they were lucky. Maybe they were rational. It makes no difference, so we need not assume rationality. The market will produce the same results. *In the aggregate*, the market will buy more of a good if its price is lower; it makes no difference if individuals act rationally and *seek out* lower prices. They need not be assumed to be rational seekers of lower prices. The market process is conceivably totally impersonal, even including its randomly acting participants.

Kirzner, as an "Austrian," wants explanations for the rationality of the market *process*. He very carefully avoids speaking, as Becker does, of the rationality of the market itself, as if the market as a whole possessed a supply or demand curve. There are reasons for his unwillingness to speak of "the rationality of the market." He is a methodological individualist. This methodology categorically denies the validity of any aggregate constructs. There are only acting individuals; there are no "acting markets." But individual actions by acting men can be discussed, and Kirzner provides a clear description of the way in which market participants plan ahead, learn from market experiences, and reformulate their plans.

In one sense, the two men are talking at cross purposes. Becker wants to discuss a hypothetical construct, the market as a whole.

46. *Ibid.*, p. 384.

47. *Idem.*

Kirzner does not explicitly say so, but his methodology denies the existence of any such construct, let alone its rationality. Becker does not want to discuss the market process explicitly (how the hypothetically random actions of individuals are merged into an aggregate which is rational), and Kirzner wants to discuss nothing else. Becker avoids discussing the market process, and Kirzner avoids discussing market (collective) rationality. Neither man really addresses the central feature of the other's position, namely, the implicit assumptions about the *one* (the aggregate market) and the *many* (acting men). What each scholar refuses to come out and say explicitly is the heart of each man's analysis. Such is the fate of scholarly discussions in academic journals.

Why the failure of each man to "go for the throat"? I contend that it stems from a sort of unwritten agreement among humanistic scholars: they will not "expose the nakedness" of their opponents, if their opponents politely reciprocate. *Humanism cannot deal with the problem of the one and the many*, so when discussions involving this fundamental issue arise, neither participant is immune from a devastating attack from the other. Becker never said in his rebuttal: "Look, Prof. Kirzner, you cannot even discuss the rationality of the market as an aggregate. All you can discuss is the individual. All you can discuss is a market process. You are unable to say anything about whether the market as a whole theoretically responds to high or low prices in predictable ways. You have no right even to use a model of 'the market,' since your presuppositions deny the possibility of such a model. In fact, you cannot claim to be an economist at all, since you are far too consistent with your own presupposition about the scientific illegitimacy of making interpersonal comparisons of subjective utility. Any model of the market must abstract from reality, and human action is not conceivable in such terms. Without a model of human action, you ought to get out of the economics profession. Why not sell insurance for a living?"

If Becker had attacked him so forthrightly, Kirzner might have replied: "You cannot explain how a market works. Your system is totally static. You cannot integrate human actions by means of a theory of market process, because acting men are rational, they learn from the past, and they are low price-seekers. You draw a lot of charts that show indifference curves, but no such curves exist in reality; they are all mental constructs. All things never remain equal. Your static system is a sham. You must rely on some version of

equilibrium, yet all equilibrium analysis necessarily involves timelessness, not to mention perfect human foresight — the elimination of all unforeseen uncertainty. So you claim to be building a case for irrational individuals as the foundation for market rationality, but your graphs can only be constructed by means of a presupposition of total, perfect human foresight and rationality. You cannot explain how your inconceivable aggregate market with its hypothetical demand curves ever comes into existence — which it does not do, since it is all a construct. So you ought to get out of the economics profession. But stay out of the insurance business; insurance salesman must deal with acting men, and you refuse to acknowledge that men act rationally anyway. You ought to become a mystic."

In such an exchange, both men would have to deny that the other is a true economist, and in doing so, both men would deny the existence of a science of economics. They would show that neither the *a priorists* nor the *empiricists* can deal with the problem of the one and the many. Both sides need to deny the validity of their own presuppositions in order to practice their profession. As Van Til once quipped, each side stays in business by taking in each other's washing. So to this extent, these men are not talking at cross purposes. They are united in their willingness to let each other stay in the profession; otherwise, both of them would have to get out. And for that matter, so would the editors of all the scholarly economics journals. There would be no economics profession to write for.

What about equilibrium? Is the concept of equilibrium really crucial to modern free market economics? It has been an implicit aspect of economic reasoning from the beginning, and an explicit aspect since the 1800's. Free market economic models all assume the "tendency toward equilibrium" in the market process. Is Kirzner correct in challenging Becker for having used the concept in an essay that denies the necessity of assuming rational (low price-seeking) individuals? And if he is correct, does that very equilibrium come back to haunt him?

Equilibrium is an impossibility, since it involves perfect foreknowledge — a world with no surprises, no profits, and no losses. Everyone is a price-taker; everyone responds predictably to market conditions; no one has any independence from all other participants' predictions. In short, human action is inconceivable in such a universe. Yet it is this inconceivable standard which undergirds all non-socialist economic thought, including Kirzner's. "It is generally

recognized that the market process (whether within a given industry or for an entire economy) is a *means of communicating* knowledge. The knowledge that a market communicates is made up of precisely those elements of information necessary to bring about the systematic revisions of plans in the direction of equilibrium (whether partial or general). Each market decision is made in the light of market information. Where the decisions of *all* market participants dovetail completely, all of them can be implemented without disappointments and without subsequent alterations of plans; the market is in equilibrium."⁴⁸ So Kirzner, like all other market-oriented economists, must judge the real world of human action in terms of a hypothetical, intellectually inconsistent world of equilibrium—a world in which forecasting is perfect, everyone's actions are fully known in advance, and men have no freedom of choice. In such a world, humans respond as automatons to stimuli. Cause and effect rule supreme: the triumph of Kant's phenomenal realm of science over Kant's noumenal realm of free human personality. In short, Kirzner must rely on a *limiting concept*, equilibrium, in order to judge the success or failure of market institutions in dovetailing the varying plans of acting men. Yet this limiting concept is in total opposition to the methodological individualism (autonomous man) that Kirzner and the Austrian School economists constantly preach. To explain human action, economists use a model which denies human action.

Here is one of the important assumptions of Alchian: "Comparability of resulting situations is destroyed by the changing environment."⁴⁹ *The changing environment in an evolving universe may have changed the rules of survival.* This is also true for Hayek's evolving universe. *This is the plight of all process philosophy.* Hayek relies on the market to guide men in their quest to dovetail their plans, but how can he be sure that the laws of the market process are still supreme? After all, we live in a world of constant change. Where is his measuring rod which tells us whether or not we are progressing according to our individual plans? How can he or Kirzner use equilibrium as the standard, when equilibrium analysis is absolutely contrary to the concept of free, autonomous human action? Alchian, as a consistent evolutionist, says that survival is the only criterion. This leads us back to the old debate: *Who or what is to insure the survival of mankind?*

48. *Idem.*

49. Alchian, *op. cit.*, p. 31.

The whole appeal of Lester Frank Ward and all other central planning advocates is that they argue that man is different from the animals around him or before him. Man has a mind. Scientific men, as an elite corps of specialists, can therefore do what no other animal can: change the environment according to a plan that ensures the survival of their own species. Man the planner overcomes through central planning the limits that have constrained all other life forms. Man the planner is a new being, a being that can adapt evolutionary processes to his own advantage as a species. No longer is man nothing more than a product of evolutionary, purposeless competition among all the species. Now man can take control of the processes of evolutionary change. Science has made this possible. This perspective is widely held. The religion of humanism teaches it.

Hayek and Kirzner can affirm that man the planning *individual* can best achieve control over nature by decentralized planning within the framework of a market order. But to claim this, they must rely on some sort of standard. How can men, as individuals, be sure that their plans are working to their advantage? By appealing to the hypothetical standard of equilibrium? But Hayek's reliance on the institutions of the free market is founded on his *denial* of omniscience. Equilibrium analysis affirms universal human omniscience, and it simultaneously denies autonomous human action.⁵⁰ Progress toward equilibrium is the Austrian School's equivalent to progress toward absolute zero: when we achieve it, we have denied all progress.⁵¹ It is progress toward *man* the omniscient being, meaning *men*

50. Mises writes: "Action is change, and change is in the temporal sequence. But in the evenly rotating economy change and succession of events are eliminated. Action is to make choices and to cope with an uncertain future. But in the evenly rotating economy there is no choosing and the future is not uncertain as it does not differ from the present known state. Such a rigid system is not peopled with living men making choices and liable to error; it is a world of soulless unthinking automata; it is not a human society, it is an ant hill." *Human Action* (New Haven, Connecticut: Yale University Press, 1949), p. 249. In the third edition published by Regnery in 1966, this appears on p. 248.

51. Mises writes: "The only method of dealing with the problem of action is to conceive that action ultimately aims at bringing about a state of affairs in which there is no longer any action, whether because all uneasiness had been removed or because any further removal of felt uneasiness is out of the question. Action thus tends toward a state of rest, absence of action." *Human Action* (1949), p. 245; (1966), p. 244. Mises, however, insists that the use of such imaginary and self-contradictory constructs is inescapable for the science of economics. He does not offer a theoretical defense of static theory; he uses *pragmatism*. "The method of imaginary constructions is justified by its success," (1949), p. 238; (1966), p. 236. Then how can we know

the totally predictable, cause-and effect dominated, price-taking non-actors. The world of equilibrium is a world without autonomous men—and autonomous man is the universally shared presupposition of all schools of humanistic economics.

Can the decentralized competition of the free market ensure the survival of man? There is no way that Hayek or Kirzner can affirm this scientifically. How can we even speak of species man, when we cannot legitimately make interpersonal comparisons of subjective utility? How can "man, the collective" ever know anything? How can we even speak of such an intellectual abstraction, if we are methodological individualists and subjectivists? Only by denying our premises.

The Chicago School rationalists want to avoid such questions, but they are also unable to escape the antinomies of post-Kantian thought. Their world of economic equilibrium analysis also assumes omniscience. Becker begins with equilibrium analysis to prove that in the aggregate, the market is rational, even if individuals are not. Yet, as Kirzner says, how can he assume the existence of equilibrium conditions? It is men as plan-makers and plan-revisers who create a *tendency* toward equilibrium. You cannot legitimately argue rationality in an equilibrium market and deny that men are necessarily rational, since to achieve equilibrium, all men must be perfectly rational and totally omniscient. Alchian begins with the presumption of uncertainty: "The existence of uncertainty and incomplete information is the foundation of the suggested type of analysis; the importance of the concept of a class of 'chance' decisions rests upon it. . . ." ⁵² Yet Becker begins with equilibrium charts to prove his case that a rational market can be the product of irrational decisions. There is something illogical here.

whether an imaginary construct "works"? He has no answer: "The method of imaginary constructions is indispensable for praxeology [the science of human action—G.N.]; it is the only method of praxeological and economic inquiry. It is, to be sure, a method very difficult to handle because it can easily result in fallacious syllogisms. It leads along a sharp edge; on both sides yawns the chasm of absurdity and nonsense. Only merciless self-criticism can prevent a man from falling headlong into these abysmal depths," (1949), p. 238; (1966), p. 237. But, we must ask, *self-criticism according to what standards?* How do we link our hypothetical and self-contradictory constructs (human action without human action) to the external realm of events? Mises does not say. No economist can say. The only way we can do this is through *intuition*, as Mises and Milton Friedman agree: North, "Economics: From Reason to Intuition," *Foundations of Christian Scholarship*, *op. cit.*

52. Alchian, *op. cit.*, p. 35.

Conclusion

The dualisms of post-Kantian thought are inescapable. To evaluate change, you need a fixed standard. To evaluate the success of human action, you need a model which denies human action, whether you call it equilibrium or "the evenly rotating economy," as Mises does. To measure the progress of mankind, you need a changeless standard which thwarts the progress of mankind. (How can we have progress in a static order?) To assert that personal irrationality is compatible with market rationality, you need an equilibrium model which rests on personal infallibility. To argue that we need a decentralized market order to preserve and expand human knowledge, we wind up affirming that no one can understand the market order. The laws of the market order are the result of eons of development—the product of human action but not of human design—yet we are asked to believe that this order is as useful to mankind as a whole (when we can legitimately say nothing as methodological individualists about mankind as a whole) as if it had been designed specifically for mankind as a whole. We must affirm cause and effect in a world that is the product of chance. We must affirm that man the planning individual cannot effectively make decisions for other men, because no man has sufficient knowledge to integrate the knowledge of other acting men, yet we are also supposed to affirm that the market is a reliable institution for the progress of the species, when we do not know how the market ever developed, and we cannot speak of an aggregate like "man, the species." We want the *one* (the market order) to conform to the needs of the *many* (acting individuals), yet we cannot, as methodological individualists, make any scientifically legitimate statements about the needs of the many. (One man "needs" to stick pins in others, while others insist that they "need" to avoid being stuck.) We make our case for the market in terms of imperfect knowledge (Alchian and Hayek), yet we are then forced to make judgments about evolution as a process, the best interests of mankind as a species, the reliability of the market in a world of evolutionary change, and so forth. From ignorance (we need the market to integrate and expand knowledge) to near-omniscience (we *know* that the market will provide us with this needed knowledge). From irrationality (Becker's irrationality thesis) to rationality (Becker's equilibrium analysis). The logic of humanistic economics is hopeless.

Christian economics is the only answer. We have a source of rationality. We have a guarantee of economic laws. We have confidence that the market order is fully conformable to the needs of individuals, and also to the needs of mankind as a whole. We know that we do not need perfect knowledge (omniscience) in order to have reliable knowledge. We know that the logic of our minds, despite its limitations when pushed, is a reliable device for interpreting and moulding external reality. We know that the market is historically the product of human action, precisely because it is transcendently the product of God's design. The dominion covenant offers us all these needed intellectual requirements. It makes economic thought possible. Without the presupposition of the dominion covenant, and the revelation of God's design for economic institutions and relationships, there can be no logical, consistent, reliable, self-attesting science of economics, whether deductivist or inductivist (logical or empirical). Any economics based on evolutionism must fail; its own internal contradictions cannot support it. Evolution is process philosophy, and process philosophy is relativism, lawlessness, the kingdom of whirl. All humanistic systems of economics are evolutionistic: Marxism, Austrianism, Chicagoism, and Keynesianism. If we are to have a reliable concept of economics, we need reliable concepts of God, man, and law. Humanism provides us with unreliable concepts of God, man, and law. It is time to abandon humanism as the foundation of economic analysis.

I have argued that the humanists must borrow heavily from Christianity in order to build their economic systems. They deny omniscience, yet they must affirm it as an ideal in order to create an equilibrium model which serves as a standard toward which human action moves. They affirm structure in the midst of change. They affirm progress for the species as a whole, despite the fact that they cannot speak of progress for the species as a whole if they are faithful to the principle of methodological individualism. The free market's advocates are united in their belief that there is an inherent rationality in the market order, yet neither Hayek nor Alchian can explain why such rationality can exist in a world of flux and irrationality. They deny the epistemological necessity of the doctrine of providence, yet they speak of market processes as if these processes were providential in nature: *selecting* survivors, *adopting* species, *integrating* conflicting plans of individuals, and so forth. The very features of

their individualistic systems that demand aggregate coherence cannot be affirmed without abandoning the logical requirements of methodological individualism. They do not wish to speak of *methodological covenantalism*, yet they are forced to adopt the conclusions of covenantalism in order to escape the clutches of methodological collectivism. They write as though they were living in a world of cosmic personalism, yet they explicitly deny the existence of any such universe. They want the fruits of a Christian world-and-life view, but not the roots. We cannot enjoy forever the fruits of Christian civilization, including the free market social order, without the roots: the biblical doctrines of God, creation, providence, law, the image of God, and the dominion covenant. We must abandon the evolutionists' defenses of the market if we are successfully to defend the market from the evolutionistic opponents of the market.

Appendix C

COSMOLOGIES IN CONFLICT: CREATION VS. EVOLUTION

Gertrude Himmelfarb, in her superb study, *Darwin and the Darwinian Revolution* (1959), quotes an amusing and highly revealing section from Benjamin Disraeli's 1847 novel, *Tancred*. Disraeli, who later became England's Prime Minister, caught the new evolutionistic spirit of some of Britain's upper classes—pre-Darwinian evolution, and a perspective universally condemned by scientists everywhere prior to Darwin's *On the Origin of Species* (1859). A fashionable lady urges Tancred, the hero, to read a new book, "Revelations of Chaos" (actually, Robert Chambers' anonymously printed and enormously popular *Vestiges of Creation*): "You know, all is development. The principle is perpetually going on. First, there was nothing, then there was something; then—I forget the next—I think there were shells, then fishes; then we came—let me see—did we come next? Never mind that; we came at last. And at the next change there will be something very superior to us—something with wings. Ah! that's it: we were fishes, and I believe we shall be crows. But you must read it. [Tancred protests, mentioning that he had never been a fish. She goes on:] Oh! but it is all proved. . . . You understand, it is all science. . . . Everything is proved—by geology, you know."

It was people like this lady who bought 24,000 copies of *Vestiges of Creation* from its publication in 1844 until 1860—not the scientists, but good, upstanding Anglican Church members. When Darwin's *Origin* was published, the entire edition of 1,250 copies was sold out in one day. The doctrine of evolution, rejected by scientists in 1850, was the universal orthodoxy in 1875. Natural selection over millions of years had become the catch-all of the sciences. The entire universe is a chance operation in this perspective: chance brought all things into existence (if in fact all things were not always in existence), and

chance presently sustains the system. The utterly improbable laws of probability provide creation with whatever piecemeal direction it possesses. This cosmology is a return to the cosmologies of ancient paganism, though of course it is all dressed up in its scientific smock and footnotes.

The reigning cosmologies of the non-Christian world have always had one feature in common: they do not distinguish between the being of God and the being of the universe. In all these cosmogonies — stories of the original creation — a finite god created the world out of a pre-existing “stuff,” either spiritual or material. This god, only comparatively powerful, faced the contingent (chance) elements of the ultimately mysterious “stuff” in a way analogous to the way we now face a basically mysterious creation. Chance is therefore ultimate in all non-Christian systems. Some “primitive” cosmogonies affirm creation from an original cosmic egg (Polynesian, eighth-century Japan).¹ A large number of the creation stories were creation out of water (Maori, certain California Indian tribes, the Central Bantu Tribe of the Lunda Cluster, Mayan Indians in Central America, Babylon).² The Egyptian text, “The Book of Overthrowing Apophis,” provides an excellent example of a water cosmogony: “The Lord of All, after having come into being, says: I am he who came into being as Khepri (i.e., the Becoming One). When I came into being, the beings came into being, all the beings came into being after I became. Numerous are those who became, who came out of my mouth, before heaven ever existed, nor earth came into being, nor the worms, nor snakes, were created in this place. I being in weariness, was bound to them in the Watery Abyss. I found no place to stand.”³ After planning in his heart the various beings, he spat them out of his mouth. “It was my father the Watery Abyss who brought them up and my eye followed them (?) while they became far from me.” This god is not the sovereign God of the biblical creation story; the Bible’s God did not spring from a watery abyss, nor did He create the world from His own substance. He created it out of nothing.

Greek Speculation

Hesiod, who probably wrote his classic poems in the eighth century, B.C., sketched a cosmogony that sought the source of creation

1. Mircea Eliade (ed.), *From Primitives to Zen* (New York: Harper & Row, 1967), pp. 88, 94.

2. *Ibid.*, pp. 86, 88, 90, 91, 93, 98.

3. *Ibid.*, p. 98.

in the infinite void (chaos), in much the same way as modern science searches for the origin of the universe. Chaos is the source of all that is.⁴ As was the case and is the case in most non-Christian cosmologies, he held to a theory of eternal cycles: the original Age of Gold is inevitably followed by a process of deterioration into new ages: Silver, Bronze, and finally Iron.⁵ (A similar outline is given by Daniel to King Nebuchadnezzar in Daniel 2; Daniel's exposition to the king's vision is not cyclical, however, for a fifth kingdom—God's eternal kingdom—finally replaces the fourth and final earthly kingdom.) Pagan cyclical theories held to a faith that the grim age of iron could be regenerated back into a new age of gold through the application of ritual acts of chaos. Our present age is characterized by law and order—the opposite of life—so that by violating established social and political laws, societies can be regenerated from below. Thus, the ancient pagan cultures had annual or seasonal chaos festivals. Metaphysical regeneration rather than ethical regeneration was basic to their cosmologies. Not a return to covenantal law, as in the Hebrew-Christian perspective, but an escape from law: here was the alternative to the biblical perspective.⁶ This dialectic between order and chaos was universal in the Near Eastern and classical civilizations. Ethics was therefore primarily political, for it was the State, as the supposed link between heaven and earth, that was the agency of social and personal salvation.⁷

In examining the history of the universe, Greek scientists were not noticeably superior to their predecessors, the poets, or the cosmologists of other ancient cultures. In an extremely important study, *The Discovery of Time* (1965), the authors conclude: "For all the rationality of their concepts, they never put down firm intellectual roots into the temporal development of Nature, nor could they grasp the time-scale of Creation with any more certainty than men had done before. In the History of Nature, therefore, the continuity between the ideas of the Greek philosophers and those of the preceding era is particu-

4. Hesiod, "Theogony," *ibid.*, p. 115.

5. Hesiod, *Works and Days*, lines 109-201.

6. Eliade, *Cosmos and History* (1958); *The Sacred and the Profane* (1957). Both are available in Harper Torchbook editions. See also Roger Caillois, *Man and the Sacred* (Glencoe, Ill.: Free Press, 1959).

7. R. J. Rushdoony, *The One and the Many* (Fairfax, Virginia: Thoburn Press, [1971] 1978), chaps. 3, 4. Cf. Charles N. Cochrane, *Christianity and Classical Culture* (New York: Oxford University Press, [1944] 1957), p. 323.

larly striking: here, even more than elsewhere, one may justly speak of their theories as 'radical myths'⁸

Hecateus of Miletos, an historian of the mid-sixth century, B.C., attempted to link human history with natural history. His conclusions were still being quoted by Diodorus of Sicily five centuries later, in the latter's *Historical Library*: "When in the beginning, as their account runs, the universe was being formed, both heaven and earth were indistinguishable in appearance, since their elements were intermingled: then, when their bodies separated from one another, the universe took on in all its parts the ordered form in which it is now seen. . . ."⁹ Life sprang from "the wet" by reason of the warmth from the sun; all the various forms were created at once. The creation of the elements was therefore impersonal. The creation of life was spontaneous, instantaneous, and fixed for all time. It was a purely autonomous development.

The philosopher Plato was caught in the tension between order and chaos. Two of the pre-Socratic philosophers, Heraclitus and Parmenides, had set forth the case for each. Heraclitus had argued that all is flux, change, and process; Parmenides had argued that all is rational, static, and universal. This so-called 'dialectic' between structure and change, order and chaos, was expressed in terms of the Form (Idea)-Matter dualism.¹⁰ Plato, in the *Timaeus* dialogue, begins with a contrast between exact, eternal mathematical concepts and the temporal flux of history. As Toulmin and Goodfield comment: "The Creation of the cosmos was the process by which the eternal mathematical principles were given material embodiment, imposing an order on the formless raw materials of the world, and setting them working according to ideal specifications."¹¹ It is the vision of a Divine Craftsman. Plato was non-committal about the timing of this creation or the order of the creation; it was, at the minimum, 9000 years earlier. In response to Aristotle's attack on this theory, Plato's pupils argued that it was only an intellectual con-

8. Stephen Toulmin and Jane Goodfield, *The Discovery of Time* (New York: Harper Torchbook, 1965), p. 33; cf. p. 37.

9. *Ibid.*, p. 35.

10. Rushdoony, *The One and the Many*, ch. 4; Herman Dooyeweerd, *In the Twilight of Western Thought* (Philadelphia: Presbyterian and Reformed, 1960), pp. 39-42; Cornelius Van Til, *A Survey of Christian Epistemology*, Volume II of *In Defense of the Faith* (Den Dulk Foundation, 1969), ch. 3.

11. *Discovery of Time*, p. 42.

struct, not something to be taken literally.¹² They were undoubtedly quite correct. Plato's god, as his other dialogues indicate, was an impersonal Idea of the Good, itself a fragmented universal.¹³

Aristotle's cosmology was different. His god was a totally impersonal, totally aloof being—thought contemplating itself—and therefore indifferent to the world. The affairs of the world are determined by autonomous processes. Both god and the world are eternal (*Physics*, VIII). His god is therefore "Unmoved Perfection," totally independent. The creation is equally independent.¹⁴ God's existence does not explain why other beings exist, or why they exist in a particular way.¹⁵ There had never been a temporal beginning; time is unbounded. History operates in terms of cycles.¹⁶ Aristotle was intensely skeptical concerning questions about some hypothetical and unknowable original creation.

The later Greek philosophical schools known as the Stoics (deterministic) and Epicureans (skeptical, atheistic) also held to a cyclical view of history. Their curiosity about the universe's origins went unsatisfied. When Paul confronted members of both schools of thought on Mars' Hill in Athens, he was unable to convince them to believe in the Bible's Creator God—the God in whom we live and have our being (Acts 17:24-28, 32). Paul's concept of God was utterly foreign to their belief in an independent, autonomous universe. They preferred to believe that an impersonal world of pure chance (luck) battles eternally for supremacy over pure determinism (fate), equally impersonal.¹⁷

Christianity offered a solution to this eternal tension. The Creator of heaven and earth is a God of three Persons: eternal, omnipotent, exhaustive in self-revelation. The revelation of the Bible, not the logic of the self-proclaimed autonomous human mind, serves as the foundation of this belief.¹⁸ This belief overcame the dualism of

12. *Ibid.*, p. 43.

13. Arthur O. Lovejoy, *The Great Chain of Being* (New York: Harper Torchbook, [1936] 1965), pp. 38, 48-53; Van Til, *Survey*, pp. 37-38.

14. *Discovery of Time*, pp. 44-45. For Aristotle's arguments against the Greek "creationists," see *Meteorologica*, Bk. II, ch. I, par. 1.

15. Lovejoy, *Great Chain*, p. 55.

16. Aristotle, *Meteorologica*, II: XIV: 352a, 353a. Haber has concluded that Aristotle was essentially a uniformitarian: Francis C. Haber, "Fossils and Early Cosmology," in Bentley Glass, et al. (eds.), *Forerunners of Darwin: 1745-1859* (Baltimore: Johns Hopkins Press, 1959), pp. 9-10. Cf. *Discovery of Time*, pp. 45-46.

17. Cochrane, *Christianity*, p. 159.

18. *Ibid.*, p. 237.

classical thought by denying the impersonalism of the cosmos. It provided an alternative to the collapsing classical civilization, for it offered a wholly new cosmology. As Cochrane says, "The fall of Rome was the fall of an idea, or rather of a system of life based upon a complex of ideas which may be described broadly as those of Classicism; and the deficiencies of Classicism, already exposed in the third century, were destined sooner or later to involve the system in ruin."¹⁹

Eastern Monism

The major philosophical religions of China and India are Buddhism and Hinduism. Both are ultimately monistic faiths. They hypothesize an ultimate *oneness of being* underlying all reality. This total oneness became plural at some point in the past, thus producing the creation out of itself; at some later point in history, it will overcome this dualism to become unified again. The change and multiplicity of life are therefore *maya*—illusions. Only unity can be said truly to exist. Somehow, the ultimate reality of one has included in itself the illusion of plurality. Swami Nikhilananda, a respected Hindu scholar whose article appears in a symposium of Darwinian evolutionists, has tried to explain his system's cosmology: "According to the Upanishads, which form the conclusion and the essence of the Vedas and are also the basis of the Vedanta philosophy, Atman, or the unchanging spirit in the individual, and Brahman, or the unchanging spirit in the universe, are identical. This spirit of consciousness—eternal, homogeneous, attributeless, and self-existent—is the ultimate cause of all things. . . . Vedanta Philosophy speaks of attributeless reality as beyond time, space, and causality. It is not said to be the cause of the Saguna Brahman [first individual] in the same way as the potter is the cause of the pot (dualism), or milk of curds (pantheism). The creation of Saguna Brahman is explained as an illusory superimposition such as one notices when the desert appears as a mirage, or a rope in semi-darkness as a snake. This superimposition does not change the nature of reality, as the apparent water of the mirage does not soak a single grain of sand in the desert. A name and a form are thus superimposed upon Brahman by *maya*, a power inherent in Brahman and inseparable from it, as the power to burn is inseparable from fire. . . . According to Vedanta, *maya* is

19. *Ibid.*, p. 355.

the material basis of creation; it is something positive. It is called positive because it is capable of evolving the tangible material universe."²⁰

The one of Atman-Brahman produces something different, maya, which really is not different in reality from the one, and maya in turn evolves the material universe, although it is not itself material. It is an illusion. The universe is therefore an illusion. The process is cyclical: "Evolution or manifestation is periodical or cyclic; manifestation and non-manifestation alternate; there is not continuous progress in one direction only. The universe oscillates in both directions like a pendulum of a clock. The evolution of the universe is called the beginning of a cycle, and the involution, the termination of the cycle. The whole process is spontaneous, like a person's breathing out and breathing in. At the end of a cycle all the physical bodies resolve into maya, which is the undifferentiated substratum of matter, and all individualized energy into prana, which is the cosmic energy; and both energy and matter remain in an indistinguishable form. At the beginning of the new cycle, the physical bodies separate out again, and the prana animates them. Evolution and involution are postulated on the basis of the indestructibility of matter and the conservation of energy. [The swami seems to be throwing a sop to the evolutionists here, since matter really cannot exist, for all is one—spirit.] From the relative standpoint, the creation is without beginning or end. A cycle is initiated by the power or intelligence of God. According to Hindu thinkers, the present cycle commenced about three billion years ago. It appears from some of the Upanishads that all beings—superhuman, human, and subhuman—appear simultaneously at the beginning of a cycle."²¹

There can be no true separation or distinction between the Creator and the creation. All is ultimately one substance: spirit. If matter is eternal, this means that illusion is eternal. Yet the attainment of Nirvana implies an escape from the process of time and change, so it would appear that not everything is matter eternally, i. e., illusion. Something—one's soul—escapes from this eternal illusion to return

20. Swami Nikhilananda, "Hinduism and the Idea of Evolution," in *A Book that Shook the World* (University of Pittsburgh, 1958), pp. 48-49. The position of philosophical Buddhism is similar: D. T. Suzuki, *Outlines of Mahayana Buddhism* (New York: Schocken Books, [1907] 1963), pp. 46-47.

21. Nikhilananda, *ibid.*, p. 51.

to the oneness. Thus, both Hindus and Buddhists developed systems of ascetic practices by which the souls of men, or at least the surviving deeds of men (Buddhism), could escape from creation. In this sense, the asceticism of the East was similar to the monistic (not necessarily monastic) ascetism of the West's gnostic sects, desert mystics, or other neoplatonic groups.²²

During the first half of the twentieth century, English language readers had to rely almost exclusively on the voluminous researches of Daisetz Teitaro Suzuki for their knowledge of Zen Buddhism, and his studies of the more orthodox and scholarly Mahayana Buddhism were also influential. Both systems are ultimately monistic, as is Hinduism, from which Buddhism developed. Paralleling the almost scholastic Mahayana form of Buddhism is Hinayana, or ascetic-magical Buddhism, but Western readers are far less concerned with this less speculative offshoot, however important it may have been in practice. As might be expected, Suzuki tries to come to grips with the ultimate oneness—Absolute Suchness—but his explanation is, by definition, hopeless. "Absolute Suchness from its very nature thus defies all definitions."²³ The ground of all existence is therefore nonrational, incommunicative, mysterious. As with Hinduism, diversity is viewed as a result of finite consciousness.²⁴ There can be no answer of the eternal one-many distinction; we can never know how the one became many.²⁵

Certain conclusions utterly foreign to Western, Christian thought result from this monism. For example, there can be no personal responsibility in such a system. Suzuki explains that "Buddhism does not condemn this life and universe for their wickedness as was done by some religious teachers and philosophers. The so-called wickedness is not radical in nature and life. It is merely superficial."²⁶ All things are at bottom one; thus, there can be no

22. R. J. Rushdoony, "Asceticism," in *The Encyclopedia of Christianity* (Wilmington, Del.: National Foundation for Christian Education, 1964), Vol. I, pp. 432-36; Rushdoony, *One and the Many*, pp. 164-70; Rushdoony, *The Flight from Humanity: A Study of the Effect of Neoplatonism on Christianity* (Fairfax, Virginia: Thoburn Press, [1973] 1978), chaps. 1-5. An example of heretical Christian monistic asceticism—almost Eastern in its perspective—is the medieval mystic, Meister Eckhart. See Raymond Bernard Blakney, *Meister Eckhart: A Modern Translation* (New York: Harper Torchbook, [1941]).

23. D. T. Suzuki, *Outlines of Mahayana Buddhism*, pp. 101-2.

24. *Ibid.*, p. 112.

25. *Ibid.*, p. 114.

26. *Ibid.*, p. 128.

murder. "It is true that Mahayanism perfectly agrees with Vedantism when the latter declares: 'If the killer thinks that he kills, if the killed thinks that he is killed, they do not understand; for this one does not kill, nor is that one killed.' (*The Katopanishad*, II, 19.)"²⁷ Furthermore, according to Suzuki, there is no personal immortal soul in Mahayana Buddhism.²⁸ There is no personal God.²⁹ There is no grace; all merit is earned.³⁰ One's deeds—not the person—are carried into eternity through *karma*, or reincarnation, ascending or descending along the scale of being.³¹ The deeds survive, not an individual soul.³² Yet somehow it is possible to distinguish good deeds from bad deeds, in spite of the fact that at bottom all things are one, and all distinctions are illusions.³³ There is no Creator, no Fall, and no hell.³⁴ In the final analysis, there is no knowledge: "Human consciousness is so made that at the beginning there was utter not-knowing. Then there was the eating of the fruit of the tree of knowledge—the knowledge that consists in making the knower different from what he knows. That is the origin of this world. The fruit separated us from not-knowing in the sense of not knowing subject and object. This awakening of knowledge resulted in our ejection from the Garden of Eden. But we have a persistent desire to return to the state of innocence prior, epistemologically speaking, to creation, to the state where there is no division, no knowledge—prior to the subject-object division, to the time when there was only God as He was before He created the world. The separation of God from the world is the source of all our troubles. We have an innate desire to be united with God."³⁵ He deliberately uses Western and Christian terms to describe a completely non-Western concept of God—impersonal, without attributes. But the thrust of Buddhist monism should be clear: the goal is universal, eternal *unity*. The Creator must be unified with the creature. We are to unite with God metaphysically, as equals, not ethically, as subordinates. We are to

27. *Ibid.*, p. 135n.

28. *Ibid.*, p. 164.

29. *Ibid.*, p. 219.

30. *Ibid.*, pp. 184-85.

31. *Ibid.*, pp. 187, 192.

32. *Ibid.*, p. 193.

33. *Ibid.*, p. 200. Capitalism, for example is evil: pp. 188-89.

34. *Ibid.*, p. 253.

35. Suzuki, "The Buddha and Zen," (1953), in *The Field of Zen* (New York: Harper and Row Perennial Library, 1970), pp. 15-16.

share God's attribute of divinity and oneness, rather than be united ethically to Christ in His perfect humanity.

The idea of creation out of nothing, and hence the Creator-creature distinction, is repugnant to Eastern thought. While the following quotation from Suzuki is chaotic, it is no worse than an extract from Hegel, Tillich, or Bonhoeffer (whose book, *Creation and Fall*, must rank as one of the truly perverse, contorted efforts in modernist biblical exegesis): "When God created the world outside Himself, He made a great mistake. He could not solve the problem of the world as long as He kept it outside of Himself. In Christian theological terminology, God, to say 'I am,' has to negate Himself. For God to know Himself He must negate Himself, and His negation comes in the form of the creation of the world of particulars. To be God is not to be God. We must negate ourselves to affirm ourselves. Our affirmation is negation, but as long as we remain in negation we shall have no rest; we must return to affirmation. We must go out into negation of ourselves and come back. We go out but that negation must come back into affirmation. Going out is coming back. But to realize that going out is coming back we have to go through all kinds of suffering and hardship, of trials and disciplines."³⁶

The use of intense mystical contemplation of total absurdities, sometimes followed by acts of asceticism, or physical beatings, is the Zen Buddhist means of achieving *satori*, the heart of Zen.³⁷ Nothing has meaning or purpose: this is the gateway to *satori*, or pure religious freedom. Total chaos rules supreme, and in chaos there is perfect peace.³⁸ All aspects of life must be accepted.³⁹ True existence is timeless.⁴⁰ By abandoning one's own individuality, man links himself to the infinite—infinite possibilities, infinite responsibilities, unlimited freedom.⁴¹ Total annihilation means total perfection. Given such a philosophy, it is not surprising that the East should have produced a stagnant culture in which men seek escape in earthly routine and the timelessness of *satori*: "The only thing that makes Buddhists look rather idle or backward in so-called 'social service' work is the fact that Eastern people, among whom Buddhism

36. *Ibid.*, p. 15.

37. *Zen Buddhism: Selected Writings of D. T. Suzuki* (Garden City, N. Y.: Doubleday Anchor, 1956), chaps. 3, 4.

38. *Ibid.*, ch. 1.

39. *Ibid.*, pp. 105, 256.

40. *Ibid.*, pp. 250, 264.

41. *Ibid.*, pp. 265-66.

flourished, are not very good at organization; they are just as charitably disposed as any religious people and ready to put their teachings into practice. But they are not accustomed to carry on their philanthropic undertakings in a systematic way. . . ."⁴² This stands in contrast to Puritans of the sixteenth and seventeenth centuries, who built charitable institutions that still exist today, and which transformed the character of English life.⁴³ Eastern people can organize successfully, as the Communists have shown, but only under the influence of a Western philosophy of progress and triumph. Monism is a religion of stagnation and retreat.

Cosmological Evolution

The concluding chapter of Charles Norris Cochrane's superb study, *Christianity and Classical Culture* (1944), deals with the philosophy of St. Augustine and his concept of history. It is Augustine who marks the transition between the shattered world of classical civilization and the new Christian society. Augustine reshaped the historical vision of Western Civilization, a monumental intellectual feat. Augustine's twin vision of predestination and linear line—both explicitly Pauline concepts—gave Western culture the idea of history.⁴⁴ All human history is directional. It began with the creation, and it shall end with the final judgment. Earthly kingdoms rise and fall, but God's kingdom (which Augustine saw, unfortunately, as exclusively spiritual and ecclesiastical in impact) is permanent. The doctrine of historical cycles is therefore false.⁴⁵ Furthermore, creation was not a process extending back into the mists of time; it was a fiat creation within the time span of human records: "In vain, then do some babble with most empty presumption, saying that Egypt has understood the reckoning of the stars for more than a hundred thousand years. For in what books have they collected that number

42. *Ibid.*, p. 274. For a critique of Zen, see Lit-sen Chang, *Zen-Existentialism* (Nutley, New Jersey: Craig Press, 1967).

43. W. K. Jordan, *Philanthropy in England, 1480-1660* (London: George Allen & Unwin, 1959; New York: Russell Sage Foundation).

44. Lynn White, Jr., "Christian Myth and Christian History," *Journal of the History of Ideas*, III (1942), p. 147; Theodore Mommsen, "St. Augustine and the Christian Idea of Progress," *ibid.*, XII (1951), pp. 346-74; Robert A. Nisbet, *Social Change and History* (New York: Oxford University Press, 1969), ch. 2; Herbert A. Deane, *The Political and Social Ideas of St. Augustine* (New York: Columbia University Press, 1963), pp. 71-73.

45. Augustine, *City of God*, Bk. XII, chs. 14-16. This is available in an inexpensive Modern Library edition.

who learned letters from Isis their mistress, not much more than two thousand years ago? . . . For as it is not yet six thousand years since the first man, who is called Adam, are not those to be ridiculed rather than refuted who try to persuade us of anything regarding a space of time so different from, and contrary to, the ascertained truth?"⁴⁶ Sadly for the condition of the besieged Church in the final quarter of the twentieth century, Christian scholars must spend whole lifetimes in refuting that which is, in Augustine's term, ridiculous — worthy of ridicule rather than refutation.

Augustine's world is a universe of cosmic personalism. God's providence brings all things to pass. It was his answer to the cosmic impersonalism of the classical world. "By thus discarding characteristic prejudices of classical mentality, Augustine opens the way for a philosophy of history in terms of the *logos* of Christ; i.e. in terms of the Trinity, recognized as the creative and moving principle."⁴⁷ In short, writes Cochrane, "For Augustine, therefore, the order of human life is not the order of 'matter,' blindly and aimlessly working out the 'logic' of its own process, nor yet is it any mere reproduction of a pattern or idea which may be apprehended *a priori* by the human mind."⁴⁸ Process is not the source of structure or meaning. "The *logos* of Christ thus serves to introduce a new principle of unity and of division into human life and human history."⁴⁹

The world has a fixed order. The Greeks believed this with respect to the creation of the various species, as do the Hindus. They were not so rigorous in applying a theology of process to the world. They hesitated to follow the implications of their view of cycles. They refused to question fully the firmness of a fixed order of creation that is not the product of a sovereign Creator. But Christians do have a foundation for their trust in natural laws. From the time of Augustine in the early fifth century through the sixteenth and seventeenth centuries, the Christian West would stand in confidence before a nature which is under the control of God.⁵⁰

The medieval view of the earth was basic to Western men's understanding of the universe in 1600. Because of the centrality of the earth in the order of God's creation, and because of the drama of the

46. *City of God*, XVIII: 40.

47. Cochrane, *Christianity*, p. 480; cf. p. 474.

48. *Ibid.*, p. 484.

49. *Ibid.*, p. 487.

50. *Discovery of Time*, p. 68. Cf. the works of the French historian, Pierre Duhem (see Bibliography, p. 476).

Fall of man and the Incarnation of the Son of God in Jesus Christ, their view of the universe was understandably geocentric. But they took the Ptolomaic construction of the universe as *physically* geocentric as a valid representation of the *ethical* geocentricity of earth in the creation. The earth was understood as round. (The incredible portolano maps of the middle ages rival the accuracy of modern maps; they were probably pre-Phoenician in origin.)⁵¹ But it was supposedly placed at the center of a huge system of translucent spheres, to which the sun, planets, and stars were attached, all rotating in perfect spherical harmony around the earth. While the existence of comets should have warned them against the translucent spheres, it did not. Galileo's telescopes, not comets, smashed these spheres.

Some commentators, such as J. B. Bury, have argued that this geocentricity gave men a sense of importance and power in the universe. This was supposedly destroyed by the advent of modern astronomical theories.⁵² Others, such as Arthur O. Lovejoy, have argued just the opposite: the earth was seen as the garbage dump of the universe, with hell at its center. "It is sufficiently evident from such passages that the geocentric cosmography served rather for man's humiliation than for his exaltation, and that Copernicanism was opposed partly on the ground that it assigned too dignified and lofty a position to his dwelling-place."⁵³ The fact seems to be that man's escape from the geocentric universe could be viewed either as a contraction of man's physical (and therefore historical) place in creation, or as an elevation, ethically, because of one's escape from the wrath of the God of the formerly confined creation. On the other hand, men might view the universe as majestically huge, and there-

51. Charles H. Hapgood, *Maps of the Ancient Sea Kings* (Philadelphia: Chilton, 1966). This is one of the most startling books ever published. Ignored by professional historians and geographers, it produces evidence that accurate maps of the world, including Antarctica, were available to explorers in the sixteenth century, probably in the twelfth century, and very likely long before the Phoenecians. Antarctica was not rediscovered—discovered, given the standard textbook account—until the eighteenth century. The book is an eloquent rebuttal of cultural and historical evolutionists: if anything, it indicates cultural devolution. No wonder it is ignored by modern scholars!

52. J. B. Bury, *The Idea of Progress* (New York: Dover, [1932] 1955), p. 115. The book first appeared in 1920.

53. Lovejoy, *Great Chain*, p. 102; cf. Alexander Koyré, *From the Closed World to the Infinite Universe* (Baltimore: Johns Hopkins Press, [1957] 1970), pp. 19, 43. This garbage-dump cosmology was an Aristotelian conception of the world: *Great Chain*, p. 104.

fore the God who created it must be infinite. This is metaphysically humbling, but for the regenerate it can be the promise of triumph. The key is not the size or shape of the universe, but the reliability of the revelation of the God of creation. The problem is not size, but ethics, not geographical position, but ethical position. The great danger, soon witnessed, of the expanded size of God's universe was the next step, wholly illegitimate: *infinite time*.⁵⁴

Modern historians have often been remiss, lazy, or deliberately misleading in their unwillingness to comment on another aspect of the conflict between medieval Roman Catholic orthodox science and the Renaissance discoveries. Renaissance speculation was not the product of a group of armchair college professors. It was deeply involved in magic, demonism, and the occult arts. C. S. Lewis is quite correct when he observes that it was not the Middle Ages that encouraged grotesque superstitions; it was the "rational" Renaissance. These men were searching for *power*, like Faustus, not truth for its own sake.⁵⁵ For example, it is generally today accepted that the first late-medieval or early modern figure to advance the old Greek concept of an infinite universe was Giordano Bruno.⁵⁶ Yet it was Bruno's reputation, well-deserved, as a magician, a Kabbalist, and an astrologer, that brought him to his disastrous end.⁵⁷ It was not simply that Copernicus, in the name of mathematical precision, placed the sun at the center of the universe. Ptolemy's system was as accurate in its predictions as Copernicus' system (for Copernicus erroneously favored circular planet orbits instead of ellipses).⁵⁸ Copernicus was involved in a neoplatonic, Pythagorean revival against the Aristotelian universe of the late-medieval period. Mathematics governs everything, this tradition teaches, contrary to Aristotle's teachings.⁵⁹ It was also a deeply mystical and magical tradition.

54. The crucial aspect of time in cosmological speculation will be discussed more fully in the section dealing with geological evolution.

55. C. S. Lewis, *The Abolition of Man* (New York: Macmillan, [1947] 1965), pp. 87-89. The attempt of modern science to fuse rational scientific technique and magical power is the theme of Lewis' magnificent novel, *That Hideous Strength* (1945).

56. Lovejoy, *Great Chain*, pp. 116-17; Koyré, *Closed World*, p. 39.

57. Frances Yates, *Giordano Bruno and the Hermetic Tradition* (New York: Vintage, [1964] 1969). This is required reading for anyone who still believes the myth of the "rational" Renaissance.

58. E. A. Burt, *The Metaphysical Foundations of Modern Physical Science* (Garden City, N. Y.: Doubleday Anchor [1925] 1954), p. 36. This is a very fine study of the mind-matter dualism of modern scientific and philosophical thought.

59. *Ibid.*, p. 52-56.

Kepler, the mathematical genius who discovered that planetoid motion is elliptical, was a sun-worshipper and an astrologer.⁶⁰ The leaders of the institutional church understandably were disturbed by these theologically and cosmologically heretical individuals.

The debate over whether or not the universe is infinite is still with us today. Einstein's curved (in relation to what?) and finite universe is obviously not in harmony with the absolute space of Newton's cosmology. Prior to the sixteenth century, however, European scholars had not raised the question. Aristotle's rejection of the idea was considered final. The problem is exceedingly intricate, as anyone understands who has attempted to struggle through Alexander Koyré's book, *From the Closed World to the Infinite Universe* (1957). Copernicus and Kepler rejected the idea, although their speculations vastly expanded men's vision of the creation. Galileo, whose telescopes shattered the translucent spheres as comets never had, was content to affirm an indeterminate universe. Descartes, who above all other men of his era, believed in a totally mathematical universe, and whose vision in this regard was crucial for the development of modern science, said that space is indefinite. He was always cautious on theological or semi-theological topics. The limit, he thought, may well be in our minds; we should therefore avoid such disputes. In fact, Descartes' refusal to postulate limits (due to men's inability to conceive such limits) really served as an assertion of an infinite space.⁶¹ Descartes' god was simply pure mind, having nothing in common with the material world.⁶²

Henry More (not Sir Thomas More), in the latter part of the seventeenth century, was converted to a belief in an *infinite void space*, identifying this with God's omnipresence. The limited material universe is therefore contained in this infinite void. Space is eternal, uncreated, and the necessary presupposition of our thinking. He identified the spatiality of God and the divinity of space.⁶³ Space is an attribute of God in this perspective—a dangerous linking of Creator and creature. (This position, by the way, was also held by Jonathan Edwards in his youth.⁶⁴) More is not that crucial a figure in the history of Europe, but his opinion on the infinity of space was

60. *Ibid.*, pp. 56-58, 69. Kepler's Platonism was tempered by his Christian faith.

61. Koyré, *Closed World*, p. 124.

62. *Ibid.*, p. 122.

63. *Ibid.*, pp. 150-53.

64. R. J. Rushdoony, *This Independent Republic* (Fairfax, Virginia: Thoburn Press, [1964] 1978), p. 6. Rushdoony cites Edwards' youthful notebooks: "Notes on Natural Science, Of Being."

shared by Isaac Newton.⁶⁵ Newton's affirmation of Absolute Space and Absolute Time as postulates of all physics was to open the door to a conclusion which he personally opposed: an autonomous universe.

Leibniz identified Newton's Absolute Space with the material universe, a step Newton did not take, but one which few others seemed able to resist after 1700. It was the crucial step in severing God from His universe. Thus, concludes Koyré: "At the end of the [seventeenth] century Newton's victory was complete. The Newtonian God reigned supreme in the infinite void of absolute space in which the force of universal attraction linked together the atomically structured bodies of the immense universe and made them move around in accordance with strict mathematical laws. Yet it can be argued that this victory was a Pyrrhic one, and that the price paid for it was disastrously high. . . . Moreover, an infinite universe existing only for a limited duration seems illogical. Thus the created world became infinite both in Space and in Time. But an infinite and eternal world, as [Dr. Samuel] Clarke had so strongly objected to in Leibniz, can hardly admit creation. It does not need it; it exists by virtue of this very infinity."⁶⁶

From a closed world to an infinite universe means, therefore, a *universe closed to God*. There is nothing to which men can appeal beyond the creation itself. But without God there can be no meaning. Max Weber was correct: modern science removes meaning from the world.⁶⁷ Koyré ends his book with this statement: "The infinite Universe of the New Cosmology, infinite in Duration as well as Extension, in which eternal matter in accordance with eternal and necessary laws moves endlessly and aimlessly in eternal space, inherited all the ontological [being] attributes of Divinity. Yet only those — all the others the departed God took away with Him."⁶⁸ *Cosmic impersonalism*: we are back to the ancient pagan cosmology, only now there is no doubt about the randomness of the universe; it is aimless.

This did not mean that those holding the new cosmology abandoned the idea of linear time. Now that God was officially removed, the linearity of time was secularized, and hopefully humanized. The

65. Koyré, p. 159; Burt, pp. 260-61.

66. Koyré, pp. 274-75.

67. Max Weber, "Science as a Vocation," (1918), in H. H. Gerth and C. Wright Mills (eds.), *From Max Weber: Essays in Sociology* (New York: Oxford University Press, 1946), pp. 139-42.

68. Koyré, p. 276.

universe would now be cosmically personal in terms of man. The secular idea of progress was born in the seventeenth century, paralleling the advent of a resurgence of orthodox Protestant (especially Calvinistic and Puritan) optimism. Nothing has characterized this secularization of Christian providence any better than Nisbet's comment: "By the late 17th century, Western philosophers, noting that the earth's frame had still not been consumed by Augustinian holocaust, took a kind of politician's courage in the fact, and declared bravely that the world was *never* going to end (Descartes, it seems, had proved this) and that mankind was going to become ever more knowledgeable and, who knows, progressively happy. Now, of a sudden, the year 2000 became the object of philosophical speculation."⁶⁹ They had not yet become fully consistent with their own philosophy of randomness.

Bernard de Fontenelle's *Conversations on the Plurality of Worlds* (1686) became the great popular work announcing the new infinity of creation, as well as its new-found autonomy. In 1755, Immanuel Kant took these speculations and became the first systematic evolutionist. Process theology came into its own: "The fame of Immanuel Kant's three *Critiques* has obscured his striking contributions to cosmology. In fact, his earlier work on the *General History of Nature and Theory of the Heavens* (1755) was the first systematic attempt to give an evolutionary account of cosmic history: in it, he spoke of the whole Order of Nature, not as something completed at the time of the original Creation, but as something *still coming into existence*. The transition from Chaos to Order had not taken place all at once."⁷⁰ Creation, argued Kant, had taken millions of centuries. Time may somehow be linear and infinite, but the process of creation is *cyclical*. The world will run down, only to be reformed once again out of the climactic conflagration at the end. As he put it, "Worlds and systems perish and are swallowed up in the abyss of Eternity; but at the same time Creation is always busy constructing new formations in the Heavens, and advantageously making up for the loss." So what we have, in his words, is a "Phoenix of Nature, which burns itself only in order to revive again in restored youth from its ashes, through all infinity of times and spaces. . . ."⁷¹ Immanuel Kant, on whose

69. Robert A. Nisbet, "The Year 2000 and All That," *Commentary* (June, 1968), p. 61.

70. *Discovery of Time*, p. 130.

71. Quoted in *ibid.*, p. 134.

speculations modern philosophy is built, also set forth the presuppositions in terms of which supposedly neutral "eternal oscillation" astronomers have constructed their footnoted cosmologies. Religious presuppositions govern modern astronomical science and modern geological science.

Men have abandoned the revelation of God. In the name of science, they inform us that the belief in a creation by God a few thousand years ago is preposterous—reversing St. Augustine's dictum. Yet in place of this creation account, physicist George Gamow asks us to believe that the universe began its existence as a condensed droplet of matter at an extremely high density and temperature. This primordial egg—the "ylem"—generated fantastic internal pressures and exploded. As it expanded its temperature dropped. As Robert Jastrow summarizes Gamow's theory: "In the first few minutes of its existence the temperature was many millions of degrees, and all the matter within the droplet consisted of the basic particles—electrons, neutrons and protons. . . . According to the big-bang theory, all 92 elements were formed in this way in the first half-hour of the existence of the universe."⁷² Jastrow offers this as a serious possibility; he is the Director of the Goddard Institute for Space Studies, and the lectures were originally viewed over CBS television in 1964 as a "Summer Semester." The public is expected to believe this, but not expected to take seriously the biblical account of creation.

We are told that the laws of probability probably govern the universe. The universe evolved in terms of these laws. Prof. Charles-Eugène Guye once estimated the probability of evolving an imaginary (but given) random assortment of atoms into an equally imaginary protein molecule containing a minimum of four atoms: carbon, hydrogen, nitrogen, and oxygen. He did not assume the coming of all 92 elements or even life itself—just the components of a single protein molecule. The volume of original random atomic substance necessary to produce—randomly—the single protein molecule would be a sphere with a radius so large that light, travelling at 186,000 miles per second, would take 10^{82} years to cover the

72. Robert Jastrow, *Red Giants and White Dwarfs* (New York: New American Library, 1969), p. 69. This happened 10 billion years ago, says Jastrow. This figure was revised to 13 billion in 1973, possibly older: 16 billion. Associated Press release: Dec. 25, 1973.

distance (10, followed by 81 zeros). The outermost limits of the known universe today, however, is about ten billion light-years, or 10^9 light-years. The probability that this imaginary molecule might be formed on a globe the size of the earth, assuming vibrations of the random electrons and protons on the magnitude of light frequencies, is next to nil. It would take—get this!— 10^{243} years. The universe is supposedly a minimum of 10 billion years old, or 10^9 years.⁷³ Obviously, modern scientists dismiss Guye's estimates as impossible, but if he is even remotely correct (within fifty or sixty zeroes), the laws of probability simply do not account for the existence of the universe. Yet scientists regard the creation story of the Bible as utterly fantastic, the cultic tale of a primitive Semitic tribe. Of course, what they fail to point out is that the theory that the universe sprang from the random impact of atoms in motion was first developed by Epicurus and Democritus; the theoretical presuppositions of the "new cosmology" are very ancient indeed. In the area of speculation concerning ultimate origins, the scientists of today have contributed very little improvement over Greek speculation twenty-three centuries ago. The fact that Kant propounded it in 1755 does not make it automatically modern.⁷⁴

Geological Evolution

Renaissance science broadened the conception of the universe that had been inherited from Aristotelian science. The physical boundaries of the universe seemed immeasurably gigantic, inconceivably large, and finally infinite. Enlightenment thinkers, most notably Kant, then hypothesized the *infinity of time* to match the hypothetical infinity of the spatial universe. From the Christian point of view, this constituted the "evolutionary wedge" by which the creation account of the Bible was steadily shoved into the realm of myth and fable. Mechanical laws replaced personal providence, thus seemingly negating the necessity of believing in "creation as sustaining." Next, the expansion of men's temporal horizon seemingly negated the necessity of believing in "creation as origin." *Cosmological*

73. Guye's figure of probability is 2.02×10^{321} ; cited in Lecomte du Noüy, *Human Destiny* (New York: Longmans, Green, 1947), p. 34. A "far less" impossible figure has been computed by Prof. Edward Blick: 10^{67} to one. Henry M. Morris, *et al.* (eds.), *Creation: Acts, Facts, Impacts* (San Diego: Creation Life Publishers, 1974), p. 175.

74. John C. Green, *The Death of Adam* (Ames: Iowa State University Press, 1959), pp. 8, 28-30.

evolution provided the hypothetical framework for *geological evolution*; geological evolution was to make possible the hypothesis of *biological evolution*. But all three required *vast quantities of time* to make them plausible. Loren Eiseley, perhaps the most successful popularizer of biological evolutionary concepts within America's intellectual circles, has made this point repeatedly: "No theory of evolution can exist without an allotment of time in generous quantities. Yet it is just this factor which was denied to the questioning scientist by the then current Christian cosmology. A change as vast as that existing between the Ptolemaic and Copernican systems of the heavens had to be effected in Western thinking upon the subject of time before one could even contemplate the possibility of extensive organic change; the one idea is an absolute prerequisite to the other."⁷⁵

In the year 1750, there were still very few scientists, let alone average citizens, who believed that the earth was much older than 6,000 years. By 1850, probably a majority of scientists were convinced that the earth was far older. *The Origin of Species*, an instant best-seller in 1859, would probably not have been published, and certainly would not have been popular, apart from a revolution in men's conception of the earth's chronology. How had this revolution come about?

If any man deserves the distinction of having set forth the outlines of geological evolution in a scientific framework, it is probably the French scholar and literary figure, the Comte de Buffon. Named as a member of the Royal Academy at age 26 (1733), appointed keeper of the Royal Cabinet of Natural History in 1739, Buffon published the first volume of his *Natural History* in 1749. He was to publish 35 more volumes before his death in 1788, one year before the outbreak of the French Revolution. His cosmological presupposition was straightforward: "Time is the great workman of Nature."⁷⁶ In the next sentences, he outlined the doctrine of *uniformitarianism*: "He [time] moves with regular and uniform steps. He performs no operation suddenly; but, by degrees, or successive impressions, nothing can resist his power. . . ." Buffon personalized the impersonal. His universe was the same as a recent American song's: "We run our

75. Loren Eiseley, *Darwin's Century: Evolution and the Men Who Discovered It* (Garden City, N. Y.: Doubleday Anchor, [1958] 1961), p. 58.

76. Buffon, cited by Greene, *Adam*, p. 148.

race in an hourglass of space; but we're only the toys in time's great game: time gives and time takes away."⁷⁷ Only the French censors kept his language even remotely orthodox.

Buffon also abandoned one of the fundamental beliefs of orthodox Christianity and non-Christian Aristotelian speculation (fused temporarily in one of Thomas Aquinas' proofs of God): the doctrine of final causes. The universe, Buffon believed, is not headed anywhere in particular. This is one of the crucial tenets of all modern science: teleology cannot be assumed by or proved by modern science. In fact, it was only by Charles Darwin's rejection of teleology — final cause, ultimate direction, etc. — that modern biological evolutionism became possible. As we shall see, the earlier systems of biological evolutionism assumed to some degree a teleological framework. Buffon set the standard over a century before the publication of Darwin's *Origin*.⁷⁸

Furthermore, Buffon rejected the idea that the present order of existence was set immutably by God in the original creation. As Greene summarizes Buffon's position, "it tried to conceive organic phenomena as the outcome of temporal process rather than a static expression of a pattern of creation."⁷⁹ *Providence disappears*, and with it, the idea that each kind reproduces after its own kind indefinitely (Gen. 1:24). He did not take this next step, Greene says, but he could not dismiss the idea of the mutability of species from his mind.

Thus, by removing God from the realm of science, Buffon thought he had transferred sovereignty to man. "There is no boundary to the human intellect. It extends in proportion as the universe is displayed. Hence man can and ought to attempt everything: He wants nothing but time to enable him to obtain universal knowledge."⁸⁰ Greene's comments are significant: "Buffon had come a long way from the Christian concept of the earth as a stage for the drama of man's redemption by divine grace. Burning with the thirst for

77. "Toys in Time," by Bob Kimmel and Ken Edwards, BMI.

78. Buffon was not a biological evolutionist, however: Lovejoy, "Buffon and the Problem of Species," in Glass, (ed.), *Forerunners to Darwin*, ch. 4. He did not believe in the mutability of the species. Writing as he did before the development of stratigraphy — an early nineteenth century science — he did not feel compelled to deal with the problem of fossils in some temporal succession. The question had not yet arisen. He could have both time and stable species.

79. Greene, *Adam*, p. 145.

80. Quoted in *ibid.*, p. 154.

knowledge and intoxicated with the sense of man's potential control over nature, he proclaimed man's power to be master of his own fate. Hitherto, he declared, man had pursued evil more energetically than good, amusement more diligently than knowledge, but there was reason to hope that he would at last discover peace to be his true happiness and science his true glory."⁸¹

Buffon offered a "scientific" conclusion that it had taken about 72,000 years for the globe to cool enough to allow the appearance of life.⁸² We have about 70,000 years ahead of us before the planet chills to lifelessness. This is neither far enough back in time to please modern geologists nor far enough ahead to please evolutionary humanists, but the break between 6,000 years and 72,000 was all that was necessary; ten billion more years was easy enough, once the 6,000-year barrier was breached.

He did not believe in organic evolution; instead, he offered a theory of repeated spontaneous, though naturalistic, appearances of new life-forms. He allowed God to be present only at the very beginning, far back in the mists of time, and far ahead in the final, unspecified, end.⁸³ By his prestige, Buffon offered man the apostate gift of Godless time. Time was the needed dwelling place of uniformitarian change, and the zone of safety from a personal God. Providence was removed from space by autonomous laws of nature and pushed back into antiquity by the newly discovered time machine.

Geology, as a specialized profession, came into being with mining and metallurgy. As men burrowed into the earth, a few of them began to notice the fact that the earth's crust often appears to be layered, like a multi-tiered cake without frosting. Prior to the unifor-

81. *Ibid.*, p. 155.

82. Eiseley, *Darwin's Century*, p. 42. Haber points out that in the unpublished manuscript copy of Buffon's *Epoques de la Nature*, he admitted that his estimate of 72,000 years to cool the molten earth was conservative; it might have taken as much as a million years, possibly more: Francis C. Haber, "Fossils and the Idea of a Process of Time in Natural History," in Glass (ed.), *Forerunners to Darwin*, p. 256. Buffon saw that the Newtonian view of infinite space could serve as an intellectual wedge for his concept of extended time: "And why does the mind seem to get lost in the space of duration rather than in that of extension, or in the consideration of measures, weights and numbers? Why are 100,000 years more difficult to conceive and to count than 100,000 pounds of money?" *Ibid.*, p. 235. The obvious answer—obvious in the mid-eighteenth century—was that by no stretch of the language of Genesis 1 could a period of 100,000 years be obtained. Two centuries ago that was important. A century later it was not.

83. Greene, *Adam*, p. 138.

mitarian geology, the two generally accepted explanations were: 1) Neptunism, that is, deposition by water (either at the flood of Noah or in some great sea of creation); 2) Vulcanism, that is, the deposits of volcanic action. An influential pioneering work was Johann G. Lehmann's *Investigation into the History of Stratified Mountains* (1756). The author believed that Noah's Deluge was the crucial event in the past that reshaped the earth's crust. Another German, Abraham Werner, was an influential teacher of stratigraphy. He was a Neptunist, but his focus was a great primeval sea, and he did not explicitly profess faith in a six-day creation. It was against Werner's theories that James Hutton reacted.⁸⁴

In all of these theories—Neptunism, Vulcanism, and even Buffon's—there were elements of catastrophism. James Hutton set out to refute this presupposition. He accepted the earth at face value; all changes on earth have always occurred at the leisurely pace observable today. He first offered the results of his investigations in 1785; his two-volume *Theory of the Earth* appeared in 1795. He held defiantly to a totally mechanistic view of geological processes; all forces and changes produce counter-forces and compensating changes. In his famous sentence, Hutton announced to the world: "The result, therefore, of this physical inquiry is, that we find no vestige of a beginning, — no prospect of an end."⁸⁵

Eiseley states categorically: "He discovered, in other words, time—time boundless and without end, the time of the ancient Easterners. . . ."⁸⁶ Indeed he did; as Eiseley also has to admit, Hutton's time bears traces of cyclicalism. There is no linear development in Hutton's self-compensating world machine. "Hutton was thus a total uniformitarian."⁸⁷ There had never been any catastrophic changes, Hutton believed, because there had never been any significant change at all. But there had been time—countless eons of time; the checkbook might even be large enough for biological evolutionists to draw the needed time reserves for their cosmologies. The cosmic judgment of God was pushed forward into the endless recesses of time's comforting womb.

Toulmin and Goodfield, in an otherwise excellent study, cannot seem to grasp the threat to Christianity which Hutton's system rep-

84. On Werner and Lehmann, see *ibid.*, pp. 59-62, 70-72.

85. *Ibid.*, p. 78.

86. *Darwin's Century*, p. 65.

87. *Ibid.*, p. 74.

resented. They say that "his fundamental aims were conservative and devout." He was just an honest observer of facts, letting them carry him to some cosmically neutral conclusion. They ask: Why did his contemporaries attack him? For one thing, it was not simply theology that motivated his opponents; his position was undermining Vulcanism's catastrophism, while simultaneously undermining Neptunism, since Hutton laid great emphasis on the power of slowly acting subterranean heat.⁸⁸ He was stepping on everyone's methodological toes. But some of the opposition was theological. Naively, Toulmin and Goodfield remark: "Yet there was, in fact, nothing in Hutton's system—apart from the unbounded chronology—that could legitimately give offense."⁸⁹ That, however, was precisely the point, as Eiseley understands so well: "The uniformitarians were, on the whole, disinclined to countenance the intrusion of strange or unknown forces into the universe. They eschewed final causes and all aspects of world creation, feeling like their master Hutton that such problems were confusing and beyond human reach. The uniformitarian school, in other words, is essentially a revolt against the Christian conception of time as limited and containing historic direction, with supernatural intervention constantly immanent [immanent—"inherent, operating within"—not imminent—"about to happen"—G.N.]. Rather, this philosophy involves the idea of the Newtonian machine, self-sustaining and forever operating on the same principles."⁹⁰

There should be no confusion on this point: the great theological debate centered around the question of *time*. All good men—Frenchmen excepted, naturally—believed in a personal God in the period 1750-1850. This God was allowed to be a creator in some sense or other. But by pushing the time or order of God's creative acts back into a misty past, men were relegating this God into a mere intellectual construction—a kind of useful myth, like Plato's creator god. *One's concept of time is fundamental in defining one's concept of God.*

Prior to Lyell's conversion to Darwinism, his view of time was almost static. Some geological forces tend to raise portions of the earth's crust; there are forces elsewhere which tend to allow land to sink. If elevation is happening in one region, leveling or erosion is taking place somewhere else. It has been this way indefinitely. The

88. Greene, *Adam*, p. 84.

89. *Discovery of Time*, p. 156.

90. *Darwin's Century*, p. 114. Cf. Nisbet, *Social Change and History*, p. 184.

forces are evenly balanced. "If we ask what of significance has happened in this expanse of time, the answer is, 'Nothing.' There have been no unique events. There have been no stages of growth. We have a system of indifference, of more or less meaningless fluctuations around an eternal mean."⁹¹ As Walter Cannon points out, this is not developing time—the time of the modern historian. It is simply unlimited, meaningless time. We might say that his impersonal time is like an infinitely long geometrical line, composed of an indefinite number of identical points. Uniformitarian time does not, in or of itself, give us a theory of evolution, for evolution implies growth, and the eighteenth-century world machine could not grow. It was a gyroscope, not a seed. But it was an exceedingly old gyroscope, and that was to prove crucial.

There is a distinctly religious impulse undergirding uniformitarianism. Eiseley is correct when he says that Hutton was proposing an anti-Christian concept of time. Charles C. Gillispie concludes that "The essence of Huttonianism lay not in specific details of weathering, denudation, or uplift, but in its attitude towards natural history."⁹² Consider what Hutton was saying. On the basis of his own limited wanderings and observations around Edinburgh, Hutton announced a new theory of change to the world. In doing so, modern commentators have concluded, he created the first truly historical natural science, geology. Hutton challenged the biblical account of Noah's flood, the researches and conclusions of the Neptunists and the more cataclysmic Vulcanists, and concluded that what he had seen—slow, even imperceptible geological change—is all men now know. Furthermore, we can assume that such imperceptible change is all any man *can* know—past, present, and future. Since he had never seen the universal flood, obviously no one has ever seen one. His operational presupposition was about as sophisticated as the opinion of the Soviet Union cosmonaut who announced, after returning from a few revolutions above the earth's atmosphere, that *he* had not seen God up there! What Hutton imposed, all in the name of rational historical insight, was the most arrogant and blatant form of what historians call "the tyranny of the present." What was true in

91. Walter F. Cannon, "The Basis of Darwin's Achievement: A Revaluation," *Victorian Studies*, V (1961); reprinted in Philip Appleman (ed.), *Darwin: A Norton Critical Edition* (New York: Norton, 1970), p. 42.

92. Charles Coulston Gillispie, *Genesis and Geology* (New York: Harper Torchbook, [1951] 1959), p. 83.

Edinburgh in 1780 was true for the whole world throughout endless eons of time. If any other historical data refute such a claim—the Bible, the almost universal pagan myths concerning a universal flood, the astoundingly precise calendars of the Babylonians and other ancient cultures, the equally astounding Babylonian astronomical records—then they must be disregarded as insufficiently historical. History is what we can observe here and now, not what primitive people used to think they were observing. Or, as Van Til has put it, “what my net won’t catch isn’t fish.” Yet what Hutton and his endless troops of defenders have claimed is that he alone was truly empirical, truly concerned with the “facts.” But no fact is allowed which seems to come into direct conflict with Hutton’s deeply religious presupposition that rates of change today have always existed, or at the very least, that we have no evidence that indicates that the rates of change have ever been different.

The prolix, unreadable writing of James Hutton did not convince men to believe in the uniformitarian religion. It was not the testimony of the rocks near Edinburgh that converted the world to a theory of an ancient earth. It was rather the built-in desire of men to escape the revelation of a God who judges men and societies, in time and on earth, as well as on the final day of judgment. They prefer to believe in the tyranny of the present because the past indicates the existence of a God who brings immense, unstoppable judgments upon sinners. *Men prefer the tyranny of the present to the sovereignty of God.* Nothing less than a deeply religious impulse could lead men to accept a presupposition as narrow, parochial, and preposterous as the theory of uniformitarian change. Hutton announced, “today Edinburgh; tomorrow the world—past, present, and future,” and men rushed to join the new anti-millennial religion. Like the Soviet cosmonaut, Hutton just could not see any sign of God in the Edinburgh rocks, and those were the rocks men soon wanted.

James Hutton is long forgotten, except by specialists in the history of geology. But his most famous follower, Sir Charles Lyell, cannot be ignored, for it is Lyell’s book, *Principles of Geology* (1830-33), which gave Charles Darwin his operating presuppositions. The son of a botanist, Lyell was by profession a lawyer. He studied geology on the weekends. He was in his early thirties when his multi-volume work was published, and it became an instant classic—indeed, the

definitive book. He had been a catastrophist until 1827; three years later he was the premier uniformitarian in the English-speaking world.

It is not easy to summarize Lyell's work. He opposed the theory of biological evolution until the late 1860's, yet it was sometime around 1860 that the evangelical Christianity of his youth returned to him.⁹³ His commitment to uniformitarian principles of interpretation led him to view geological processes as if they were part of a huge mechanism. He was familiar with the young science of paleontology; he was aware of the fact that lower strata ("older") often contained species that did not appear in the higher ("younger") strata. This seemed to point to both extinct species and completely new ("recent") species, indicating biological development, given the "fact" of eons of time in between the geological strata. Yet Lyell resisted this conclusion until 1867 — nine years after Darwin and Wallace had published their first essays on natural selection and biological evolution. Lyell's opposition to evolution had long vexed Darwin; he could not understand why Lyell resisted the obvious conclusion of the uniformitarian position. As recently as 1958, scholars were still as confused over this as Darwin had been. Lyell's correspondence indicates that he was committed to the idea of final causation — teleology — like most other scientists of his day. He spoke of a "*Presiding Mind*" in an 1836 letter to Sir John Herschel.⁹⁴ This divine intelligence directed any extinctions or new appearances of species that might have taken place in the past. He called these "intermediate causes," and let it go at that. But such interventions by God, direct or indirect, violated the principle of uniformitarian change, since no such intervention is visible today. Thus, concludes the meticulous scholar, A. O. Lovejoy, "once uniformitarianism was accepted, evolutionism became the most natural and most probable hypothesis concerning the origin of the species."⁹⁵ But Lyell insisted (in the 1830's through 1863) on the recent origin of man and the validity, respecting mankind, of the Mosaic record. "He simply did not see," writes Lovejoy, "that a uniformitarian could not consistently accept special-creationism, and must therefore accept some form of evolu-

93. William Irvine, *Apes, Angels, and Victorians: The Story of Darwin, Huxley, and Evolution* (New York: McGraw-Hill, 1955), p. 139.

94. Quoted by Greene, *Adam*, p. 373, note #6.

95. Lovejoy, "The Argument for Organic Evolution Before the Origin of the Species, 1830-1858," in Glass (ed.), *Forerunners to Darwin*, p. 367.

tionism."⁹⁶ In the tenth edition of *Principles* (1867), Lyell finally capitulated, becoming a full Darwinian.

Lyell's ultimate faith was in uniformitarianism: unlimited geological time and slow, continuous geological change. This was to override his commitment to special creation (or some unnamed non-evolutionary natural process of species transformation). It was an inescapable either/or situation. Nineteenth-century geological and biological scientists could not forever cling to a God who intervened to rewrite the book on living species, eon after eon, letting the "geological clock" tick for ages in between interventions. *If creationism was not a one-time fiat act of God*, it was ludicrous. The ridiculousness of such a God could not forever be avoided. Here was a God who created creatures, then let them perish; intervening, He created new creatures, and some of them perished. In order to keep the balance of nature going, He intervened over and over through countless ages, adding ever more complex creatures to the earth. Some of these became extinct, but cockroaches and ants survived. He behaved, in Lovejoy's words, like a very lazy and befuddled architect, intervening with endless *ad hoc* plans to reconstruct the jerry-built structure. As Lovejoy wryly comments, "no man outside of a madhouse ever behaved in such a manner as that in which, by this hypothesis, the Creator of the universe was supposed to have behaved."⁹⁷ Yet such a view was orthodox, both theologically and geologically, from 1820-30. Enlightenment rationalism had eroded the Christian foundation of knowledge; Christians had built on a foundation of sand. Darwinism destroyed the structure, but only because the "creationists" had long before gone bankrupt, leasing the grounds temporarily to Lyell until Darwin foreclosed, bringing in the demolition equipment.

What is both baffling and appalling is that so many Christians still cling in the 1980's to Lyell's temporary and hopeless compromise—a compromise he had to abandon in 1867. Geologists who profess orthodoxy still argue that we must accept the results of uniformitarian geology, yet assure us that we do not have to accept organic evolution. In a scholarly journal of a modern Calvinistic seminary we

96. *Ibid.*, p. 373. Gertrude Himmelfarb believes that Lyell was an evolutionist in private. But his private letters also indicate his belief in a "Presiding Mind." He was certainly ambivalent—or epistemologically schizophrenic—but I do not think he was dishonest. See Himmelfarb, *Darwin and the Darwinian Revolution* (Gloucester, Mass.: Peter Smith [1959] 1967), pp. 189-93.

97. *Ibid.*, p. 413.

read: "We believe that Scripture does not permit the interpretation of the theistic evolutionist. We do believe that the data of Scripture permit, although they do not require, the view that the days of Genesis one were periods of time of indefinite length. Hence we believe that the products of creation of the various days one through six were not necessarily instantaneously produced in a mature state but were formed over a long period of time. This view does have the advantage of permitting the Christian geologist to interpret intelligibly the actual data of geology."⁹⁸ It has the advantage of allowing a geologist who is a Christian to interpret the Bible in terms of the geology and theology of 1840, when some men could still believe in numerous special creations. The geology of 1859 or later, devoid of final causes, purpose, interventions by God, or the need of reconciliation with the Bible, has no space for God's activity in between the autonomous strata of the earth.

Galileo had begun the steady removal by autonomous men of God from His universe. By the 1840's, God's last place of refuge among scientists was in the realm of biology. Uniformitarianism after 1830 had finally removed Him from the rocks. He was allowed His various "special creations" from time to time among living beings. "And while all these miraculous interpositions were taking place in order to keep the organic kingdom in a going condition, the Creator was not for a moment allowed, by most of these geologists (including, as we shall see, Lyell and his followers) to interfere in a similar manner in their own particular province of the inorganic processes. . . . So, in the opinion of most naturalists the only officially licensed area in which miracles might be performed by the Creator was the domain of organic phenomena."⁹⁹ Charles Darwin's *On the Origin of Species* repealed the license even here. Thus, it is a sign of the demoralization and naiveté of modern uniformitarian geologists who claim to be Christian in their scholarship, that they expect the

98. Davis A. Young, "Some Practical Geological Problems in the Application of the Mature Creation Doctrine," *Westminster Theological Journal*, XXXV (Spring, 1973), p. 269. He is the son of Edward J. Young, author of *Studies in Genesis One*. A reply to Young's article appeared in the subsequent issue: John C. Whitcomb, Jr., "The Science of Historical Geology in the Light of the Biblical Doctrine of a Mature Creation," *ibid.*, XXXVI (Fall, 1973). Young's doctorate is in geology; Whitcomb's is in theology. Whitcomb is co-author of *The Genesis Flood* (1961), the most important book in the revival of the six-day creation view of Genesis, for it helped to develop the market for numerous additional studies along these lines in the 1960's.

99. Lovejoy, in *Forerunners*, p. 365.

methodology of uniformitarianism to be easily restrained. It is supposedly fine for geologists to assume as valid this uniformitarian methodology (as it was in 1840), but biologists nevertheless have to be anti-evolutionists, denying therefore Darwin's overwhelmingly successful—pragmatically speaking—fusion of uniformitarianism and biology. But Darwinianism is not to be denied by compromising Christian biologists in the 1980's, any more than he could be denied by uniformitarian scholarship in the 1870's. Uniformitarian concepts of time are far too potent for half-measures.

The important humanist study, *Forerunners of Darwin* (1959), published on the centenary of the publication of *Origin of Species*, opens with a crucial quotation from the uniformitarian geologist, George Scrope, who wrote in 1858 these memorable words: "The leading idea which is present in all our researches, and which accompanies every fresh observation, the sound which to the ear of the student of Nature seems continually echoed from every part of her works, is—Time! Time! Time!"¹⁰⁰

Biological Evolution: Pre-Darwin

The seventeenth century had seen the reappearance of postmillennial eschatology—out of favor since the fifth century—which offered Christians new hope. The preaching of the gospel and the establishment of Christian institutions would eventually transform the world ethically, and this ethical transformation would eventually be accompanied by external personal and cultural blessings. This had been the vision of many English Puritans and most of the American colonial Puritans (until the pessimism of the 1660's, symbolized by the poetry of Michael Wigglesworth, set in). This vision was to have a revival, unfortunately in more antinomian, "spiritual" forms, through the influence of Jonathan Edwards in the eighteenth century.¹⁰¹

Paralleling this biblical optimism was the secular idea of progress

100. Cited by Francis C. Haber, "Fossils and Early Cosmology," *ibid.*, p. 3.

101. On the Puritans' postmillennial impulse, see the articles by James Payton, Aletha Gilscorff, and Gary North in *The Journal of Christian Reconstruction*, VI (Summer, 1979); Iain Murray, *The Puritan Hope* (London: Banner of Truth, 1971); Ernest Lee Tuveson, *Redeemer Nation: The Idea of America's Millennial Role* (University of Chicago Press, 1967); Alan Heimert, *Religion and the American Mind* (Cambridge, Mass.: Harvard University Press, 1966). One of the representative documents of the colonial American period is Edward Johnson's *Wonder-Working Providence*, edited by J. Franklin Jameson (New York: Barnes & Noble, 1952). Until quite recently, postmillennial thought was a neglected—indeed, completely misunderstood—factor in American history.

of Enlightenment thinkers, especially Frenchmen. By the 1750's, this perspective was becoming a part of the European climate of opinion.¹⁰² The idea of stages of historical development fascinated the writers of the day. The cosmological evolutionary schemes of Kant and Laplace were discussed as serious contributions, and Maupertuis and Diderot, the French secularists, offered theories of biological development—"transformism."¹⁰³ Three important features were present in these new theories; without these theoretical axioms, there would have been no reason to assume the evolutionary perspective. First, *change* (not stability) is "natural"—one of the key words of the Enlightenment.¹⁰⁴ Second, the natural order is regular; nature makes no leaps. This is the doctrine of *continuity* (uniformitarianism). Finally, in the late eighteenth and early nineteenth centuries, the method of investigation selected by the progressivists was the *comparative method*. Classification preceded the demonstration of evolutionary change.¹⁰⁵

Classification: this was all-important. Because of the influence of the Greek concept of the *chain of being*, men had long regarded all life as a harmonious interdependence of every species, from God at the top of the chain (or ladder) to the lowest creature. (This presented problems in theory: Are Satan and his angels therefore metaphysically necessary for the operation of the cosmos? Is Satan at the bottom of the scale because of his ethical depravity, or just under God Himself because of his metaphysical power? In fact, if he is totally evil, can he be said to have true existence at all? Questions like these destroyed the jerry-built "medieval synthesis" of Greek philosophy—itsself self-contradictory—and biblical revelation. Yet even in the eighteenth century, much of the original potency of the concept of the "great chain of being" remained.) But this chain of being was

102. J. B. Bury, *The Idea of Progress* (1920), is a standard account of secular optimism.

103. Bentley Glass, "Maupertuis, Pioneer of Genetics and Evolution," and Lester G. Crocker, "Diderot and Eighteenth Century Transformism," in Glass (ed.), *Forerunners of Darwin*.

104. On the importance of the word "nature" to the eighteenth century, see Carl Becker, *The Heavenly City of the Eighteenth-Century Philosophers* (Ithaca: Cornell University Press, 1932). On the way in which "natural history" was used, see Robert A. Nisbet, *Social Change and History*, ch. 4. It meant, essentially, *conjectural history*, that is, how events would automatically develop "naturally" if there were no "artificial" restraints on them. Developmentalism was to become biological evolutionism in the nineteenth century.

105. Frederick J. Teggart, *Theory of History* (Yale University Press, 1925), pp. 129-32.

made up of fixed species. There was progress possible within one's species, but not between the fixed categories. Part of the magical impulse of alchemy was the desire to change lead into gold, not primarily for the sake of wealth, but for the power involved. The magical "philosopher's stone" would enable the magician-scientist to transcend the limits of creation. Thus, the search for the magical talisman; thus, the quest for magical salvation: metaphysical manipulation rather than ethical repentance and regeneration was the magician's means of grace.¹⁰⁶ To break the limits of creaturehood!

Enlightenment progressivists now offered a new theory: there had been progress of species through time. There had been development, and to Enlightenment thinkers, it was easy to assume that biological modification implied ethical improvement. There had been progress! And there would continue to be progress, not just politically and economically, but in the very nature of mankind. The religious impulse was clear enough: *there were no longer any fixed barriers in the creation, given sufficient time to transcend them.* The great chain of being could now be temporalized. Heaven was no longer above men; it was in front of mankind chronologically. Genetics would serve as a substitute for the alchemical talisman.

Not many thinkers were convinced by the biological evidence in 1750, or even in 1850. But the comparative method which had always been implied in the concept of the great chain of being was now emphasized by a newly developed discipline, *natural history*. The crucial figure in this field in the eighteenth century was the Swedish naturalist, Linnaeus. He possessed an unparalleled reputation in 1750; indeed, from the publication of the first edition of his *Sustema Natura* in 1735, he became world-famous, "a phenomenon rather than a man," as Eiseley puts it.¹⁰⁷ He had a mania for naming things, and he created the system of dual names which still exists today, generic and species (which H. L. Mencken used in classifying the *boobus Americanus*). He was not an evolutionist in any sense, but in popularizing comparative anatomy as the means of classification — a method to be applied to every living organism — he added the crucial third axiom of the developmental hypothesis.¹⁰⁸

106. Yates, *Giordano Bruno and the Hermetic Tradition*, chaps. 2, 3.

107. *Darwin's Century*, p. 16.

108. Linnaeus did admit, in later years, that nature had a "sportiveness" about her, that is, surprising variations within species. But not even Eiseley or Greene can conclude that he ever leaned toward biological developmentalism.

Buffon's researches also added prestige to the taxonomic research of the mid-eighteenth-century naturalists. But the next major step was half a century away. An obscure mining engineer, William Smith, had created a system of classifying strata in terms of the placement of organic fossils in each layer. "Strata" Smith's system would be popularized by Rev. William Townsend after 1800. (Ministers would have an important role in natural science for well over a century. Rev. John Ray was the first popular classifier, four decades before Linneaus published. Rev. John Playfair would be the popularizer of James Hutton's uniformitarianism after 1800. Even Charles Darwin himself had once studied to be a minister.) Smith avoided any theoretical explanation of his system—he hated both speculating and publication. He was a convinced catastrophist. Nevertheless, he had provided the uniformitarians with their necessary yardstick. By fusing Hutton's time scale and Smith's progressive fossil beds ("older" fossils in the lower layers), uniformitarians could now argue that they could measure the slow, steady history of the earth.

By 1820, there was hardly a single reputable scientist in the British Isles who was committed to a six-day creation. Both the Neptunists (flooders) and Vulcanists (heaters) believed in long ages preceding man's appearance on the earth. The Hutton time scale was common property among all the groups. All geologists therefore faced a disturbing problem: the fossil record demonstrated clearly that animals and plants appearing in one layer of the earth often did not appear in lower or higher layers—dinosaurs, for example. This implied extinction. It also implied a series of special creations over eons of time. The "creationism" of the 1820's, by clinging to Hutton's time scale, was involved in a whole series of difficult, self-imposed dilemmas. We have already discussed them in the previous section: God the lazy architect; uniformitarianism with too many supernatural interventions; catastrophism with too much time to explain, and too little emphasis on the great Noahic flood. (Not that it was ignored, but it was regarded as only one of many important crises; after 1830, the flood had become a local disaster in Palestine, or the Near East, at most.)

The doctrine of organic evolution was advocated by two thinkers at the turn of the century, Jean Baptiste Lamarck and Erasmus Darwin. Their speculations never proved popular among scientists or laymen. Each came to the conclusion that members of the various

species adapted themselves to changes in their environments. This process of adaptation was supposedly hereditary; thus, *the doctrine of acquired characteristics* was born. It was never to be taken seriously officially; unofficially, it became an escape hatch in the later editions of Charles Darwin's *On the Origin of Species*. But their major premise, namely, *the unlimited possibility of species variation*, did become the touchstone of Darwinian evolution. It was this premise that broke the spell of the great fixed chain of being.

One of the most important books of the early nineteenth century was Rev. William Paley's *Natural Theology* (1802). Paley's work synthesized many of the then-prominent arguments for God's providence on earth. He argued that Newton's clock-like universe offers us testimony to God's sustaining providence. We can see it if only we look at nature's intricate design; the harmonious interdependence of the infinite number of parts assures us that only an omnipotent Creator could have designed, created, and sustained it for all these years. The language of *design* had become universal by Paley's day, and his book only reinforced an established dogma. Darwin himself had been greatly influenced by Paley's providentialism in his college days, as he admitted much later: "I do not think I hardly ever admired a book more than Paley's 'Natural Theology.' I could almost formerly have said it by heart."¹⁰⁹ At the heart of all these schemes of God's mechanistic providence was the doctrine of *final causation*: the whole universe was designed to serve the needs of man. All things were planned in advance to further man's affairs; in every being created in the mists of time there were the materials available to deal with the survival of the species. (This posed a serious theoretical problem: how to explain extinct fossils.) The evolutionary form of this doctrine is obviously Lamarckianism: species have the power of adaptation, individual by individual, organ by organ. *Unconscious adaptation* is the mechanism of organic evolution. When Darwin finally broke with Rev. Paley, he therefore also had to break with Lamarckianism, a position which he had never held anyway.

Providence implies control by God; control implies purpose. The doctrine of final causation had provided Western man with philosophical purpose since the days of Aristotle.¹¹⁰ So long as scien-

109. Darwin to John Lubbock (Nov. 15, 1859); in Francis Darwin (ed.), *The Life and Letters of Charles Darwin* (New York: Basic Books, [1888] 1959), II, p. 15.

110. F. S. C. Northrop, "Evolution and Its Relation to the Philosophy of Nature," in Stow Persons (ed.), *Evolutionary Thought in America* (New York: George Braziller,

tists were able to cling to the concept of purpose, science would never become fully autonomous. It is safe to say that *the struggle over Darwinian evolution was, above all, a struggle over the concept of purpose*. Darwin is regarded as the Newton of biological science. Why? Most of his arguments and data had been offered by others much earlier; the crucial arguments had been provided in the much maligned *Vestiges of Creation* (1844).¹¹¹ The answer would appear to be in the purposeless quality of the doctrine of natural selection; it is based on the philosophy of random variations. Biological processes, in theory, can now be subjected to the rigors of mathematical logic, just as Newton subjected all astronomical changes to mathematical law—or thought he had. It was no longer necessary, Darwin and his followers believed, to hypothesize the existence of creation, providence, or final causes. Therefore, God was no longer a part of the operating hypothesis of biological science. And from the observation that final causes are not necessary for the operations of modern science, it was easy—almost automatic—to conclude that there can be no final causes. “What my net doesn’t catch isn’t fish,” and the net of modern science excludes final causes, both impersonal and personal, but especially personal. Final causation points to God; so does design; hence, let us abolish final causation from the domain of logic and science. If God is to confront us, He must do so only through the non-logical communication of mysticism, ecstasy, encounter, the tongues movement, or some other way which does not confront us in our external, intellectual apostasy. God, being unnecessary to science, was shaved away by the logic of Occam’s razor: needless propositions in any logical statement may be safely ignored.

Lamarck was a representative of the French Enlightenment. In England, after 1789 had brought the French Revolution, it was not popular to be identified with French revolutionaries. After the advent of Napoleon in 1799, it was not popular to be identified with the French, unless it was the “orthodox” comparative anatomist, Cuvier. Lamarck’s arguments were not compelling to conservative Christians or even vague Anglican scholars. He had broken with theological and biological orthodoxy by offering the theory of organic evolu-

1956), pp. 48-54. This was first published in 1950 by Yale University Press. It is a compilation of lectures delivered to the American Civilization Program at Princeton University, 1945-46.

111. Lovejoy, “The Argument for Organic Evolution Before the Origin of Species, 1830-1858,” in Glass (ed.), *Forerunners*, pp. 381-410.

tion (as had Erasmus Darwin), thus alienating conservatives. Yet he held to the idea of purpose, however remote, in arguing for the unconscious adaptation of species to the environment. He had not gone far enough to propose a true "scientific revolution." Too heretical for the conservatives, too providential for any potential atheists and "total autonomy" investigators, the doctrine of the inheritance of acquired characteristics died for want of takers. It survived after 1859 only because Charles Darwin's mechanism of natural selection had washed all traces of purpose from its exterior, and after 1900, the re-discovery of Mendelian genetics finally buried it.

There were other possibilities for an earlier conversion to biological evolution, but none took hold. Hegel's thought was one of these, but the discontinuous "leaps" of nature that he proposed alienated uniformitarians.¹¹² In Germany, the close association of romanticism and evolutionary thought alienated the professional biologists, most of whom were increasingly mechanistic in outlook.¹¹³ Darwin's theory was truly a scientific revolution.

The defeat of orthodox creationism was not an overnight event. Yet one of the interesting features of the steady retreat between 1750 and 1859 was the rallying cry of each successive capitulation: the "higher" view of God involved, or the "deeper" understanding of His providence. Six days just did not do justice to God; He must have showered His providence on His creation for millions of extra years. If only we accept the action of God's primeval sea, the Neptunists said, plus a less comprehensive impact of the flood. If only we accept God's activity in unleashing volcanoes and internal heat, said the Vulcanists. If only we will admit the effects of the flood and earthquakes, said the catastrophists of the 1820's. If only we allow God the right to create new species from eon to eon, the uniformitarians said. If only we do these things, then the introduction of vast geologic time will not harm us. *And at each step, the name of God was invoked.* Men were not to be limited by the confines of God's six-day creation; God is unlimited. And the "unlimited" God of geologic time steadily retreated from the scene; the "unlimited" God was steadily replaced by unlimited time. Time was not personal; time did not call men to repentance. Time seemed holy and magnifying, but most of all, it seemed safe. This centrality of time is understood by today's evolu-

112. Northrop, *Evolutionary Thought*, pp. 61-68.

113. Owsei Temkin, "The Idea of Descent in Post-Romantic German Biology: 1848-1858," *Forerunners*, ch. 12.

tionists; "respectable" Christian geologists—geologists who may be regenerate—have never grasped the fact. Writes Gillispie: "From both the empirical and the interpretative points of view, the progress of geological science in the first half of the nineteenth century was an essential prelude to the formulation of a successful theory of biological evolution. There had, of course, been a number of more or less fanciful evolutionary schemes suggested ever since the middle of the eighteenth century. In [Thomas H.] Huxley's opinion, however, these speculative proposals had little influence on scientific thinking, and it was rather Lyell's work which was primarily responsible for smoothing the road for Darwin, so that from this standpoint it is James Hutton and not Lamarck who ought to be considered Darwin's intellectual ancestor. . . . But uniformitarianism as an attitude toward the course of nature could not be carried to its logical conclusion in a theory of organic evolution until a formulation sufficiently scientific to be compelling could attack the idea of a governing Providence in its last refuge, the creation of new species, and drive it right out of the whole field of natural history."¹¹⁴ Men abandoned creationism step by step, not overnight.

Gillispie goes on to argue that it was the commitment to providentialism that kept the idea of immutable species in the canons of biological orthodoxy: design implied fixed species. Step by step, uniformitarianism removed God from the earth's history. "And after each successive retreat, providential empiricists took up positions on new ground, which their own researches were simultaneously cutting out from under them."¹¹⁵ Not starting with God as the presupposition of their empirical researches, not starting with God's self-justifying revelation in the Bible, the supposedly neutral scientists—operating as they were in terms of non-Christian methodologies—found that their own logic drove them into the waiting arms of infinite time and random change. Not starting with God, they could not logically wind up with God—not the God of the Bible, at least.

No document can be found that better demonstrates this "higher view of God" than Robert Chambers' *Vestiges of Creation*. More than any other scientific work, though produced by an amateur scientist, this one prepared the public's mind for Darwin. Not even Herbert Spencer's evolutionism was more important. How did Chambers

114. Gillispie, *Genesis and Geology*, pp. 217-18. See also Francis C. Haber, *The Age of the World: Moses to Darwin* (Baltimore, Maryland: Johns Hopkins Press, 1959).

115. *Ibid.*, p. 221.

defend his researches? First, he defended the Mosaic record as being most in conformity with his views. Then he said that it was God's expressions of will, not His direct activities, that brought forth the creation. (He ignored, of course, the orthodox doctrine of the verbal creation, that is, the response out of nothing to the command of God.) God created all life; he stated that he took this for granted. "In what way was the creation of animated beings effected? The ordinary notion [that is, the debased doctrine of successive creations over endless ages—G.N.] may, I think, be described as this,—that the Almighty Author produced the progenitors of all existing species by some sort of personal or immediate exertion." So he allowed God to create life. But he then proceeded to ridicule the "orthodox" creationism of his day, that disastrous fusion of geologic time, uniformitarian change, and successive creations: "How can we suppose an immediate exertion of this creative power at one time to produce zoophytes, another time to add a few marine mollusks, another to bring in one or two crustacea, again to produce crustaceous fishes, again perfect fishes, and so on to the end? This would surely be to take a very mean view of the Creative Power. . . . And yet this would be unavoidable; for that the organic creation was thus progressive through a long space of time, rests on evidence which nothing can overturn or gainsay. Some other idea must then be come to with regard to *the mode* in which the Divine Author proceeded in the organic creation."¹¹⁶

It should be obvious that the progression described by Chambers is correct: given the idea of vast geological time, fossils distributed in layers, uniformitarian change—and it was, by 1840, a single idea—God's creative interventions do look foolish. So a new mode of creation is offered: *organic evolution*. In two sentences, Chambers takes us from Newton's cosmic impersonalism for the heavens (not that Newton intended such a conclusion) into a hypothetically impersonal world of biological law: "We have seen powerful evidence, that the construction of this globe and its associates, and inferentially that of all the other globes of space, was the result, not of any immediate or personal exertion on the part of the Deity, but of natural laws which are expressions of his will. What is to hinder our supposing that the organic creation is also a result of natural laws, which

116. [Robert Chambers], *Vestiges of the Natural History of Creation* (4th ed.; Soho, London: John Churchill, 1845), pp. 157-58. It sold 24,000 copies, 1844-60: *Darwin's Century*, p. 133.

are in like manner an expression of his will?"¹¹⁷ Only one thing was to inhibit such a supposition: there was too much of God's will in the picture. When Darwin substituted natural selection through random variation, there would no longer be any hindrance to the supposition in the minds of "liberated" scientists—liberated from the doctrine of final causation or design. Chambers served Darwin among the public even as John the Baptist served Jesus. And like John the Baptist, he did it in the name of God, he thought: "To a reasonable mind the Divine attributes must appear, not diminished or reduced in any way, by supposing a creation by law, but infinitely exalted. It is the narrowest of all views of the Deity, and characteristic of a humble class of intellects, to suppose him constantly acting in particular ways for particular occasions. It, for one thing, greatly detracts from his foresight, the most undeniable of all the attributes of Omnipotence. It lowers him towards the level of our own humble intellects. . . . Those who would object to the hypothesis of a creation by the intervention of law, do not perhaps consider how powerful an argument in favour of the existence of God is lost by rejecting this doctrine."¹¹⁸ Men adopted heresy in the name of a "higher orthodoxy."

Odd, is it not? With every so-called strengthening of the idea of God, He became less and less important to the affairs of men. With each "elevated concept" of God's sovereign power, He became less and less relevant for the activities of empirical scientists. This "exalted" conception of God was to collapse into oblivion a decade and a half later, when Charles Darwin finally made biology autonomous.

Biological Evolution: Darwinism

Early in the year 1858, Alfred Russel Wallace lay on his bed on the island of Ternate in the Dutch East Indies, suffering from what he later described as "a sharp attack of intermittent fever." Because of hot and cold fits, he had to lie down, "during which time I had nothing to do but think over any subjects then particularly interesting to me." So in the midst of some tropical fever, with nothing else to while away his time, Wallace discovered the principle of organic development through natural selection, the theory which shook the world. Somewhere in between 98.7 degrees Fahrenheit and delirium, modern secularism's most important theory of human

117. *Ibid.*, p. 158.

118. *Ibid.*, pp. 160-61.

autonomy was born. It was an auspicious beginning.¹¹⁹

Wallace had been thinking about the problem for almost a decade. He had wondered why some men live and some men die. "And the answer was clearly, that on the whole the best fitted live." He might have said simply, those who survive do, in fact, survive. But that would never have satisfied a scientist like Wallace. "From the effects of disease the most healthy escaped"—you can't fault his logic here, certainly—"from enemies, the strongest, the swiftest, or the most cunning; from famine, the best hunters or those with the best digestion; and so on." A skeptic might not be very impressed so far, but you have to remember that the man was suffering from a fever. "Then it suddenly flashed upon me that this self-acting process would necessarily *improve the race*, because in every generation the inferior would inevitably be killed and the superior would remain—that is, *the fittest would survive*."¹²⁰ This is the Darwinian theory of evolution, without its footnotes, intricate arguments, flank-covering, and graphs.

There are two answers to this perspective. First, *the absolute sovereignty of God*: "So then it is not of him that willeth nor of him that runneth, but of God that sheweth mercy" (Rom. 9:16). The other is that of the *philosophy of pure contingency*, described so wonderfully in Ecclesiastes: "I returned, and saw under the sun, that the race is not to the swift, nor the battle to the strong, neither yet bread to the wise, nor yet riches to men of understanding, nor yet favour to men of skill; but time and chance happeneth to them all. For man also knoweth not his time: as the fishes that are taken in an evil net, and as the birds that are caught in the snare; so are the sons of men snared in an evil time, when it falleth suddenly upon them" (Ecc. 9:11-12).

Pure contingency or God's sovereignty: neither satisfied Alfred Russel Wallace, Charles Darwin, or the myriad of their monograph-writing followers. Somewhere in the randomness that overtakes the individual, the evolutionists believe, there has to be *some* stability—impersonal, laws-of-probability-obeying stability. Thomas Huxley, Darwin's unofficial hatchet-man and progenitor of that remarkable family of professional skeptics—skeptics except where evolution was concerned—stated his faith quite eloquently: chance is really quite orderly, all things considered, and totally sovereign in any case. This is the testament of modern evolutionary thought: "It is said that he

119. Alfred Russel Wallace, *My Life* (New York: Dodd, Mead, 1905), I, p. 361.

120. *Ibid.*, I, p. 362.

[Darwin] supposes variation to come about 'by chance,' and that the fittest survive the 'chances' of the struggle for existence, and thus 'chance' is substituted for providential design. It is not a little wonderful that such an accusation as this should be brought against a writer who has, over and over again, warned his readers that when he uses the word 'spontaneous,' he merely means that he is ignorant of the cause of that which is so termed; and whose whole theory crumbles to pieces if the uniformity and regularity of natural causation of illimitable past ages is denied. But probably the best answer to those who talk of Darwinism meaning the reign of 'chance' is to ask them what they themselves understand by 'chance'? Do they believe that anything in this universe happens without reason or without a cause? Do they really conceive that any event has no cause, and could not have been predicted by any one who had a sufficient insight into the order of Nature? If they do, it is they who are the inheritors of antique superstition and ignorance, and whose minds have never been illuminated by a ray of scientific thought. The one act of faith in the convert to science, is the confession of the universality of order and of the absolute validity in all times and under all circumstances, of the law of causation. This confession is an act of faith, because, by the nature of the case, the truth of such propositions is not susceptible of proof. But such faith is not blind, but reasonable; because it is invariably confirmed by experience, and constitutes the sole trustworthy foundation for all action."¹²¹ At least he called this view what it was: *faith*.

That is one of the endearing qualities about science, especially nineteenth-century, pre-Heisenberg science: its candid lack of modesty.¹²² We know where Huxley stands—at the vanguard of irrefutable truth—because he tells us so.

121. T. H. Huxley, "On the Reception of 'Origin of Species'" (1887), in Francis Darwin (ed.), *Life & Letters of Charles Darwin*, I, p. 553.

122. Werner Heisenberg, an influential physicist of the early twentieth century, destroyed the Newtonian view of the universe. Instead of a mathematically regular, precise world, the modern conception is that of a world governed by the highly improbable laws of probability. Radical contingency was substituted for Newtonian order. Individual events are random; only aggregates can be dealt with statistically—order in the aggregate out of chaos in the individual. Huxley's faith is, by twentieth-century standards, hopelessly naive. For a superb study of modern physics, see the article by the Nobel prize winner, Eugene Wigner, "The Unreasonable Effectiveness of Mathematics in the Natural Sciences," *Communications on Pure and Applied Mathematics*, XIII (1960), pp. 1-14. Basically, the pessimism of Ecclesiastes 9:11-12 comes closer to modern temper than Huxley's optimism.

Wallace was so confident in the truth of what he had discovered that he could hardly contain himself. "I waited anxiously for the termination of my fit so that I might at once make notes for a paper on the subject." His fit-induced paper was completed post-haste and sent to his acquaintance, Charles Darwin, who was working on the same problem that had occupied Wallace's mind for so long.

When Darwin read the paper, he was crestfallen. He wrote despondently to Charles Lyell: "Your words have come true with a vengeance—that I should be forestalled. You said this, when I explained to you here very briefly my views of 'Natural Selection' depending on the struggle for existence. I never saw a more striking coincidence; if Wallace had my MS. [manuscript] sketch written out in 1842, he could not have made a better short abstract! Even his terms now stand as heads of my chapters. . . . So all my originality, whatever it may amount to, will be smashed. . . ." ¹²³ Actually, Darwin should not have worried about Wallace's paper and its possible effects on Darwin's claim of originality. The theory had already been offered back in 1813 by William Wells, in a paper delivered before the Royal Society of London, and it immediately sank into oblivion. Furthermore, another obscure writer, Patrick Matthew, had outlined a very similar theory in an appendix to an 1831 book on timber. ¹²⁴ But in 1858, few scientists remembered these papers.

He offered to have Wallace's paper added to a summary of his own—carefully selected from a pre-1858 pile of notes, just to make certain nobody would forget who got the idea first—and they were published in the *Journal of the Linnean Society*, Zoology, Vol. III (1858). ¹²⁵ The fate of these pathbreaking, revolutionary papers was identical to those published by Wells and Matthew: they sank beneath the surface without a trace. No angry rebuttals, no outraged theologians, nothing. So much for the impact of scholarly journals on

123. Darwin to Lyell (June 18, 1858), *Life & Letters*, I, p. 473.

124. Darwin gave belated recognition to Wells and Matthew (among a long list of others, thereby downplaying their importance) in his "Historical Sketch," added to the third (1861) edition of the *Origin*.

125. Reprinted in Appleman (ed.), *Darwin*, pp. 81-97. Arnold Brackman has argued persuasively that Charles Lyell and Joseph Dalton Hooker, Darwin's friends, set up the "delicate arrangement" whereby Darwin got the credit for discovering the principle of evolution through natural selection. They had the extracts from Darwin's notes read at the Linnean Society meeting, along with Wallace's paper. Brackman, *A Delicate Arrangement: The Strange Case of Charles Darwin and Alfred Russel Wallace* (New York: Times Books, 1980).

nineteenth-century society (and perhaps today).

The matter might have ended there, an obscure footnote in some obscure Ph.D. dissertation (which is the fate of most scholarly articles published in obscure academic journals), had it not been for Darwin's willingness to bring his *Origin of Species* to a conclusion. It was published on November 24, 1859, and it sold out the entire edition of 1,250 copies in one day.¹²⁶ This must have surprised the publisher, John Murray, who had begged Darwin to write a book on pigeons instead.¹²⁷ The reading public, which had purchased 24,000 copies of *Vestiges of Creation*, in marked contrast to the subscribers to the *Journal of the Linnean Society*, obviously was in tune to the times. (Or, in Darwinian terminology, was better adapted to the intellectual environment.)

There can be no question about the book's impact. It launched an intellectual revolution. Many historians and scientists have tried to grasp this instant success, and few can. It was an unpredictable fluke, by human standards. Thomas Huxley remarked years later that the principle of natural selection was so clear, so obvious, that he could not understand why he had not thought of it before. This was the reaction of most of the academic community. For about a year, the reviews in professional magazines were hostile. One exception—"by chance"—was the review in the *Times*, which had been assigned to a staff reviewer, and had in turn been referred to Huxley when he had decided that it was too technical for him to review. Thus, the December 26, 1859 review was very favorable.¹²⁸ Yet at first it had not appeared that Darwin's victory would prove so easy. Huxley wrote much later: "On the whole, then, the supporters of Mr. Darwin's views in 1860 were numerically extremely insignificant. There is not the slightest doubt that, if a general council of the Church scientific had been held at that time, we should have been condemned by an overwhelming majority."¹²⁹ By 1869, the Church scientific (except in France) was in Darwin's camp.¹³⁰

Darwin knew in 1859 just what is needed to pull off an academic revolution: younger scientists and the support of laymen. He went after both, and he won. As he wrote to one correspondent within two

126. *Life & Letters*, II, p. 1.

127. Himmelfarb, *Darwin*, p. 252.

128. *Ibid.*, p. 264.

129. *Life & Letters*, I, p. 540.

130. Himmelfarb, pp. 304-9.

weeks of the publication of the *Origin*, "we are now a good and compact body of really good men, and mostly not old men. In the long run we shall conquer."¹³¹ He was like a troop commander, sending copies with accompanying personal letters to most of the eminent scientific figures in Europe and America.¹³² Laymen may not have converted the scientists, as Himmelfarb notes, but they helped to create the climate of opinion in which both laymen and professionals worked.¹³³

But good tactics will seldom win a world war. Why did Darwin and his book succeed so completely? *Because the various geological theories had already undermined the traditional faith of Christians in the historical accuracy of the Bible.* Huxley may have been correct in his complaint that nine-tenths of the civilized world was Christian in 1860; he was not correct when he also complained that the Bible was accepted "as the authoritative standard of fact and the criterion of the justice of scientific conclusions, in all that relates to the origin of things, and, among them, of species."¹³⁴ If it had been true, then Huxley's 1871 pronouncement would not have been very likely: ". . . this much is certain, that, in a dozen years, the 'Origin of Species' has worked as complete a revolution in biological science as the 'Principia' [of Isaac Newton] did in astronomy. . . ."¹³⁵ Himmelfarb's assessment is closer to the mark: "Thus the 1850's, which have been apotheosized as the most tranquil, prosperous, and assured of all decades in English history, were, in fact, a period of intense spiritual anxiety and intellectual restlessness."¹³⁶ The geology question had disturbed many thinking Christians. As a specialist in the history of Victorian England, her words have to be taken seriously: "What the *Origin* did was to focus and stimulate the religious and nihilist passions of men. Dramatically and urgently, it confronted them with a situation that could no longer be evaded, a situation brought about not by any one scientific discovery, nor even by science as a whole, but by an antecedent condition of religious and philosophical turmoil. The *Origin* was not so much the cause as the occasion of the upsurge of these passions."¹³⁷ With this kind of religious and spiritual assess-

131. Darwin to Carpenter (Dec. 3, 1859), *Life & Letters*, II, p. 34.

132. Irvine, *Apes, Angels & Victorians*, p. 114.

133. Himmelfarb, p. 296.

134. Huxley, *Westminster Review* (1860); in Appleman (ed.), *Darwin*, p. 435.

135. Huxley, *Quarterly Review* (1871); *ibid.*, p. 438.

136. Himmelfarb, p. 239.

137. *Ibid.*, p. 400.

ment of Darwin's impact, it is not surprising to find, as late as 1969, some deservedly obscure evolutionary scientist warning his readers to "beware" of books like Himmelfarb's.¹³⁸ She points to the *religious* roots of Darwin's success.

Charles Darwin had not been a bright child; he had not been ambitious, either. His father had despaired of him for years. He had studied to be a physician, like his father, but had given it up. He had studied to be a minister, but had given that up, too. At the end of his university career, he had developed a fondness for natural science under the direction of Prof. J. S. Henslow, the Cambridge botanist. It was Henslow who secured for Darwin a position as naturalist for the voyage of the H. M. S. *Beagle*, a five-year cruise which changed Darwin's life, as he freely admitted. Henslow also recommended that Darwin read Lyell's newly published first volume of *Principles of Geology*, although Henslow warned against its uniformitarian thesis. The warning went unheeded. At the first port of call for the ship, in early 1832, Darwin's observation of the St. Jago volcanic mountains and boulders, coupled with the uniformitarian vision of Lyell, converted him. The voyage lasted from late 1831 through the fall of 1836. During that time Darwin collected, classified, made many notes, read books, speculated endlessly, and vomited (he was seasick throughout the trip). He sent reports back to England about his findings, and the ready market made by the geologizing mania saw to it that these essays were published and read. He returned to England a mildly prominent fellow. (And like every not-too-bright son, he undoubtedly could face his father—who had opposed the trip in the first place—with a good deal more confidence.)

Darwin always regarded himself as a truly empirical investigator, a man in the tradition of Francis Bacon, the philosopher of scientific empiricism. He wanted to be known as a "fact man." He freely admitted in his autobiography that he had difficulty in following long, abstract arguments.¹³⁹ Commenting many years later on his early researches, he proclaimed: "My first note-book was opened in July 1837. I worked on true Baconian principles, and without any theory collected facts on a wholesale scale. . . ." ¹⁴⁰ Yet to Wallace he wrote

138. Michael T. Ghiselin, *The Triumph of the Darwinian Method* (Berkeley & Los Angeles: University of California Press, 1969), p. 8, and footnote #19, p. 251.

139. *Life & Letters*, I, p. 82.

140. *Ibid.*, I, p. 68.

in 1857 that "I am a firm believer that without speculation there is no good and original observation."¹⁴¹ And in 1860 he wrote to Lyell that "without the making of theories I am convinced there would be no observation."¹⁴² Thus, we can side safely with Himmelfarb's judgment: "As the notebooks amply demonstrate, he was speculating boldly from the very beginning of this period [1837], and his speculations were all directed to a particular theory—that of mutability. What is impressive about these early notebooks is not the patient marshaling of the evidence, which in fact was conspicuously absent, but rather the bold and spirited character of his thought. What clearly urged him on was theory capable of the widest extension and a mind willing to entertain any idea, however extravagant."¹⁴³

In the fall of 1838, Darwin read Rev. Thomas Malthus' classic study in political economy, *An Essay on the Principles of Population* (1798). This, he later said, transformed him. Malthus' hypothesis of a geometrically expanding population pressing against an arithmetically expanding food supply convinced him that the key to the species question is the struggle for existence. It is doubly interesting that Wallace admitted that it was his recollection of Malthus' theory, during his fever, that triggered his formulation of the theory of natural selection. Once again, a minister had been crucial—indirectly, this time—in the steady progress of the theory of evolution. Darwin's theory was basically complete as early as 1838. Lest we forget the circumstances of this intellectual breakthrough: "Darwin was only twenty-nine and barely out of his apprenticeship, so to speak, when, by this second leap of imagination, his theory took full shape. If this chance reading—or misreading—of Malthus, like his first general speculations about evolution, seems too fortuitous a mode of inspiration, the fault may lie not with Darwin but with the conventional notion of scientific discovery. The image of the passionless, painstaking scientist following his data blindly, and provoked to a new theory only when the facts can no longer accommodate the old, turns out to be, in the case of Darwin as of others, largely mythical."¹⁴⁴

There was another interesting coincidence during this period.

141. *Ibid.*, I, p. 465.

142. *Ibid.*, I, p. 108.

143. Himmelfarb, p. 156.

144. *Ibid.*, p. 66. See also Thomas Kuhn, *The Structure of Scientific Revolutions* (2nd ed.; Chicago: University of Chicago Press, 1970) and James D. Watson, *The*

Between 1836 and 1839, Darwin simultaneously lost his early faith in the accuracy of the Bible,¹⁴⁵ and became afflicted with an unnamed physical sickness that remained with him for the remainder of his life, some forty-five years. The sickness weakened him, so that he seldom left his home, could see few visitors, and could work only a few hours each day.¹⁴⁶ Thomas Huxley was also afflicted with a life-long "internal pain" and "hypochondriacal dyspepsia," and like Darwin's burden, it had come upon him within a year or two after he had abandoned his faith (a loss which occurred when he was eleven or twelve years old).¹⁴⁷ Most of Darwin's children suffered from this same affliction (one son, his namesake, was feeble-minded, and died very young—not a surprising event in the family life of a man who had married his first cousin). William, his eldest son, like his father, was never one to take needless chances with the weather. At his father's funeral in Westminster Abbey, which was unfortunately conducted under cloudy skies, William sat with his gloves on top of his bald head, keeping out unnecessary drafts.¹⁴⁸

It took Darwin twenty years to piece together the evidence for the theory he had decided was true at age twenty-nine, including eight years in classifying barnacles. (Non-evolutionists may fault his biological theory, but one thing is certain: that man knew his barnacles!) He had published an account of his voyage, plus numerous articles and monographs, but he told only close friends of his doubts concerning the fixity of the species. In the early stages of his labors, all he claimed to be asking was fair hearing for his theory as one among many.¹⁴⁹ He admitted the "many *huge* difficulties on this view" to Asa Grey, the noted American scientist.¹⁵⁰ Cautious, patient, modest to a fault: this is the legend of Charles Darwin. And modesty was a wise tactic, given the paucity of his position. In 1863,

Double Helix (New York: New American Library, 1969). This last book is an autobiographical account of one of the co-discoverers of the DNA molecule, the second major breakthrough of modern genetics (Mendel's was the first). Watson shows how many unscientific factors, including (humanly speaking) pure luck, go into a major intellectual discovery.

145. *Life & Letters*, I, p. 227.

146. Irvine, *Apes*, pp. 53, 124, 162, 200, 229.

147. *Ibid.*, pp. 11-12. Irvine thinks that it was Huxley's witnessing of an autopsy at age 14 that triggered his life-long physical disturbances, an odd feature in the life of a self-proclaimed expert in biology. I think Irvine is incorrect.

148. *Ibid.*, p. 229; Himmelfarb, p. 441.

149. Darwin to Jenyns (1845?), *Life & Letters*, I, p. 394.

150. Darwin to Gray (July 20, 1856), *ibid.*, I, p. 437.

four years after the publication of the *Origin*, he wrote to one correspondent: "When we descend to details, we can prove that no one species has changed [*i.e.* we cannot prove that a single species has changed] — [*note: apparently added by Francis Darwin, the editor*]; nor can we prove that the supposed changes are beneficial, which is the groundwork of the theory. Nor can we explain why some species have changed and others have not."¹⁵¹ Therefore, he warned, we must "always remember our ignorance." But in 1871, his *Descent of Man* carefully defined the "neutral" ground on which the discussion of species would henceforth be conducted: "But it is a hopeless endeavor to decide this point, until some definition of the term 'species' is generally accepted; and the definition must not include an indeterminate element such as an act of creation."¹⁵² His modesty had earlier overcome him in the *Origin*: "Thus, on the theory of descent with modification, the main facts with respect to the mutual affinities of the extinct forms of life to each other and to living forms, are explained in a satisfactory manner. And they are wholly inexplicable on any other view."¹⁵³ However, he was quite willing to debate the details with all comers, so long as they were willing to be truly scientific. Therefore, let all good men join hands and march under the banner unfurled in 1969 by Michael Ghiselin when he reminded us all that "Darwin was a master of scientific method."¹⁵⁴ Let us all "beware" of Miss Himmelfarb's book, taking care to read the one book Dr. Ghiselin thinks is an adequate biography of Darwin, in which we learn of the "extremes of hypocrisy and self-contradiction" of Darwin's nineteenth-century critics, as well as the "venomous and confused counterattacks" these men used.¹⁵⁵ If we do all these things, we shall become truly adapted to our intellectual environment, and we shall prosper — for as long as that climate of opinion survives. . . .

The technical details of Darwin's thought are best left to professional biologists. Prof. Bolton Davidheiser's *Evolution and Christian Faith* (1969) is a good beginning. But we can consider the operating presuppositions and practical conclusions that Darwin set forth.

151. Darwin to G. Bentham (May 22, 1863), *ibid.*, II p. 210.

152. *The Origin of Species and the Descent of Man* (Modern Library, 2 vols. in one): *Descent*, ch. 11, p. 268.

153. *Origin*, ch. 11, p. 268.

154. Ghiselin, *Triumph*, p. 4.

155. Irvine, *Apes*, p. 88; Ghiselin's recommendation: p. 8.

Three of these are *indeterminacy*, *continuity*, and *cosmic impersonalism*.

The heart of the Darwinian system is *indeterminacy*. The universe is a chance event. Darwin was self-conscious in his commitment to randomness. Take, for example, his definition of species, the origin of which his book was intended to demonstrate. *There is no definition of species*. This is Darwin's chief contribution to biological science. He absolutely denied that there are any limits on genetic variation within the arbitrarily defined group called species. "Slow though the process of selection may be, if feeble man can do much by artificial selection, I can see no limit to the amount of change. . . ." ¹⁵⁶ The great chain of being, with its separate and permanent links, has become a multi-tiered escalator. The second chapter of the *Origin* reiterates this theme over and over: there are no reliable definitions (although, as we have already seen, there are unreliable definitions: creationists' definitions). "Nor shall I here discuss the various definitions which have been given of the term species. No one definition has satisfied all naturalists; yet every naturalist knows vaguely what he means when he speaks of a species." (This is vaguely reminiscent of the old line, "I can't define art, but I know what I like." Unfortunately, Darwin is regarded as the Newton of biology.) We are no better off when we seek his definition of that other crucial term, "variety": "The term 'variety' is almost equally difficult to define. . . ." ¹⁵⁷ In short, to clear things up once and for all: "From these remarks it will be seen that I look at the term species as one arbitrarily given, for the sake of convenience, to a set of individuals closely resembling each other, and that it does not essentially differ from the term variety, which is given to less distinct and more fluctuating forms. The term variety, again, in comparison with mere individual differences, is also applied arbitrarily, for convenience' sake." ¹⁵⁸ Got that? Excellent!

The biblical account of Genesis 1:24-25 indicates one very good definition: reproduction. Buffon's definition corresponded with this one fairly closely: no infertile progeny. A perfect definition may no longer be possible in a post-Fall age; the ground has been cursed, and "nature" is no longer normative, even as a fool-proof pointer to the truth. But Buffon's position is so vastly superior for operational purposes in day-to-day experiments that one can only conclude that

156. *Origin*, ch. 4, p. 82.

157. *Ibid.*, ch. 2, p. 38.

158. *Ibid.*, ch. 2, p. 46.

the professional preference for Darwin's indeterminate definition rests on a deeply religious commitment: evolutionary change in an indeterminate universe. When a variety is simply an "incipient species,"¹⁵⁹ and species is undefined, it is no feat of genius to conclude that it is possible for varieties to vary and species to change. Everything is in flux. Darwin was a theologian of the continuity of life. And while he never faced the issue squarely, later evolutionists have concluded that organic life stemmed from inorganic matter; thus, Darwinism is the theology of the *continuity of everything*. All "being" is basically one. Huxley was quite correct when he called Darwinian evolution "the revived thought of ancient Greece"; it is the old Greek denial of a fundamental difference between God and the creation.¹⁶⁰

This doctrine of *continuity* destroyed the semi-creationism of the early nineteenth century. There could be no special creations in the world's history. To argue that such events could have occurred was to argue against the logic of uniformitarian science. Modern "Theistic evolutionists" and "successive creationists" may not grasp this fact, but Darwin and his followers did. God's activities could no longer have any measurable effect in time. Eiseley makes his point forcefully: "As one studies these remarks, and many like them, one can observe that the continuity in nature which had been maintained by Sir Charles Lyell against the catastrophists in geology has now been extended to the living world. The stability of natural law, first glimpsed in the heavens, had been by slow degrees extended to the work of waves and winds that shape the continents. Finally, through the long cycles of erosion and the uneasy stirring of the ocean beds, it was beginning dimly to be seen that life itself had passed like a shifting and ephemeral apparition across the face of nature. Nor could that elusive phantom be divorced from man himself, the great subject, as even Darwin once remarked. If fin and wing and hoof led backward toward some ancient union in the vertebrate line, then the hand of man and ape could be scanned in the same light. Even had they wished, the scientists could not stop short at the human boundary. A world, a dream world which had sustained human hearts for many centuries, was about to pass away. It was a world of design."¹⁶¹

159. *Ibid.*, ch. 2, p. 51.

160. Huxley, *Life & Letters of Darwin*, I, p. 534.

161. Eiseley, *Darwin's Century*, p. 194.

The *continuity of change* was as dear to Darwin as the continuity of being. Uniformitarianism pervaded all of his writings. Nature, he asserted, "can never take a great and sudden leap, but must advance by short and sure, though slow steps."¹⁶² Admittedly, "The mind cannot possibly grasp the full meaning of the term of even a million years; it cannot add up and perceive the full effects of many slight variations, accumulated during an almost infinite number of generations." But even though the mind cannot grasp this, we are expected to drop our unwarranted prejudices against what we cannot grasp, and accept it. "Whoever is led to believe that species are mutable will do good service by conscientiously expressing his conviction; for thus only can the load of prejudice by which this subject is overwhelmed be removed."¹⁶³ We should not "hide our ignorance" by using terms like "plan of creation" or "unity of design." Instead, we should stand firm alongside those "few naturalists, endowed with flexibility of mind, and who have already begun to doubt the immutability of species," and wrap our newly flexible minds around a concept of uniformitarian change which no mind can grasp.¹⁶⁴ This, you understand, is the scientific method.

The third feature of Darwin's thought is *cosmic impersonalism*. Obviously, this is the product of both his philosophy of indeterminacy and uniformitarianism. They are intertwined. There is no personal God in Darwin's system who can in any way affect the operations of random variation and statistical natural law. In general, this is regarded as the heart of the system. Biology, the last refuge of a personal God, was finally cleared of this embarrassing influence. While he regarded nature as wholly impersonal, Darwin was never able to escape the language of personification in describing natural processes. The very phrase "natural selection" implied an active power, as he admitted, but he reminded his readers that this was simply a metaphor. But metaphors are powerful devices, however candid Darwin's admission might have been. It made the transition from cosmic personalism to cosmic impersonalism that much easier. "So again it is difficult to avoid personifying the word Nature; but I mean by Nature, only the aggregate action and project of many natural laws, and by laws the sequence of events as ascer-

162. *Origin*, ch. 6, p. 144.

163. *Ibid.*, ch. 15, p. 368.

164. *Idem*.

tained by us."¹⁶⁵ The obvious conclusion is that his doctrine of natural law is completely nominalistic: we humans make the laws, since we observe and interpret the data of observation. We hope that the regularities "out there" conform to our vision of them, but how do we know? As he had written to his old teacher, Henslow, after five months at sea on the *Beagle*: "One great source of perplexity to me is an utter ignorance whether I note the right facts, and whether they are of sufficient importance to interest others."¹⁶⁶ And how do we know our theories are correct, once we have *selected* the facts? Furthermore, "it is lamentable," as he wrote to Wallace, "how each man draws his own different conclusions from the very same facts."¹⁶⁷ Charles Darwin had a naive view of law, or else a grimly skeptical estimation of the public's ability to bother about its intellectual nakedness, one way or the other.

To erase God from the universe of phenomena, he had to erase teleology, the doctrine of final causation. He went as far as the following admission to sweep away any trace of final cause: "There is no evidence, as was remarked in the last chapter, of the existence of any law of necessary development."¹⁶⁸ No necessary law of development; no necessary anything: the whole universe is random. How long should a species survive? "No fixed law seems to determine the length of time during which any single species or any single genus endures."¹⁶⁹ We are quite ignorant concerning the laws of variation within species.¹⁷⁰ (He need not have been so ignorant; Mendel's famous paper on genetics was available in 1865, prior to the sixth edition of the *Origin*, but none of Darwin's contemporaries ever saw the significance of it, although reprints were sent to many scientific men. This truly great advance in biological science was not spectacular enough to be visible amidst the evolution controversy.) Darwin's view of law was indeterminate, however much he disliked the implications. He suffered with indeterminacy in order to maintain his cosmic impersonalism.

He was convinced that chance governs the variability of any

165. *Ibid.*, ch. 4, p. 64.

166. Darwin to Henslow (May 18, 1832), *Life & Letters*, I, p. 208.

167. Darwin to Wallace (May 1, 1857), *ibid.*, I, p. 453.

168. *Origin*, ch. 12, p. 281.

169. *Origin*, ch. 11, p. 259.

170. *Ibid.*, ch. 6, p. 147.

genetic (he did not use the term, of course) inheritance.¹⁷¹ Time, he said, is important only to give scope to selection.¹⁷² And, wonder of wonders, "We have almost unlimited time. . . ." ¹⁷³ (He was forced to give up his open checkbook of time when Lord Kelvin, the physicist, offered his theory of heat loss for the earth, which Darwin thought he had to accept: 300,000,000 years of organic life in the first edition of the *Origin* disappeared in later editions. Instead, we read: "Unfortunately we have no means of determining, according to the standards of years, how long a period it takes to modify a species. . . ." ¹⁷⁴) Yet it appalled him to argue for an indeterminate universe, with or without unlimited quantities of time in which chance could operate. To Asa Gray, who never abandoned his faith in God's design in nature, he confessed: "I am conscious that I am in an utterly hopeless muddle. I cannot think that the world, as we see it, is the result of chance; and yet I cannot look at each separate thing as the result of Design. . . . Again, I say I am, and ever shall remain, in a hopeless muddle."¹⁷⁵ And so he remained. *To abandon a non-teleological universe would have meant abandoning his life's work.*

How did he view his labors? What did he think was the significance of those years in the laboratory and the study? In his autobiography, written in 1876, he was forced to reflect upon the meaning of his life. What impressed him was his victory over Rev. William Paley, whose *Natural Theology* had influenced him so greatly before his voyage on the *Beagle*. First, he took Paley's argument from the regularity of the universe and reversed it; for once, he returned to a vision of impersonal, totally sovereign natural law—in contrast to his former doubts that favored the randomness of nature. He had long ago abandoned faith in the miracles of Christianity, for "the more we know of the fixed laws of nature the more incredible do miracles become." Nevertheless, he admits, "I was very unwilling to give up my belief. . . . Thus disbelief crept over me at a very slow rate, but was at last complete. The rate was so slow that I felt no distress." (Even his loss of faith was uniformitarian, in his recollections!)

171. Darwin to Hooker (Nov. 23, 1856), *Life & Letters*, I, p. 445.

172. *Ibid.*

173. Darwin to Gray (Sept. 5, 1857), *ibid.*, I, p. 479.

174. *Origin*, ch. 11, p. 239. On Lord Kelvin's criticism, see Eiseley, *Darwin's Century*, ch. 9.

175. Darwin to Gray (Nov. 26, 1860), *Life & Letters*, II, p. 146. This was sent just one year after the publication of the *Origin*.

At last he was free from Paley: "The old argument from design in Nature, as given by Paley, which formerly seemed to me so conclusive, fails, now that the law of natural selection has been discovered."¹⁷⁶ What little cosmic personalism that still remained in Paley's rationalistic universe was now officially rejected.

When challenged by Asa Gray to defend his anti-teleological attitude, Darwin did not call forth his notes on barnacles or some new theory of coral reef formation. He replied from his heart, and his heart was exceedingly religious. *What he really hated was the Christian doctrine of a totally sovereign God.* He hated this God more than he feared a random universe: "With respect to the theological view of the question. This is always painful to me. I am bewildered. I had no intention to write atheistically. But I own that I cannot see as plainly as others do, and as I should wish to do, evidence of design and beneficence on all sides of us. There seems to me too much misery in the world. I cannot persuade myself that a beneficent and omnipotent God would have designedly created the *Ichneumonidae* with the express intention of their feeding within the living bodies of Caterpillars, or that a cat should play with mice. Not believing this, I see no necessity in the belief that the eye was expressly designed. On the other hand, I cannot anyhow be contented to view this wonderful universe, and especially the nature of man, and to conclude that everything is the result of brute force. I am inclined to look at everything as resulting from designed laws, with the details, whether good or bad, left to the working out of what we may call chance. Not that this notion *at all* satisfies me. I feel most deeply that the whole subject is too profound for the human intellect. A dog might as well speculate on the mind of Newton."¹⁷⁷

He could not believe that the eye was designed, despite the inescapable difficulty that it is a totally complex element of the body that needs to be complete before it can function at all. How could this organ have evolved? What good was it during the countless millennia before it was an eye? Darwin was familiar with this objection, but he could not believe in specific design. However, in order to save his hypothetical universe from the burden of total randomness — from "brute force" — he was willing to admit that natural laws had been designed, a conclusion wholly at odds with his own theoretical methodology. But he was not satisfied with this conclusion, either.

176. *Ibid.*, I, p. 278.

177. Darwin to Gray (May 22, 1980), *ibid.*, II, p. 105.

So he feigned modesty. These questions are beyond human intellect. Questions of biology, factual and theoretical, are answerable, but not questions that are raised as a direct product of the biological answers. This has been a tactic of "neutral" scientists for years: challenge the conclusions of a culture's presuppositions by referring to neutral science, but claim honest ignorance when discussing the presuppositions of the methodology of neutral science. As he wrote to W. Graham, two decades later, contradicting his earlier defense of designed natural laws: "You would not probably expect any one fully to agree with you on so many abstruse subjects; and there are some points in your book which I cannot digest. The chief one is that the existence of so-called natural laws implies purpose. I cannot see this." Here is the dilemma of modern, post-Kantian philosophy: Law or no law? When defending *the total reliability and stability of "autonomous" natural science* against the claims of Christians in favor of God's miraculous interventions, natural law is absolute (for example, the statement by T. H. Huxley on p. 397). But when faced with *the totalitarian implications of absolute natural law*—a law so complete and systematic that it indicates *design* rather than randomness as its foundation—the "neutral" scientist throws out "so-called natural laws." God may neither thwart absolute natural law, nor claim credit for the existence of such law, because it really is not absolute after all. Absolute randomness is therefore a philosophical corollary of absolute, impersonal law, and Darwin was uncomfortable with both horns of his dilemma. So he appealed once again to ignorance, since he had to agree that chance is not sovereign: "But I have had no practice in abstract reasoning, and I may be all astray. Nevertheless you have expressed my inward conviction, though far more vividly and clearly than I could have done, that the Universe is not the result of chance. But then with me the horrid doubt always arises whether the convictions of man's mind, which has been developed from the mind of the lower animals, are of any value or at all trustworthy. Would anyone trust the convictions of a monkey's mind, if there are any convictions in such a mind?"¹⁷⁸

Notice Darwin's implicit faith. He has absolute confidence in his "monkey-descended" (or, for the purists, "ancestor-of-monkey-descended") mind when it concludes that his mind has, in fact, descended from some lower animal. But when the implications of

178. Darwin to W. Graham (July 3, 1881), *ibid.*, I, p. 285.

this religiously held belief come into direct conflict with a belief that man's mind can be relied upon precisely because man is made in the image of God, then he doubts the capacity of his monkey-descended mind to grapple with such abstract questions. We are intelligent enough to know that we are not intelligent enough to know; we can have sufficient confidence in our minds to rest assured that we can have no confidence in our minds. God is locked out of His universe by man's simultaneous confidence and lack of confidence in his own logic. Neither doubt nor confidence is allowed to point to God. Cosmic impersonalism is thereby assured; autonomous man is defended by his supposedly autonomous science. Like the universe around man, his thought processes are simultaneously *absolute* (man is descended from lower animals; no other theory is valid¹⁷⁹) and *contingent* (man cannot trust his own speculations when they concern absolutes).

Anyone who imagines that the implications for philosophy of Darwinism are not both widespread and important in modern life is impossibly naive. It was not the details of the Darwinian system that captivated European thought — Darwin had to repudiate much of his system anyway. He once admitted to his earliest supporter, J. D. Hooker, that he was proficient “in the master art of wriggling.”¹⁸⁰ Few biologists could follow all of his arguments; if they had done so, they would have grasped the fact that his retreat into the categories of “use and disuse” represented a revival of Lamarckianism. But they did not read his works that closely. Liberated men scarcely question the logic or fine points of their liberator's scriptural canon. *What did capture the minds of intellectuals, and continues to captivate them, is Darwin's rejection of meaning or purpose; the post-Darwinian universe has no traces of final or ultimate causation.*

A marvelous statement of the Darwinian faith was presented in the *Britannica Roundtable* (Vol. I, #3, 1972), a slick magazine which is on the intellectual level of the Sunday newspaper's magazine insert, but which parades under the banner of high culture. C. P. Snow, ballyhooed in the early 1960's because of his propaganda favoring the fusion of the “two cultures” — autonomous rational science and the equally autonomous humanities — offered us his personal credo in “What I Believe”: “I believe life, human life, all life, is a singular

179. *Origin*, ch. 11, p. 268; quoted earlier.

180. Darwin to Hooker (Dec. 10, 1866), *Life & Letters*, II, p. 239.

chance. A fluke, which depended on all manner of improbable conditionings happening at the same time, or in the same sequence of time. Between ten and twenty billion years ago there was a big bang, and the universe started. Before that, time did not exist: this is something our minds are not able to comprehend. . . . It has all been a very unlikely process, with many kinds of improbability along the way. . . . If any asked me on what basis I make these assumptions, I have no answer. Except to affirm that I do. Some will say I am making them because, under all the intellectual qualification, I am a residual legatee of the Judeo-Christian tradition. I doubt that. I have a nostalgic affection for the Anglican Church in which I was brought up, but for me its theological formulations have no meaning. Nor have any theological formulations of any kind."

"Nobody in here but us non-theologians," Snow affirms. And his little credo went out to those who purchased their *Encyclopedia Britannicas* in the hope of upgrading their minds and their children's social position. In fact, I would guess that it is likely that they read through this slick magazine more often than they look up references in their dust-covered set of encyclopedias. Sooner or later, ideas have consequences.

Most modern commentators, both philosophers and professional scientists (Himmelfarb excepted), see Darwin's denial of teleology as his most important intellectual contribution. It is not simply that science can *see no traces* of purpose or design in the universe; science now affirms that it has *shown* that there is no design or purpose in the universe. If there is, it is wholly internal to the non-rational recesses of the human personality, and the behaviorist psychologist B. F. Skinner has done his best to reduce *that* noumenal realm of mystery. George Gaylord Simpson, the world-famous Darwinian paleontologist, states quite forthrightly that "Man is the result of a purposeless and natural process that did not have him in mind. He was not planned."¹⁸¹ You just cannot make it any plainer than that.

Darwin's work, writes Loren Eiseley, "had, in fact, left man only one of innumerable creatures evolving through the play of secondary forces and it had divested him of his mythological and supernatural trappings. The whole tradition of the parson-naturalists had been overthrown. Mechanical cause had replaced Paley's watch and watch-

181. George Gaylord Simpson, *The Meaning of Evolution* (New Haven: Yale University Press, [1949] 1967), p. 345.

maker."¹⁸² Man has to view this mechanical cause as essentially random, however, since man's mind is finite. But in spite of this lack of omniscience, *man can see the random universe as sufficiently orderly and absolute to remove God from the premises*. So we are now at last set free from God: "The evolutionists discovered that nature 'makes things make themselves' and thus succeeded in apparently removing the need of a Master Craftsman."¹⁸³ Impersonal, random biological variation within the framework of an impersonal, random, passively pruning environment is the key to all purposeful, orderly life. But man now makes his own purpose; or, as C. S. Lewis warned, some elite men now seek to define and impose purpose and meaning for all the others.¹⁸⁴

The cosmic impersonalism, the indeterminacy, and the continuity of natural processes have all combined to produce a remarkably discontinuous leap: *Man*. Man now is to take over the direction of the processes of evolution. Man is now to make the cosmos personal; he shall determine it. As Simpson says, "Plan, purpose, goal, all absent in evolution to this point, enter with the coming of man and are inherent in the new evolution, which is confined to him."¹⁸⁵ Julian Huxley says the same thing.¹⁸⁶ Cosmic impersonalism is now transcended. Man, the product of nature (immanence) now takes control of nature (transcendence). Freed from God's sovereignty by nature's random, impersonal sovereignty, man now affirms his own sovereignty, to impart meaning and purpose to the formerly random forces of evolutionary process. Our first true god has come at last!

Darwinian man is simultaneously transcendent and immanent with respect to nature, just as orthodox Christian man has been. But there is this fundamental difference: Christian man gained his claim of transcendence over *some* of nature's physical processes only by maintaining his meekness under God and His laws. He achieved limited sovereignty over nature by means of his complete dependence on God's total sovereignty. But Darwinian man has dispensed with God's sovereignty in order to grant such sovereignty (temporarily and as a theoretical limiting concept) to random, imper-

182. *Darwin's Century*, pp. 195-96.

183. *Ibid.*, p. 198.

184. C. S. Lewis, *The Abolition of Man*, ch. 3.

185. Simpson, *Meaning*, pp. 345-46.

186. J. Huxley, "Evolutionary Ethics," (1943): in Appleman (ed.), *Darwin*, pp. 406-7.

sonal nature. Once this transfer of sovereignty has taken place, Darwinian man reclaims this sovereignty, as the legitimate heir of nature. Man then becomes the official king of nature, and like Napoleon Bonaparte, he has been careful to place the crown on his own head (not relying on the Pope or any other theological agent).

Eiseley is quite correct when he says that Darwin's work destroyed the labors of the parson-naturalists. This did not keep the parsons from flocking to him in droves, bearing symbolic frankincense and myrrh, in his later years. This typical yet pathetic development only served to intensify his hostility to religion. His cousin remarked that he was far more sympathetic to religious critics than the fawning ecclesiastics who lauded his work.¹⁸⁷ Preposterously, "The religious managed to find in Darwinism a variety of consolations and virtues not dreamed of even in natural theology. One distinguished botanist bewildered Darwin by declaring himself a convert on the grounds that the theory finally made intelligible the birth of Christ and redemption by grace. A clergyman was converted on the grounds that it opened up new and more glorious prospects for immortality. And theologians declared themselves ready to give up the old doctrine of 'the fall' in favor of the happier idea of a gradual and unceasing progress to a higher physical and spiritual state."¹⁸⁸

Himmelfarb has hit the nail on the head when she writes that *the Darwinian controversy was not between theists and evolutionists, but between the reconcilers and irreconcilables on both sides of the controversy*.¹⁸⁹ In our century, the irreconcilable Christians (and, I gather, conservative Jews) have diminished in number. The new evolutionists do not care enough one way or the other whether Christians do or do not rewrite their religion to conform to the Darwinian universe. The historian, Greene, has bent over backward to say nice things about the various theological compromises of men like Russell Mixter and James O. Buswell III, but he is only stating an inescapable fact (from the consistent Darwinian point of view) when he concludes: "These theories may help to conserve belief in the inspiration of the Bible, but it is difficult to see how they can be of much scientific value. . . . [When Greene refers to the inspiration of the Bible, he has in mind the heretical Barthian variety, as he says two pages later.] As science advances, moreover, the maintenance of what these writers call 'verbal

187. Himmelfarb, p. 386.

188. *Ibid.*, p. 394.

189. *Ibid.*, p. 397.

inspiration' is likely to prove possible only by continual reinterpretation of the Bible. In the long run, perpetual reinterpretation may prove more subversive of the authority of Scripture than would a frank recognition of the limitations of traditional doctrines."¹⁹⁰ The compromisers are trapped.

But the best summary was made by Richard Holt Hutton back in 1879, and the fact that hardly a pastor in the conservative churches today sees the truth of this statement constitutes one of the most chilling facts of contemporary religious life: "The people who believe today that God has made so fast the laws of His physical universe, that it is in many directions utterly impenetrable to moral and spiritual influences, will believe tomorrow that the physical universe subsists by its own inherent laws, and that God, even if He dwells within it, cannot do with it what He would, and will find out the next day, that God does not even dwell within it, but must, as M. Renan says, be 'organized' by man, if we are to have a God at all."¹⁹¹

From the natural law of the parson-naturalists, to Robert Chambers' "Christian" evolution, to Charles Darwin's autonomous law, to Julian Huxley's evolving human master of the evolutionary process: the development has seemed almost irreversible. It has led us into three cultural quagmires: the modern chaotic world of impotent existentialism, the modern bureaucratic world of the planners, and the modern retreatist world of visionless, compromised religion.

Conclusion

There is only one accurate doctrine of creation. All other systems partake either of pantheism or deism, both implying a finite Creator. The Bible's account avoids both pitfalls. A totally sovereign God created the universe out of nothing in six days, according to His own trinitarian counsel. He then placed man, His subordinate representative, in authority over the creation. Man rebelled against the Creator, thereby bringing the wrath of God upon himself and, to some extent, on the creation itself. But in His grace, God reveals Himself to men, both in the creation (the testimony of which is always rejected by rebellious men) and in His verbal, written word, the Bible. He has informed men of His creative acts in bringing all things into

190. Greene, *Darwin and the Modern World View* (New York: Mentor, 1963), p. 34.

191. Cited in Himmelfarb, pp. 398-99.

existence in six days—a period of time identical to the six days in which men are to labor at their vocations. Men are to subdue the earth to the glory of God and in terms of His natural laws, as interpreted by His written word. Man is subordinate to God, operating entirely in terms of His ethical laws, and he is both under and over laws of nature. Nature responds to mankind's authority in terms of mankind's ethical relationship to God, especially with respect to man's obedience to the external laws of God. God's law, both natural and revealed through the Bible, is man's tool of godly subduing.

All other systems place man in a position either of total impersonal autonomy (transcendence), or total impersonal passivity (immanence), or—as in the case of Darwinian thought—both simultaneously. The deist's god is on vacation, leaving man in full control of the semi-autonomous world machine; the pantheist's god is indistinguishable from the organic, living creation. *In either case, God is silent concerning ethics.* The deist's god ignores the world; the pantheist's god is impotent to speak in a voice separate from the world. Thus, man is seen as rationally autonomous from God (eighteenth-century Continental deism) or irrationally immersed in and part of God. In neither case is there a final ethical judgment by a self-contained, sovereign, personal God in whose image man is created. Man either rules over nature as a totalitarian despot, or else he is completely subservient to nature, like some oriental slave. The universe is closed to any judgment outside itself in both pantheism and deism; man has no higher court of appeal than nature itself. And in both cases, nature ignores ethics. As Simpson puts it: "Discovery that the universe apart from man or before his coming lacks and lacked any purpose or plan has the inevitable corollary that the workings of the universe cannot provide any automatic, universal, eternal, or absolute ethical criteria of right or wrong."¹⁹²

What should be inescapably clear by now is that *there is no doctrine of ultimate origins which is not intensely religious.* Similarly, there is no philosophical system that does not possess a doctrine of creation—the origin of all things and the constitution which presently sustains all things. For Christians to tamper with the plain meaning of the Bible in order to make it conform to the latest findings of this or that school of evolutionary thought is nothing short of disastrous. It means an amalgamation of rival and irreconcilable religious presup-

192. Simpson, *Meaning*, p. 346.

positions. Neither Darwin nor the orthodox Christian can escape the philosophical and theological implications of methodology. Both Darwin and the compromising Christians tried to push questions of philosophy and epistemology (knowledge) into the background, as if there could be some universally shared scientific methodology that is independent of philosophical presuppositions. But when the chips were down, Darwin always sided with atheism; he refused to acknowledge that the God of the Bible could have created or influenced the world in the ways explicitly affirmed by the Bible. *Evolutionism is methodological atheism*, whether Hindu, or Buddhist, or Lamarckian, or Darwinian. It always was; it always will be.

Darwinian thought is fundamentally Greek paganism. This was recognized very early by Darwin's hatchet-man, Thomas Huxley. In Huxley's assessment of the impact of Darwin's thought, which Huxley wrote for the *Life and Letters of Charles Darwin* in 1887, he expressed his opinion: "The oldest of all philosophies, that of Evolution, was bound hand and foot and cast into utter darkness during the millennium of theological scholasticism. [Actually, scholastic philosophy lasted only from the twelfth century through the fifteenth as a cultural force in Europe, but Huxley means simply medieval, Christian thought in general—G.N.] But Darwin poured new lifeblood into the ancient frame; the bonds burst, and the revived thought of ancient Greece has proved itself to be a more adequate expression of the universal order of things than any of the schemes which have been accepted by the credulity and welcomed by the superstition of seventy later generations of men." Indeed; all three of the accepted "scientific" evolutionary cosmologies today are simply footnoted revivals of Greek cosmological thought.

First, consider George Gamow's "primeval atom" or "big bang" theory—the exploding "ylem" of matter-energy that created all the elements of the universe in the first half-hour of its existence. Plato's theory of creation outlined in the *Timaeus* dialogue was its analogue in Greek thought. *Second*, there is the so-called steady-state theory (Fred Hoyle, the famous British astronomer, used to believe in this one). Matter and energy are continuously being created out of nothing. Everything continues today as it always has. This is the Aristotelian outlook, and it undergirded the geology of Hutton and Lyell. It is the uniformitarian theory. *Finally*, there is the theory of the oscillating universe: big bang, explosion outward, slowing, imploding inward, crash, and new big bang. Marx's partner, Engels,

held this faith. It is quite similar to the Stoic theory of a cyclical cosmos. As Toulmin and Goodfield note: "The disagreement between supporters of these views today is just about complete. Nor does there seem to be any real hope of reaching an accommodation without abandoning elements which are regarded as indispensable to the theories."¹⁹³ In short, rival pagan faiths are no less in opposition to each other, despite their unity against cosmic personalism. It was true in the days of Greece; it is equally true today.

"Details apart," write Toulmin and Goodfield, "the *general* resemblances between twentieth-century cosmology and its ancestors are no mere coincidence. Rather, they prompt one to look for an equally general motive." There is not sufficient evidence today to prove any theory of the earth's history, so the same old *a priori* refrains are repeated, generation after generation. As the authors conclude, "cosmological theory is still basically philosophical," and certain "obstinate and insoluble" problems and objections "still face us which cannot be evaded by dressing them up in twentieth-century terminology."¹⁹⁴ Either time had an origin, thereby making discussion of what happened "before" impossible; or else time is infinite in both directions, thus forcing us to ask forever, "Before then, what?"

Secularists, who too often spend little or no time thinking about the internal contradictions of their own presuppositions, like to ridicule Christians with stupid questions like "Who created God?" or "Where did God get the 'stuff' to build the universe?" as if they had some non-theistic answer to these questions. They do not. They have a tendency to ignore their own rootless systems of philosophy, however, which gives them great confidence in challenging the revelation of the Scripture. They prefer to have faith in the impersonal "ylem" or impersonal, infinite, steady-state time or impersonal cosmic cycles; a personal Creator God is too preposterous for their sophisticated tastes.

Yet if we are compelled to regard secular opponents of the biblical doctrine of the six-day creation as naive, then those Christians who try to amalgamate Genesis 1 and one (or all) of the secular cosmologies are doubly naive. Philosophically, the concept of *process* undergirds the secular positions. Toulmin and Goodfield recognize this; R. J. Rushdoony, in his study, *The Mythology of Science* (1967),

193. *Discovery of Time*, p. 255.

194. *Ibid.*, p. 258.

recognizes this. Instead of the fiat word of God—a discontinuous event which created time and the universe—we are expected to believe in the creativity of impersonal process. As Rushdoony argues, “the moment creativity is transferred or to any degree ascribed to the process of being, to the inner powers of nature, to that extent sovereignty and power are transferred from God to nature. Nature having developed as a result of its creative process has within itself inherently the laws of its being. God is an outsider to Nature, able to give inspiration to men within Nature but unable to govern them because He is not their Creator and hence not their source of law.”¹⁹⁵ Is it any wonder, then, that the first modern cosmological evolutionist, Immanuel Kant, was also the philosopher of the modern world? Is it any wonder that his theory of the two realms—autonomous external and random “noumena” vs. scientific, mathematically law-governed “phenomena”—is the foundation of the modern neo-orthodox theology which has eroded both Protestantism and Catholicism? Is it any wonder that Kant’s “god” is the lord of the noumenal realm, without power to influence the external realm of science, without even the power to speak to men directly, in terms of a verbal, cognitive, creedal revelation? This is the god of process theology, of evolution, of the modern world. It is the only god rebellious men allow to exist. The God of Deuteronomy 8 and 28, who controls famines, plagues, and pestilences in terms of the ethical response of men to His law-word, is not the God of modern, apostate evolutionary science. He is not the god of process theology. The Christian with the Ph.D. in geology who says that he just cannot see what process has to do with the sovereignty of God is telling the truth: *he cannot see*. Had he been able to see, no “respectable” university would ever have granted him a Ph.D. in geology, at least not in historical geology.¹⁹⁶

The Bible does not teach the theology of process. It does not tell us that an original chaos evolved into today’s order, and will become even more orderly later. That is the theology of the Greeks, of the East, and the modern evolutionist. It is not a part of the biblical heritage. Even the so-called “chaos” of Genesis 1:2—“And the earth was without form and void”—does not teach a “chaos into order” scheme. Prof. Edward J. Young has offered considerable proof of

195. Rushdoony, *The Mythology of Science* (Fairfax, Virginia: Thoburn Press, [1967] 1978), pp. 38-39.

196. Davis Young, *Westminster Theological Journal* (Spring, 1973), p. 272.

the fact that the Hebrew phrase translated "without form and void" should be rendered, "desolation and waste." It signifies that "God did not create the earth for desolation, but rather to be inhabited. . . . Such an earth has not fulfilled the purpose for which it was created; it is an earth created in vain, a desolate earth."¹⁹⁷ Young cites Isaiah 45:18, which contains the same Hebrew words: "For thus saith the LORD that created the heavens; God himself that formed the earth and made it; he hath established, he created it not in vain, he formed it to be inhabited: I am the LORD; and there is none else." What is described in Gen. 1:2 is a great primeval sea, which was uninhabitable and therefore desolate. (See verse 9: "let the dry land appear.") The "chaos" factor, so heavily relied upon by compromising biblical expositors, not only does not conform to Greek speculation, but is intensely anti-modern: the desolation implies *purpose*, that great bugaboo of modern science. Any attempt to view Gen. 1:2 in terms of some original chaos plays into the hands of the Darwinians, for it compromises the element of purpose in the creation. (One popular variation on this theme is the so-called "gap hypothesis," which argues that in Gen. 1:1 God created the earth, only to shake up the elements in Gen. 1:2 as a result of Satan's fall. He then created the new, six-day earth in Gen. 1:3-27. There are three things wrong with this view, at the very least. First, the Bible does not teach anything like this; it is obviously a jerry-built interpretation that has become popular in order to give an explanation for the apparent age of the uniformitarians' earth. Second, the uniformitarians are entitled to dismiss it, since a true "chaos" would have been a complete erasure of the previously existing earth, thus removing the "precious" traces of age that the "gapologists" so desperately desire. Third, as already mentioned, it compromises the explicit traces of purpose in the creation's original desolation. A fourth reason is at least possible: Satan fell on the seventh day, *after* God had pronounced the whole creation "good.")

The step-by-step retreat of Christian thinkers from the six-day creation—universally acknowledged in 1725, and generally believed right up until 1800—has been a disastrous, though temporary, setback for Christian orthodoxy. Sadly, Christians were not usually dragged, kicking and screaming, into Lyell's uniformitarian and

197. Edward J. Young, *Studies in Genesis One* (Philadelphia: Presbyterian & Reformed, 1963), p. 33. See also pp. 13, 16, 34.

Darwin's purposeless evolution. They accepted each new scientific "breakthrough" with glee. At best, each resistance attempt was a three-stepped process: 1) it is not true; 2) it is not relevant, anyway; 3) we always knew it was true, and Christianity teaches it, and teaches it better than any other system. No wonder Darwin was irritated; a good, purposeless universe could not be left in peace by these silly people!

The battle lines should be clear: Christianity or error, the six-day creation or chaos, purpose and meaning or cosmic impersonalism and randomness. It is not hard to understand why the religion of modernism clings to Darwinian thought. It is also not surprising why occultist Max Hindel could write *The Rosicrucian Cosmo-Conception or Mystic Christianity: An Elementary Treatise upon Man's Past Evolution, Present Constitution and Future Development* (1909). It is not surprising that the book has been reprinted in a cheap paperback as recently as 1971, and that it is used in college classrooms. (I bought my copy in a bookstore of an ostensibly conservative private college—not on a rack, but in the class section. One hopes it was used simply for the purposes of criticism.) But why Christians should give one second's consideration of the possibility of evolution—ancient or modern, occultist or scientific—is a mystery.

The compromise with uniformitarian principles has been a steady, almost uniformitarian process within Christian circles. Gillispie, describing the steady capitulation of early nineteenth-century Christian naturalists, shows how disastrous the retreat was for orthodoxy. At each stage, the Christians, copying the mythical act of King Canute, shouted "thus far and no farther" to uniformitarianism. "And at every stage except the last, progressives admitted that a further step, the possibility of which they disavowed while they unwittingly prepared it, would indeed have had serious implications for orthodox religious fidelity."¹⁹⁸ But each new uniformitarian "discovery" was assimilated into the supposedly orthodox framework nonetheless, despite the fact that at every preceding capitulation, the proponents of that compromise admitted that the next step (now greeted passively or even enthusiastically) would be unnecessary, impossible, and utterly wrong. (Any similarity between nineteenth-century Christian progressives and today's Christian progressives is hardly coincidental.) The progressivists of the 1840's, like the com-

198. Gillispie, *Genesis and Geology*, p. 221.

promisers of today, would not face up to reality. They could not admit to themselves or their few orthodox opponents the fact that Robert Nisbet has called to our attention: "It is hard today to realize the degree to which the attack on Christianity obsessed intellectuals of rationalist and utilitarian will. Christianity had much the same position that capitalism was to hold in the first half of the twentieth century. It was *the* enemy in the minds of most intellectuals. Uniformitarianism, above any other single element of the theory of evolution, was the perfect point of attack on a theory that made external manipulation its essence and a succession of 'catastrophes' its plot."¹⁹⁹

Thomas H. Huxley, the scientist who helped spread the gospel of Darwinism more than any other man in the second half of the nineteenth century, was vitriolic in his hostility to orthodox Christianity, with its insistence on the doctrine of creation. He knew there could never be any compromise between Darwinism and creationism. He announced in his important defense of Darwin in 1859: "In this nineteenth century, as at the dawn of modern physical science, the cosmogony of the semi-barbarous Hebrew is the incubus of the philosopher and the opprobrium of the orthodox. Who shall number the patient and earnest seekers after truth, from the days of Galileo until now, whose lives have been embittered and their good name blasted by the mistaken zeal of Bibliolators? Who shall count the host of weaker men whose sense of truth has been destroyed in the effort to harmonise impossibilities—whose life has been wasted in the attempt to force the generous new wine of Science into the old bottles of Judaism, compelled by the outcry of the same strong party?"²⁰⁰ Huxley was totally confident in the long-term success of Darwinism. In fact, he believed that this victory of science (which he dutifully capitalized, as one should do when spelling out the name of any divinity one worships) had already been secured. He viewed this triumph as the result of an intellectual war. "It is true that if philosophers have suffered, their cause has been amply avenged. Extinguished theologians lie about the cradle of every science as the strangled snakes beside that of Hercules; and history records that whenever science and orthodoxy have been fairly opposed, the latter has been forced to retire from the lists, bleeding and crushed if not

199. Nisbet, *Social Change and History*, p. 184.

200. Thomas Huxley, "The Origin of Species," (1859), in *Essays*, edited by Frederick Barry (New York: Macmillan, 1929), pp. 105-6.

annihilated; scotched, if not slain. But orthodoxy is the Bourbon [referring to the French monarchy, the House of Bourbon—G.N.] of the world of thought. It learns not, neither can it forget; and though, at present, bewildered and afraid to move, it is as willing as ever to insist that the first chapter of Genesis contains the beginning and the end of sound science; and to visit, with such petty thunderbolts as its half-paralyzed hands can hurl, those who refuse to degrade Nature to the levels of primitive Judaism."²⁰¹ His next paragraph begins with this unforgettable sentence: "Philosophers, on the other hand, have no such aggressive tendencies." Why not? "The majesty of Fact is on their side, and the elemental forces of Nature are working for them. Not a star comes to the meridian of their methods: their beliefs are 'one with the falling rain and with the growing corn.' By doubt they are established, and open inquiry is their bosom friend. Such men have no fear of traditions however venerable, and no respect for them when they become mischievous and obstructive; . . ."²⁰²

He knew his contemporary enemies well. He realized clearly, as they did not, that their hypothesis of continuing special creations "owes its existence very largely to the supposed necessity of making science accord with the Hebrew cosmogony; but it is curious to observe that, as the doctrine is at present maintained by men of science, it is as hopelessly inconsistent with the Hebrew view as any other hypothesis."²⁰³ Darwinian scientists from Huxley's day to the present have been able to make the same criticism of later attempts of Christian scholars to compromise the teachings of Genesis 1 and evolution. Sadly, Huxley's barb applies quite well to these professional academic compromisers: they *are* like the Bourbon kings. They never seem to learn that there can be no successful compromise between the rival cosmologies.

The six-day creation is not a narrow cosmology. It is as broad as the creation itself and the revelation of that creation given by its Creator. Evolution and uniformitarian geology (however modified the uniformitarianism may be) may appear very broad-minded, but only in the sense of Matthew 7:13: "Enter ye in at the strait [narrow, tight] gate: for wide is the gate, and broad is the way, that leadeth to destruction, and many there be which go in thereat."

201. *Ibid.*, p. 106.

202. *Ibid.*, pp. 106-7.

203. *Ibid.*, p. 108.

Appendix D

BASIC IMPLICATIONS OF THE SIX-DAY CREATION

Introduction

The Christian churches seldom lack an issue that can serve as a means of internal disruption and conflict: the mode of baptism, the age of one's first communion, the form of government, the role of the institutional church in non-church realms. Surprisingly—and contrary to the impression given by popular textbooks—the conflict between evolution and creation has not been one of these major and continuing sources of contention within the vast majority of Christian churches. Prior to 1800, the concept of biological evolution had not been widely considered; a few secular philosophers—for example, Immanuel Kant—had argued for some form of cosmic evolution, but Christians were generally uninformed about, or unimpressed by, such speculation. Yet after 1900, outside of a few so-called fundamentalist groups, the question of the time and mode of God's creation was no longer considered intellectually or ecclesiastically respectable as a topic of fundamental importance. Men are expected to “agree to disagree” as Christians; specifics concerning creation are officially relegated into the realm of *adiaphora*, that is, things indifferent to salvation or the life of the church. “Theistic evolution” or the “gap theory” or “progressive creation” or the “literary framework hypothesis” serve as popular alternatives to the six-day creation within those circles that still concern themselves with the question of biblical inerrancy. Outright Darwinism has been adopted readily by everyone else.

Since the turn of the century, we have witnessed a strange phenomenon inside the evangelical churches. Pastors have been dismissed by their congregations or their hierarchical superiors for mismanaging budgets, changing their minds about the mode of baptism, softening their views concerning the sabbath, or disrupting the

autonomy of the choir director. But a heresy trial for a pastor who holds to some variant of theistic evolution would be unthinkable in most evangelical churches today. As a means of institutional confrontation, the choir is a far more potent issue than the doctrine of creation. So powerful have been the forces of religious syncretism, philosophical pragmatism, and academic respectability inside the churches, that this crucial foundation of the faith has become operationally secondary—or less.

If the pastors, clutching desperately at their advanced academic degrees from accredited colleges, have abandoned the defense of the faith, why should the layman think that he has any right to call the churches to repentance? How can a layman challenge the official expertise of certified scholarship and ordained respectability? This was Moses' question to God, basically, in Exodus 4:10. God's answer was straightforward: "Who hath made man's mouth? or who maketh the dumb, or deaf, or the seeing, or the blind? have not I the LORD?" (Ex. 4:11). God is the source of all valid theories and all valid footnotes, not the geology department of Harvard University. His revelation of Himself in the Bible is the standard of accuracy, not the latest discovery (which will be refuted in five years by someone else) of hypothetically neutral science. If intelligent, devoted, and necessarily self-taught laymen do not make use of the services of the various creation research organizations in their efforts to call Christians back to the explicit revelation of the Bible and the historic faith of the orthodox churches, then a major battle will have been lost. The status quo in the churches today is our defeat; orthodoxy demands reconstruction. Assistance from the pastors in this struggle would be appreciated, but as it stands today, the laymen are necessarily the strategists and generals.

Why make the stand here? Why is creation the rallying issue? First, because it is the one issue which has established itself in the minds of many orthodox Christians as a necessary and legitimate area of confrontation between apostate science and Christianity. Men who would not be confident in challenging secular thought in the realms of psychology, politics, economics, or other academic disciplines, nevertheless do understand the false nature of the claim of scientific neutrality concerning evolution. As a result, the intellectual division of labor is greater in the areas of biology and geology than in any other Christian endeavors. More men are already involved in the battle. Thus, it is tactically a solid place to make a

stand. More important than tactics, however, is the centrality of the doctrine of creation to Christian faith. Langdon Gilkey, a neo-orthodox theologian who does not believe in the verbal, plenary inspiration of the Bible, has nonetheless seen the issue more clearly than most supposedly evangelical theologians. His *Maker of Heaven and Earth* announces forthrightly:

It is quite natural, of course, that Christian devotion and Christian thought should concern themselves most with God's redeeming activity in Jesus Christ, for upon this our knowledge of God as loving Father, and so of our hope for salvation, most directly depends. Nevertheless, the centrality of God's redeeming activity to our life and thought should not blind Christians to the divine work of creation, which, if not so close to our hearts, is just as significant for our existence and just as important if we are to think rightly about God. Through God's redeeming works we know that He is supremely righteous and supremely loving. But when we ask *who* is supremely righteous and loving, the answer comes in terms of God's original activity, creation: the Creator of heaven and earth, the Lord, is He who judges and redeems us. The transcendent "Godness" of God, what gives Him deity and so ultimate significance to our lives, is most directly manifested to us through His creative activity as the transcendent source of all being and of all existence. Without this transcendent aspect of "deity," the judgment and love of God would be ultimately unimportant to us, and the redemption promised by them impossible for God. The idea of creation, therefore, provides the most fundamental, if not the most characteristic, definition of God in the Christian faith. Among all the activities of God, creation is that activity or attribute which sets him apart as "God" (pp. 83-84).

The doctrine of the Trinity—the eternal, infinite, fully self-revealing and communing holy God who is three persons—is the starting point of Christian theology. But insofar as He has any relationship with men, the doctrine of creation is absolutely central. The fact that Gilkey, who is not orthodox, can see this, and evangelicals do not, testifies to the disastrous effects of syncretism. Christianity and antitheism cannot be successfully fused without destroying Christianity.

Creation Defined

The Bible testifies to the fact that a personal God created all things—matter and energy, structure and motion—out of nothing: *creatio ex nihilo*. The opening words of the Bible are concerned with

the question of origins: "In the beginning God created the heaven and the earth" (Gen. 1:1). God repeats this fact to us again and again: "Yea, before the day was I am he; and there is none that can deliver out of my hand: I will work, and who shall let it?" (Isa. 43:13). We read in the New Testament concerning God the Son: "For by him were all things created, that are in heaven, and that are in earth, visible and invisible, whether they be thrones, or dominions, or principalities, or powers: all things were created by him, and for him: and he is before all things, and by him all things consist" (Col. 1:16-17). There is no more comprehensive statement in Scripture concerning the creation. Christ our savior is identified with God the Creator; were He not the Creator, He would not be the savior. We would still be dead in our sins (Eph. 2:5). The Gospel of John, the most explicitly evangelistic of the gospels (John 20:30-31), begins with the affirmation that Christ, the Word of God, is the Creator: "All things were made by him; and without him was not any thing made that was made" (1:3). God precedes all things: "Before the mountains were brought forth, or ever thou hadst formed the earth and the world, even from everlasting to everlasting, thou art God" (Ps. 90:2). He is therefore sovereign over all things: "Thou turnest man to destruction; and sayest, Return, ye children of men" (Ps. 90:3).

No knowledge of God as Creator could penetrate the minds of rebellious men sufficiently to bring them to repentance were it not for God's gracious self-revelation in the Bible, by means of the Holy Spirit. Men willfully hold back the knowledge they have of God as Creator (Rom. 1:18-23). The saving knowledge of God comes only by means of His special revelation and special grace to His people. Therefore, men are required to believe that God is the Creator, and not the creator devised by the rebellious human imagination, but the Creator as revealed in the Bible. Any old kind of creation will not do; we are not to adopt a doctrine of creation in the same way as we select salads in a cafeteria. The words of Genesis 1 inform us of the fact that God created all things in six days. This is repeated in the Decalogue (ten commandments): ". . . in six days the LORD made heaven and earth, the sea, and all that in them is, and rested the seventh day . . ." (Ex. 20:11). The creation was out of nothing, in response to the sovereign word of God: "By the word of the LORD were the heavens made; and all the host of them by the breath of his mouth . . . For he spake, and it was done; he commanded, and it

stood fast" (Ps. 33:6, 9). Therefore, the Apostle Paul writes: "For of him, and through him, and to him, are all things: to whom be glory for ever. Amen" (Rom. 11:36).

Modern translators of the Bible have sometimes sought to revive the theology of the pagan ancient world, since a similar theology undergirds all modern apostate rationalism. They have translated Genesis 1:1-2 as follows: "When God began to create the heaven and the earth—the earth being unformed and void, with darkness over the surface of the earth. . . ." ¹ The language, while grammatically possible, is theologically perverse. The translation is governed by the premises of apostate man rather than by the explicit teaching of the Bible. It is the Bible, not the presuppositions of rebellious men, which is to interpret the verbal revelation of God (II Tim. 3:16; II Pet. 1:20). Modern translators believe, far too often, in the co-existence of the material (or energetic) universe with the being of God. This assumption of the ancient cosmologies, contemporary "primitive" cosmologies, ancient philosophy (Aristotle, *Physics*, VIII), and modern evolutionism, is erroneous. When this pagan god began to mold the eternally existing "stuff" of the universe, he found that he was not sovereign over it, because he had not created it. He, like the "stuff" in front of him, behind him, above him, and beneath him, was governed by the independent laws of probability and chance. "Lots of luck there, God! We're pulling for you!"

In contrast to this stands the Creator of the Bible. At best, the pagan god is Dr. God, while we humans are only Mr. But the book of Hebrews testifies of another God altogether: "And, thou, Lord, in the beginning hast laid the foundation of the earth; and the heavens are the works of thine hands: They shall perish; but thou remainest; and they all shall wax old as doth a garment; And, as a vesture shalt thou fold them up, and they shall be changed: but thou art the same, and thy years shall not fail" (Heb. 1:10-12). God dwells in eternity (Isa. 57:15); He creates the new heaven and new earth (Isa. 65:17-18; II Pet. 3:9-13; Rev. 21:1). The Creator is the savior: "Lift up your eyes to the heavens, and look upon the earth beneath: for the heav-

1. *The Torah* (Philadelphia: Jewish Publication Society of America, 1962). For a scholarly refutation of this approach to Genesis 1:1, see Edward J. Young, *Studies in Genesis One* (Philadelphia: Presbyterian and Reformed, 1964), pp. 1-7. Young's study also offers refutations of the so-called "gap theory"—cons of time between Genesis 1:1 and 1:2—and the literary or framework hypothesis, which argues against the chronological succession of the six days of creation.

ens shall vanish away like smoke, and the earth shall wax old like a garment, and they that dwell therein shall die in like manner: but my salvation shall be for ever, and my righteousness shall not be abolished" (Isa. 51:6). He who dares to tamper with the doctrine of creation compromises the revelation of the Creator concerning His own activity. If the latest finding of science—based, as it is, on the oldest antitheistic philosophy of creation—should be permitted to undermine the explicit revelation of God concerning one aspect of His relationship to His creation, there is no logical reason to draw back in horror when science also undermines the doctrine of salvation. Without the doctrine of creation there can be no doctrine of salvation—not, at least, an orthodox doctrine.

God is eternal and unchanging (Mal. 3:6). His words shall not pass away (Matt. 24:35); His counsel is immutable (Heb. 6:17). "The LORD by wisdom hath founded the earth; by understanding hath he established the heavens" (Prov. 3:19). God's wisdom founded the world; the fallen world's wisdom cannot accept this. God's wisdom is foolishness to the world (I Cor. 1:20), and God warns His people not to be beguiled by the vanity of apostate philosophies (Col. 2:4-9). God is the standard of reference, the unchanging measure of all truth. Thus, the Bible rejects the pagan idea of creation through self-generated *process*, and it affirms the *fiat* creation by the word of God. Creation was a discontinuous event—the discontinuous event prior to Christ's incarnation. Process theology is the remnant of Adam's thought; by stressing the continuity between man's truth and God's truth, it relativizes God's truth. The shifting opinions of scientists replace the verbal revelation of God. *Time*, not God, becomes the framework of creation; *chance*, not God's eternal word, becomes the creative force in history. Evolution, the most consistent and most dangerous form of process theology, cannot be made to fit the categories of Christian faith.

Providence

The definition of creation goes beyond the concept of the original creation which ended on the sixth day. It simultaneously affirms the *sustaining hand* of God in time. It is Christ, "who being the brightness of his glory, and the express image of his person, and upholding all things by the word of his power" (Heb. 1:3), maintains the earth and the stars. "He hath made the earth by his power, he hath established the world by his wisdom, and hath stretched out the heaven by his

understanding. When he uttereth his voice, there is a multitude of waters in the heavens; and he causeth the vapors to ascend from the ends of the earth: he maketh lightnings with rain, and bringeth forth the wind out of his treasures" (Jer. 51:15-16). Psalm 104 is a lengthy presentation of God's creative, sustaining providence in history. This applies equally to matters spiritual and physical: "Fear thou not; for I am with thee: be not dismayed; for I am thy God: I will strengthen thee; yea, I will help thee; yea, I will uphold thee with the right hand of my righteousness" (Isa. 41:10; cf. 42:5-6). The doctrine of providence reveals the total sovereignty of God.

Creator-Creature Distinction

Is God wholly removed from the world, as an eighteenth-century deist would have argued? Is God wholly identified with the world, as the pantheists have argued? As far back as we have written records men have answered both ways. Sometimes, as in the case of the philosopher Plato and the neo-orthodox theologian Barth, secularists have held both positions simultaneously.² Aristotle's "thought thinking itself," deism's watchmaker god, or Plato's Forms or Ideas are all wholly transcendent, wholly aloof gods. Eastern religious monism and Western pantheism are examples of the god who reveals himself wholly in his creation. The first god has no point of contact with life and change; the second god cannot be distinguished from life and change. Neither is therefore truly personal.

The Bible affirms the existence of a *personal* Creator who is simultaneously transcendent and immanent. This is not held, as in the case of neo-orthodoxy, on the basis of modern philosophical dualism, but rather on the basis of a personal God's verbal and therefore understandable revelation of Himself to those creatures made in His image. God is not to be identified with His creation, yet the creation testifies to His existence. There is no uniform being that in some way links God and the creation—some ultra something that both God and creation participate in. There is no scale of being between the devil and God, with God as the possessor of more being than anyone

2. On Plato's position, see Cornelius Van Til, *A Survey of Christian Epistemology*, vol. II of *In Defense of the Faith* (den Dulk Foundation, 1969), ch. 3. (This was published originally in 1932 as *The Metaphysics of Apologetics*.) On Barth's dualism between God as wholly revealed, yet wholly hidden, see Van Til, *Christianity and Barthianism* (Philadelphia: Presbyterian and Reformed, 1962), ch. 6.

else, and the devil drifting into non-being. The God of the Bible is personal and sovereign, unlike the secular transcendent God (who is too different or too removed to care about the world) or the secular immanent God (who is too similar and too close to the world to influence it). We are informed by Psalm 90:1-2 that God is our dwelling place (immanence), yet He existed before the foundation of the world (transcendence). The universe is therefore personal; in contrast to all forms of paganism, at bottom a personal God controls all His creation. Christianity affirms *cosmic personalism*.

1. *Transcendence*. "For thou, LORD, art high above all the earth: thou art exalted far above all gods" (Ps. 97:9; cf. 135:5; Isa. 46:9). The Psalms are filled with the language of transcendence. "The LORD is great in Zion; and he is high above all the people" (Ps. 99:2). "Be thou exalted, O God, above the heavens: and thy glory above all the earth" (Ps. 108:5). While we do not need to accept the conclusions of the so-called higher criticism of the Bible, that is, the multiple authorship of many individual books of the Bible, there is no doubt that Isaiah 40-66 does stress the idea of the transcendence of God far more than Isaiah 1-39. Perhaps the crucial verses in the Bible dealing with God's transcendence are Isaiah 55:8-9: "For my thoughts are not your thoughts, neither are your ways my ways, saith the LORD. For as the heavens are higher than the earth, so are my ways higher than your ways, and my thoughts than your thoughts." Yet God's transcendence is not impersonal; He is on high, but He cares for His people: "For thus saith the high and lofty One that inhabiteth eternity, whose name is Holy; I dwell in the high and holy place, with him also that is of a contrite and humble spirit, to revive the spirit of the humble, and to revive the heart of the contrite ones" (Isa. 57:15). This same connection between God's transcendence and mercy is found in Jeremiah 32:17-18. But the most comprehensive statement of God's absolute transcendence is presented in Job, chapters 38-41. No created being can challenge the creative hand of God. It was the unwillingness of the devil to respect this limitation that brought his downfall (Isa. 14:12-15), as it also was in the case of Adam and Eve.

It is therefore insufficient to argue merely for the separation of God and the creation. As Cornelius Van Til writes: "The transcendence concept of theism is not clearly stated, if it is merely said that God is independent of the world. According to the ordinary use of the word, that would not exclude the possibility that the world

would also be independent of God. And it is this dependence of the world upon God that a theist is interested in as much as the independence of God apart from the world. In fact God would not be truly independent of the world unless the world were dependent upon God. No one is absolutely independent unless he alone is independent."³ The doctrine of creation prevents the appearance of a deistic view of transcendence, for the Bible's account of creation also teaches the doctrine of providence. God sustains the world. It is only in terms of His eternal decree that the world has existence or meaning.

2. *Immanence.* The transcendence of God the Creator implies His immanence. "But will God indeed dwell on the earth? behold, the heaven and heaven of heavens cannot contain thee; how much less this house that I have builded?" (I Kings 8:27). God is omnipresent; He cannot be contained in heaven alone. He dwells throughout His creation and far beyond infinity. Psalm 139:7-8 is the archetype passage: "Whither shall I go from thy Spirit? or whither shall I flee from thy presence? If I ascend up into heaven, thou art there: if I make my bed in hell, behold, thou art there." God asks Jeremiah: "Am I a God at hand . . . and not a God afar off? Can any hide himself in secret places that I shall not see him? saith the LORD. Do not I fill heaven and earth? saith the LORD" (Jer. 23:23-24). Near and far, God is present. "For what nation is there so great, who hath God so nigh unto them, as the LORD our God is in all things that we call upon him for?" (Deut. 4:7). God's words are very clear in this regard. As Paul proclaimed before the pagans in Athens, "For in him we live, and move, and have our being. . . ." (Acts 17:28a). Our physical bodies serve as the temple of the Holy Spirit (I Cor. 6:19; II Cor. 6:16).

Man is made in the image of God (Gen. 1:26-27). Man's inner being calls him to repentance and worship. Man's environment also calls him to worship the Creator: "The heavens declare the glory of God; and the firmament sheweth his handywork" (Ps. 19:1). Therefore, concludes Paul, every man is totally without excuse:

For the invisible things of him from the creation of the world are clearly seen, being understood by the things that are made, even his eternal power and Godhead; so that they are without excuse: Because that, when they knew God, they glorified him not as God, neither were thankful; but

3. Van Til, *Survey of Christian Epistemology*, p. 16.

became vain in their imaginations, and their foolish heart was darkened. Professing themselves to be wise, they became fools, And changed the glory of the uncorruptible God into an image made like to corruptible man, and to birds, and fourfooted beasts, and creeping things. Wherefore God also gave them up to uncleanness through the lusts of their own hearts, to dishonour their own bodies between themselves: Who changed the truth of God into a lie, and worshipped and served the creature more than the Creator, who is blessed for ever. Amen (Rom. 1:20-25).

There is no escape from God's revelation of Himself; the whole creation proclaims His majesty. There is not sufficient natural revelation to save men from destruction, but there is natural revelation sufficient to condemn them for all eternity. The "work of the law" is written in every man's heart, "conscience also bearing witness" to his own evil nature (Rom. 2:15). Men seek desperately to escape this testimony. Again, quoting Van Til: "The main point is that if man could look anywhere and not be confronted with the revelation of God then he could not sin in the Biblical sense of the term. Sin is the breaking of the law of God. God confronts man everywhere. He cannot in the nature of the case confront man anywhere if he does not confront him everywhere. God is one; the law is one. If man could press one button on the radio of his experience and not hear the voice of God then he would always press that button and not the others. But man cannot even press the button of his own self-consciousness without hearing the requirement of God."⁴

In short, "Psychologically there are no atheistic men; epistemologically [knowledgeably] every sinner is atheistic."⁵ For this reason, the evil man Dives asked to be allowed to return from hell to warn his lost brothers—not because he had a trace of goodness or compassion for the lost, but because if he could get God to admit that His revelation to the brothers was not sufficient to warn them, then God would have no cause to judge any man, including Dives. God, understandably, turned the request down flatly: though one rose from the dead (Jesus Christ), they would not be persuaded (Luke 16:27-31). Men's problem is not their lack of revelation; it is

4. Van Til, *Common Grace and the Gospel* (Philadelphia: Presbyterian and Reformed, 1973), pp. 176-77.

5. *Ibid.*, p. 54.

their willful rebellion against that revelation. God's creation reveals Him.

The Sovereignty of God

Job 38-41 is an important testimony to the sovereignty of God. God, who created all things and sustains all things, rules all things. Nothing happens outside the decrees of God; Satan had to ask permission in order to harass Job, and God set limits to everything he did (Job 1:12; 2:6). Everything is known to God beforehand, of course: "Known unto God are all his works from the beginning of the world" (Acts 15:18). But in Isaiah 45 we learn of the extent of God's total direction of all events:

I form the light, and create darkness: I make peace, and create evil: I the LORD do all these things. Drop down, ye heavens, from above, and let the skies pour down righteousness: let the earth open, and let them bring forth salvation, and let righteousness spring up together; I the LORD have created it. Woe unto him that striveth with his Maker! Let the potsherd strive with the potsherds of the earth. Shall the clay say to him that fashioneth it, What makest thou? or thy work, He hath no hands? . . . I have made the earth, and created man upon it: I, even my hands, have stretched out the heavens, and all their host have I commanded (Isa. 45:7-9, 12).

God is not the author of confusion (I Cor. 14:33), yet He controls and directs all things. There is no solution to this seeming intellectual dilemma in terms of the logic of autonomous man.

The image of the potter and his workmanship is a recurring one in the Bible. "But now, O LORD, thou art our Father; we are the clay, and thou our potter; and we all are the work of thy hand" (Isa. 64:8). Jeremiah 18, God's confrontation with Israel, is constructed upon this analogy: "O house of Israel, cannot I do with you as this potter? saith the LORD. Behold, as the clay is in the potter's hand, so are ye in mine hand, O house of Israel" (Jer. 18:6). But in Romans 9, the great chapter in the New Testament dealing with the total predestination of the world by God, Paul uses the potter analogy to stifle the apostate and illegitimate conclusion of those who would argue that God's predestination is opposed to human responsibility. Paul's use of the potter analogy has no meaning except in terms of such an illegitimate use of human logic; he answers that issue, and only that issue, in these words:

Therefore hath he mercy on whom he will have mercy, and whom he will he hardeneth. Thou wilt say then unto me, Why doth he yet find fault? For who hath resisted his will? Nay but, O man, who art thou that repliest against God? Shall the thing formed say to him that formed it, Why hast thou made me thus? Hath not the potter power over the clay, of the same lump to make one vessel unto honour, and another unto dishonour? (vv. 18-21).

God therefore has set explicit limits on the exercise of human logic. God is good, and He created all things good in the beginning, yet He uses evil and rebellion to fulfill His plan of history. Man is totally predestined by the Creator (Rom. 8:28-30; Eph. 1), yet man is wholly responsible for his actions. We are required to affirm both points. We are the vessels; God, the Creator, is the potter. Men are reminded that "The secret things belong unto the LORD our God: but those things which are revealed belong unto us and to our children for ever, that we may do all the words of this law" (Deut. 29:29). Creatures are not permitted knowledge as exhaustive as God's is, whether of outward affairs or of the heart (I Sam. 16:7). Godly humility requires every Christian to submit to the sovereignty of God, acknowledging His total predestination as well as man's total responsibility. Anything less than this affirmation—any quibbling concerning possible zones of human autonomy to make decisions respecting anything, including their salvation—involves men in outward rebellion. "The king's heart is in the hand of the LORD, as the rivers of water: he turneth it whithersoever he will" (Prov. 21:1). "A man's heart deviseth his way: but the LORD directeth his steps" (Prov. 16:9).⁶

Meekness and Dominion

Since God is sovereign over the creation which exists only because of God's decree, and since man is made in the image of God, man therefore has a legitimate, though subordinate, right of dominion over the creation. This is man's *cultural mandate*: "And God said, Let us make man in our image, after our likeness: and let them have dominion over the fish of the sea, and over the fowl of the air, and over the cattle, and over all the earth, and over every creeping thing

6. For a more detailed introduction to these issues, see the chapter on God in my book, *Unconditional Surrender: God's Program for Victory* (Tyler, Texas: Geneva Divinity School Press, 1981). This appendix is basically a summary of *Unconditional Surrender*.

that creepeth upon the earth. So God created man in his own image, in the image of God created he him; male and female created he them. And God blessed them, and God said unto them, Be fruitful, and multiply, and replenish the earth, and subdue it: and have dominion over the fish of the sea, and over the fowl of the air, and over every living thing that moveth upon the earth" (Gen. 1:26-28). This cultural mandate was reaffirmed with Noah and his sons (Gen. 9:1). Man's meekness before a Creator God is the foundation of man's inheritance of the earth, for the meek shall inherit the earth (Matt. 5:5). Christ, who claimed to be meek (Matt. 11:29), was the one who drove the money-changers from the temple (Matt. 21:12) and called the Pharisees sons of the devil (John 8:44). It is *meekness before God* which gives man *dominion over nature*:

When I consider thy heavens, the work of thy fingers, the moon and the stars, which thou hast ordained; What is man, that thou art mindful of him? and the son of man, that thou visitest him? For thou hast made him a little lower than the angels, and hast crowned him with glory and honour. Thou madest him to have dominion over the works of thy hands; thou hast put all things under his feet: All sheep and oxen, yea, and the beasts of the field; the fowl of the air, and the fish of the sea, and whatsoever passeth through the paths of the seas. O LORD our LORD, how excellent is thy name in all the earth! (Ps. 8:3-9).

Now we are made a little lower than the angels, but not forever. "Know ye not that we shall judge angels? how much more things that pertain to this life?" (I Cor. 6:3). Christians who retreat from the affairs of this world are, by their very actions, acknowledging the devil's view of God's sovereignty: man does not have legitimate rule because God, in whose image man is made, does not have legitimate sovereignty. It should come as no surprise that as the doctrine of evolution has invaded the churches, the idea of meekness before God has departed; with it has departed the idea of man's legitimate rule over earthly affairs. Christians today are in full retreat almost everywhere.

We have noted that God is transcendent to, yet immanent to, His creation. Man, created in God's image, occupies an analogical position in the creation. He is under many of nature's laws, yet he is simultaneously above nature as God's subordinate sovereign. Gilkey, the neo-orthodox theologian, has called attention to this dual position of man:

History takes on meaning, then, when man not only sees himself as a creature in a "good" nature, but, more importantly, has distinguished himself from nature. He must realize that he alone among God's creatures is not completely dominated by nature; he must become conscious of his own unique capacity for self-direction and meaning, and therefore of being in some sense transcendent to the repetitive natural order in which he participates. . . . If man is understood as totally out of relation to nature because he is regarded as purely soul or mind, or if man is understood as totally immersed in nature and so as purely creature, then no understanding of history arises. Greek idealism lost a sense of history because it could not understand the value of the natural world and of time [pure transcendence—G.N.]; Greek naturalism never achieved historical consciousness because it understood existence only in terms of the cycles of natural life [pure immanence—G.N.].⁷

The tool of man's dominion over nature is law. God has established patterns of regularity in the mind of man (logic) and in the creation (natural law). He has also established ethical and social laws by His revealed word. Rebellious man cannot acknowledge the fact that God's sovereign word undergirds natural law, human logic, and ethical (revealed) law. The self-proclaimed autonomous man cannot even explain the relationship between the logic of his own mind—especially mathematical logic—and the external universe he perceives, although his science demands that such a relationship exist.⁸ The works of the law are in men's hearts (Rom. 2:15). God established His covenant with men, and His ordinances are continual (Jer. 33:25-26; Heb. 8:10-12; 10:15-17). Our universe is orderly (Prov. 30:24-28). It is orderly because God is its Creator (Ps. 136:6-9; Prov. 8:22-31). Therefore, He calls us to repentance: "Now therefore hearken unto me, O ye children: for blessed are they that keep my ways" (Prov. 8:32). "Let us hear the conclusion of the whole matter: Fear God, and keep his commandments: for this is the whole duty of man" (Eccles. 12:13).

This is God's universe; He does as He pleases with it. Here is the primary lesson from the book of Job. Yet men are to gain power

7. Gilkey, *Maker of Heaven and Earth: The Christian Doctrine of Creation in the Light of Modern Knowledge* (Garden City, New York: Doubleday Anchor, [1959] 1965), pp. 203-4. Cf. Stanley L. Jaki, *The Road of Science and the Ways to God* (Chicago: University of Chicago Press, 1978), ch. 1.

8. Cf. Eugene Wigner, "The Unreasonable Effectiveness of Mathematics in the Natural Sciences," *Communications on Pure and Applied Mathematics*, XIII (1960), pp. 1-14. Cf. Van Til, *Christian-Theistic Evidences*, Vol. VI of *In Defense of the Faith* (Den Dulk Christian Foundation, 1975), chaps. 6, 7.

over earthly affairs through the godly exercise of biblical law (Deut. 8). God covenants with men in terms of His law; though men violate His statutes, yet He still shows mercy to many, as chapters 5-8 of the epistle to the Romans indicate. God's covenant, through grace, is sure, for man can trust in God's word. Because of Christ's sacrifice on the cross, God's wrath is placated (Rom. 5:8). Men can therefore subdue the earth in confidence through God's law (Gen. 9:1-7), for "the earth hath he given to the children of men" (Ps. 115:16).

Fall and Restoration

By breaking the law of God, Adam brought destruction to humanity (Rom. 5:12-21). Deny this historic event, and you deny the doctrine of original sin. Deny the doctrine of original sin, and man is left without an understanding of his desperate plight. He will think that his own efforts can bring him eternal life. Without a comprehension of the effects, both in time and eternity, of the ethical rebellion of man, it becomes impossible to appreciate the extent of Christ's atoning sacrifice on the cross. Theological modernism, so closely linked with an evolutionary cosmology, has produced precisely this state of disbelief.⁹

The ethical rebellion took place in time and on earth. The death and resurrection of Christ took place in time and on earth. The first-fruits of the new heaven and new earth are now manifested and will continue to manifest themselves in time and on earth. As men subdue their own hearts in terms of God's law, they work out their gift of salvation (Phil. 2:12). God's gift of sanctification, personal and social, is added unto His great gift of personal justification. God gives the increase (I Cor. 3:7). Every good gift is from God (James 1:17). The possibility of the restoration of the external world is set before God's people (Deut. 8; 28; Isa. 2; 65; 66).

The Fall of man involved a false claim of divinity on the part of man. Man, following the devil's lead, came to the conclusion that his own word, rather than God's, is ultimately creative. He made himself the judge of the reality of God's word. He would stand between God and the devil to test which one was telling the truth. He made his own hypothetical neutrality as the standard of judgment. He wanted to determine good and evil (Gen. 3:5), for knowledge is always preliminary to the exercise of power. This was the devil's sin

9. See above, pp. 250ff.

of pride (Isa. 14:12-15). Such a path leads to destruction (Isa. 14:16-23). Man is supposed to think God's thoughts after Him, not attempt to be an autonomous creature. When man becomes humble in all his ways before God, victory is within his grasp, in time and on earth: "And it shall come to pass, if thou shalt hearken diligently unto the voice of the LORD thy God, to observe and to do all his commandments which I command thee this day, that the LORD thy God will set thee on high above all nations of the earth: And all these blessings shall come on thee, and overtake thee, if thou shalt hearken unto the voice of the LORD thy God" (Deut. 28:1-2). Or, in other words, "But seek ye first the kingdom of God, and his righteousness; and all these things shall be added unto you" (Matt. 6:33). Christ is given all power (Matt. 28:18). He gives power to us.

Time and Development

"And as it is appointed unto men once to die, but after this the judgment: So Christ was once offered to bear the sins of many; and unto them that look for him shall he appear the second time without sin unto salvation" (Heb. 9:27-28). History has meaning; it determines the place of each man in eternity: "Every man's work shall be made manifest: for the day shall declare it, because it shall be revealed by fire; and the fire shall try every man's work of what sort it is. If any man's work abide which he hath built thereupon, he shall receive a reward. If any man's work shall be burned, he shall suffer loss: but he himself shall be saved; yet so as by fire" (I Cor. 3:13-15). History had a beginning (Gen. 1:1), and the fallen earth shall have an end (I Cor. 15). Therefore, in absolute opposition to ancient pagan philosophies, the Bible teaches that time is *linear*. It is also *limited*. Only after the final judgment shall the burden of time be removed from this world (Rev. 10:6). God is the ruler of time.

Sanctification in a personal sense is a progressive process, after God has imparted the perfect sanctification of Christ to us at the moment of regeneration. Paul speaks of running the good race (I Cor. 9:24) and fighting the good fight (II Tim. 4:7). As with the individual who strives against sin in his own life (Eph. 6:10-18), so it is with Christian institutions and nations. The earth is to be subdued to the glory of God, not just in eternity, but in time—not just after the final judgment, but before it, when sinners are still alive on earth (Isa. 65:20). History has purpose, direction, and meaning, precisely because God's decree controls all events. Ours is a personal universe, not an imper-

sonal, chance multiverse. Ours is a providential world. As Gilkey writes: "Now in a world created by a transcendent and purposive God, such an ultimate coherence and significance is possible. . . . The belief that existence finds its ultimate origin in God sets each creaturely life in a context of coherence and significance impossible on any other terms. . . . And the sole basis for such a faith is the knowledge of the Creator. Without such knowledge, there is no basis for this context for coherence and significance, and without that context the meaning of life quickly evaporates."¹⁰ If a neo-orthodox theologian can see this so clearly, why is the doctrine of creation so neglected in the pulpits of the supposedly evangelical churches? It is this optimism concerning God's decree in history which made modern science possible.¹¹ Without a faith in the possibility of progress, science loses meaning. By destroying the faith in creation, apostate science has almost entirely eroded the foundation of its own existence.¹²

Because God's eternal decree undergirds time, and because in His grace He assures His people that "all things work together for good to them that love God, to them who are the called according to his purpose" (Rom. 8:28), Christians need not fear time. Time brings with it the curses imposed by God as punishment for the rebellion of man, and not until death is finally subdued and the new heavens and new earth appear will time lose all of its characteristic burdens, but Christians are not time's prisoners. Our citizenship is in heaven (Phil. 3:20). Unlike the pagans, whose chaos festivals like Mardi Gras and Carnival have symbolized a desperate attempt to escape time,¹³ Christians are told to walk circumspectly, redeeming the time, that is, buying it back, prolonging it, conserving it, and using it diligently (Eph. 5:16). It is a tool for one's calling, a gift of God to His people. It is a resource to be used efficiently for the glory of God, and not a burden to be escaped by means of ritual debauchery or bloody revolution.¹⁴ Time is therefore a means of production, not

10. Gilkey, *Maker of Heaven and Earth*, pp. 188-89.

11. *Ibid.*, pp. 65-66. See also Jaki, *Road of Science*, chaps. 1, 6, 19, 20.

12. Cf. Gunther Stent, *The Coming of the Golden Age: A View of the End of Progress* (Garden City, New York: Natural History Press, 1969).

13. For various examples of this attempted "escape from time," see the works of the comparative anthropologist, Mircea Eliade, such as *Patterns in Comparative Religion* (New York: Sheed & Ward, 1958), pp. 399-407; *Myth and Reality* (New York: Harper Torchbook, [1963] 1968), chaps. 3, 5; *Cosmos and History: The Myth of the Eternal Return* (New York: Harper Torchbook, [1954] 1959).

14. See my study on Marxism, *Marx's Religion of Revolution: The Doctrine of Creative Destruction* (Nutley, New Jersey: Craig Press, 1968).

the justification for destruction.

Knowledge and Interpretation

We have already noted the scriptural instruction concerning God's wisdom as the foundation of the creation (Prov. 3:19-20). The revelation of God to man is the source of all human wisdom. Psalm 119, the longest chapter in the Bible, stands as the great passage dealing with the close relationship between wisdom and God's holy law: "Thy word is a lamp unto my feet, and a light unto my path" (Ps. 119:105). "Deal with thy servant according unto thy mercy, and teach me thy statutes. I am thy servant; give me understanding, that I may know thy testimonies" (Ps. 119:124-25). But it is in Job that we find most succinctly stated the basis of our knowledge: "But there is a spirit in man: and the inspiration of the Almighty giveth them understanding" (32:8). Elihu, the youthful fourth companion who has come to visit Job, challenges both Job and the other three "comforters" for their failure to consider the ways of a totally sovereign God. Apart from God the sovereign Creator, no knowledge is possible. He has made all things, directed all events, and He comprehends all facts. We, as God's images, are to think God's thoughts after Him: "Behold, I am according to thy wish in God's stead: I also am formed out of the clay" (33:6). It is only by God's grace, Elihu announces, that we are given knowledge: "Why dost thou strive against him? for he giveth not account of any of his matters. For God speaketh once, yea twice, yet man perceiveth it not. In a dream, in a vision of the night, when deep sleep falleth upon men, in slumberings upon the bed; Then he openeth the ears of men, and sealeth their instruction, That he may withdraw man from his [man's] purpose, and hide pride from man" (33:13-17). God, through His gracious revelation, restrains the hands of evil men who are bent on destruction. He is not compelled to do so; His mercy is unearned.

God finally replies to Job as Elihu had, announcing that He alone possesses original knowledge. He drives this point home by referring back to the creation; He is God the Creator!

Where wast thou when I laid the foundations of the earth? declare, if thou hast understanding. Who hath laid the measures thereof, if thou knowest? or who hath stretched the line upon it? Whereupon are the foundations thereof fastened? or who laid the cornerstone thereof; When the morning stars sang together, and all the sons of God shouted for joy? . . . hast thou

perceived the breadth of the earth? declare if thou knowest it all. Where is the way where light dwelleth? and as for darkness, where is the place thereof, That thou shouldst take it to the bound thereof, and that thou shouldst know the paths of the house thereof? . . . Knowest thou the ordinances of heaven? canst thou set the dominion thereof in the earth? Canst thou lift up thy voice to the clouds, that abundance of waters may cover thee? Canst thou send lightnings, that they may go, and say unto thee, Here we are? Who hath put wisdom in the inward parts? or who hath given understanding to the heart? (38:4-7, 18-20, 33-36).

The lessons of these latter passages in the book of Job are repeated by Paul: "For who hath known the mind of the Lord? or who hath been his counselor? Or who hath first given to him, and it shall be recompensed unto him again? For of him, and through him, and to him, are all things: to whom be glory for ever. Amen" (Rom. 11:34-36). As the Creator, He controls; as the Redeemer, He reveals. All things are known to Him: "I will praise thee; for I am fearfully and wonderfully made: marvelous are thy works; and that my soul knoweth right well. My substance was not hid from thee, when I was made in secret, and curiously wrought in the lowest parts of the earth. Thine eyes did see my substance, yet being unperfect; and in thy book all my members were written, which in continuance were fashioned, when as yet there was none of them" (Ps. 139:14-16). He knows all things because He creates all things; His book sets forth what is or is not possible and actual. And in grace He redeems: "He that chastiseth the heathen, shall not he correct? he that teacheth man knowledge, shall not he know? The LORD knoweth the thoughts of man, that they are vanity. Blessed is the man whom thou chastenest, O LORD, and teachest him out of thy law; That thou mayest give him rest from the days of adversity, until the pit be digged for the wicked" (Ps. 94:10-13). God has revealed Himself preeminently through His Son (John 1). "Father, I will that they also, whom thou hast given me, be with me where I am; that they may behold my glory, which thou hast given me: for thou lovedst me before the foundation of the world" (John 17:24).

Men are not autonomous from God; they are analogous to God. Their knowledge should therefore be analogical to God's knowledge, that is, in conformity to His revelation concerning Himself, man, and the creation. Men are told that they are not the source of knowledge because they are not the source of the creation. They have knowledge only to the extent that they think God's thoughts after

Him. Even in their rebellious thought, sinners can be said to see the world only in terms of borrowed capital. To use Van Til's analogy, the child must sit on his father's lap in order to slap his face. Thus, he writes, "Christianity is the only reasonable position to hold. It is not merely as reasonable as other positions, or a bit more reasonable than other positions; it alone is the natural and reasonable position for man to take."¹⁵ Apart from God's revelation, all men are blind. God, in fact, deliberately blinds the minds of some men so that they will not see the truth and be converted; Christ specifically said that this is why He spoke in parables (citing Isa. 6:9-10 in Matt. 13:10-15). Sinful men want to believe lies, so God sends them lies (Ezek. 14:9-11; II Thess. 2:11-12).

"All scripture is given by inspiration of God, and is profitable for doctrine, for reproof, for correction, for instruction in righteousness: That the man of God may be perfect, thoroughly furnished unto all good works" (II Tim. 3:16-17). In all true knowledge there is grace. God the Redeemer is God the Creator. What He reveals is true because He created and sustains all things. Were He not the Creator, He could not be the Redeemer; His revelation could always be suspect—another possible interpretation in a random multiverse. In fact, His revelation of what He is and does would have to be false, since it is not compatible with a random multiverse. A God who is not the Creator is not the God of the Bible.

Ownership and Stewardship

God, as Creator, is owner of the universe. This is stated throughout the Bible, but especially in the Psalms. "The earth is the LORD's, and the fulness thereof; the world, and they that dwell therein. For he hath founded it upon the seas, and established it upon the floods. Who shall ascend into the hill of the LORD? or who shall stand in his holy place?" (Ps. 24:1-3). "The heavens are thine, the earth also is thine: as for the world and the fulness thereof, thou hast founded them" (Ps. 89:11). Perhaps most famously: "For every beast of the forest is mine, and the cattle upon a thousand hills" (Ps. 50:10). This being true, then man, as God's image-bearer, possesses subordinate ownership: "The heaven, even the heavens, are the LORD's: but the earth hath he given to the children of men" (Ps. 115:16). The foundation of ownership on earth is God's creation of the earth.

15. Van Til, *Common Grace and the Gospel*, p. 62.

God places limitations on the exercise of the rights of property. Secularists, whether Marxists, libertarians, or anarchists, do not acknowledge these restrictions. God requires a system of tithes, and the whole book of Malachi is devoted to an exposition of the ethical and social impact of tithe-rejection. In the Old Testament economy, God placed restrictions on the practice of lending money, prohibiting the taking of interest from a poverty-stricken fellow believer (Ex. 22:25-27). There is no indication that this restriction is no longer binding.¹⁶ During the time that Israel served God as His throne, containing the tabernacle and the Holy of Holies, it was also illegal to sell the family's land for a period longer than forty-nine years; in the jubilee year, all land was to revert to the original owner or his family (Lev. 25:23-28).¹⁷ "The land shall not be sold for ever: for the land is mine; for ye are strangers and sojourners with me" (Lev. 25:23). With the rending of the veil of the temple, which had separated the Holy of Holies, at the point of Christ's death (Matt. 27:50-51), this unique position of the land of Israel departed from God's economy, but the general ownership of the whole earth by God still holds true. Ownership is never autonomous. It is always covenantal.

Ownership thus involves personal stewardship. The use of property is bounded by the laws of the various possessors: individuals, civil governments, private corporations, families, churches. Each has its own rules and regulations set by the Bible. None can ever be the exclusive owner, for no human or earthly sphere of life is exclusively divine. As Proverbs 20 through 29 indicates, men are to be charitable, industrious, honest, just; in short, they are to be faithful stewards of the goods God loans or leases to them. Each institution or individual has some legitimate rights of ownership that may not be infringed upon by another human sovereignty. Ahab was not acting legally when he killed Naboth to steal his vineyard (I Kings 21:18-19), even though he was the king. It is God who is the source of all wealth, not men, states, churches, or the devil (Deut. 8:18;

16. Gary North, "Stewardship, Investment, and Usury: Financing the Kingdom of God," in R. J. Rushdoony, *The Institutes of Biblical Law* (Nutley, New Jersey: Craig Press, 1973), Appendix 3. This is also reprinted in my book, *An Introduction to Christian Economics* (Nutley, New Jersey: Craig Press, 1973), ch. 31.

17. For an analysis of the Hebrew restrictions on the sale of land, see Rushdoony, *The Institutes of Biblical Law*, pp. 488-93.

James 1:17). Thus, when the devil offered Christ the world in return for Christ's worship of him, he was making an impossible offer (Matt. 4:9). It was not his to give.

The cosmic personalism of the Bible's universe is obviously in total opposition to the autonomous multiverse of modern man. This is God's universe. He brings blessings and curses as He sees fit (Job 38-41), but He has covenanted Himself to bring earthly blessings and troubles to communities (though not necessarily to individuals) in terms of their covenantal responses to Him. Deuteronomy 8 and 28 outline this relationship: blessings for obedience; curses for rebellion. All human sovereignties are derivative. All attempts to escape the limitations set by God on the exercise of property rights are therefore self-defeating.

The Good Creation

"And God saw every thing that he had made, and, behold, it was very good. And the evening and the morning were the sixth day" (Gen. 1:31). The creation was originally good. This included even Satan himself. At a point in time (presumably after the seventh day of creation-rest), he rebelled. His own pride was his downfall (Isa. 14:12-15). He then led Adam and Eve into this same path of destruction (Gen. 3). As Van Til has pointed out so well, our parents in Eden were tempted to think of themselves as determiners of reality. They would test God's word to see if it would hold true. They placed their own logic and interpretation of the universe on a level with God's interpretation. Thus, they viewed the universe as problematical and therefore God's word as problematical. They denied the absolute sovereignty of God's word over history and nature. It was this that constituted the Fall—knowing (determining) not only good and evil, but also knowing (determining) the possible and impossible.¹⁸

Through Adam, sin entered the world (Rom. 5:12). Man's rebellion, like Satan's, was therefore *ethical*, not metaphysical. It was not some flaw in man's being, but a willful rejection of God's sovereignty. It was an attempt to play God. It was a matter of purpose and will, not a defect in creation. Man did not slide into a lower realm of "Being in general"; he simply rebelled. Sin, therefore, is not a built-in eternal aspect of the creation. The fault was in the will of

18. Van Til, *Survey of Christian Epistemology*, pp. 19-20.

Satan and man: "Let no man say when he is tempted, I am tempted of God: for God cannot be tempted with evil, neither tempteth he any man: But every man is tempted, when he is drawn away of his own lust, and enticed. Then when lust hath conceived, it bringeth forth sin; and sin, when it is finished, bringeth forth death" (James 1:13-15).

Ethical rebellion led God to curse the world (Gen. 3:17-18). Men are now ethically blind and willfully rebellious (Rom. 1). But this evil is restrained, as in the case of the Tower of Babel (Gen. 11:6). It must not be regarded as a permanent phenomenon. The final end of rebellion is the lake of fire, into which hell, death, Satan, and all his followers shall be dumped on the day of judgment (Matt. 25:41; Rev. 20:13-14). It is a place of true existence—the eternal reminder of the results of ethical rebellion, eternally glorifying God and His justice—but a place of utter impotence. But even as hell is only a temporary dwelling place of disembodied rebellious souls, so is heaven an equally temporary dwelling place for disembodied regenerate souls. Heaven is not a place of total bliss and perfection, just as hell is not a place of total desolation, for final bliss and final desolation come only after souls and bodies are reunited on the day of judgment (I Cor. 15:39-57). The souls of the slain saints of God are in heaven, John informs us, crying, "How long, O Lord, holy and true, dost thou not judge and avenge our blood on them that dwell on the earth?" (Rev. 6:10). Yet even this scene is temporary, for evil is limited in time, however strong it may appear prior to the final judgment.

God has promised a final restoration of edenic bliss for His elect (Rev. 21; 22). Yet He graciously gives us a foretaste of this ultimate internal and external victory as an "earnest"—down payment—on our blessed hope. Isaiah 65 and 66 tell of a preliminary manifestation of the new heavens and new earth, prior to the day of judgment, for in these promised days of earthly peace, there shall be sinners still alive (Isa. 65:20). Similarly, Ezekiel 37 presents us with the famous vision of the valley of dry bones. The dead shall be resurrected. But this passage can be interpreted in terms of spiritual death as well as physical death. In fact, it must be seen as applying to both forms of death and both forms of resurrection. Ezekiel was called to "Prophecy upon these bones"; it was a preaching ministry to the spiritually dead people of Israel. Men are spiritually dead (Luke 9:60); he who believes in Christ "is passed from death unto life"

(John 5:24). Ezekiel 37 therefore promises an age of spiritual rebirth as well as a day of judgment and resurrection. "For for this cause was the gospel preached also to them that are dead, that they might be judged according to men in the flesh, but live according to God in the spirit" (I Pet. 4:6). Spiritual death is the foretaste of physical and eternal death; spiritual life is the foretaste of physical and eternal life. God promises to raise up the dead bones of the valley, spiritually and physically. The image loses its impact if either aspect is ignored.

Chapters 8-10 and 12-14 of the book of Zechariah are deeply imbued with the spirit and language of external victory over evil. The restoration of godly rule is prophesied in all of its force and clarity. Restoration shall be in time and on earth; the rule of the saints on earth is a preliminary of the day on which men shall judge the angels (I Cor. 6:3). The nations and their false gods shall be utterly defeated, writes Jeremiah (Jer. 10:10-11). These false gods "shall perish from the earth, and from under these heavens" (vs. 11). In Daniel's explanation of King Nebuchadnezzar's dream, we learn of the great kingdom stone of God: ". . . the stone that smote the image became a great mountain, and filled the whole earth" (Dan. 2:35b). Restoration is the promise of the prophetic vision.

How does God intend to bring this about? Not by some discontinuous political event, or some miraculous intervention into the daily processes of the world, but by steady spiritual progress. "For whatsoever is born of God overcometh the world: and this is the victory that overcometh the world, even our faith. Who is he that overcometh the world, but he that believeth that Jesus is the Son of God?" (I John 5:4-5). The day of judgment itself is not a discontinuous event in the midst of some steady, relentless spiritual decline, but rather a discontinuous event which will have been preceded by long ages of spiritual and social sanctification (I Cor. 15:25-28), and which will have been briefly interrupted at the end by a rebellion of a tiny minority ("remnant") of Satan's host (Rev. 19:19-21). Then the whole creation will be restored:

For I reckon that the sufferings of this present time are not worthy to be compared with the glory which shall be revealed in us. For the earnest expectation of the creature waiteth for the manifestation of the sons of God. For the creature was made subject to vanity, not willingly, but by reason of him who hath subjected the same in hope: because the creature itself also shall be delivered from the bondage of corruption into the glorious liberty of the children of God. For we know that the whole creation groaneth and

travailleth in pain together until now. And not only they, but ourselves also, which have the firstfruits of the Spirit, even we ourselves groan within ourselves, waiting for the adoption, to wit, the redemption of our body (Rom. 8:18-23).

Ethical response outwardly to the law of God brings God's covenantal blessings. The very blessings will tempt those who are only outwardly obedient to forget God and violate His statutes. But the regenerate community will use His blessings to further His glory and expand His kingdom into all areas of life. Thus, special grace is necessary to maintain common grace's blessings. (By common grace, theologians mean—or should mean—the *unearned* gifts of God to all men, including the unregenerate. All men deserve death as a result of Adam's sin [Rom. 5]; life itself is a sign of common grace, that is, an unearned gift.) What we learn in Deuteronomy 8 and 28 is that the external world of nature responds in terms of a community's outward conformity to or rejection of God's law. Thus, as always, ethical questions are primary, not metaphysical questions of being. The creation itself is closely linked to man's ethical response to God; it was cursed when man sinned, and it shall be restored progressively as men are conformed once again to God's legal requirements.

God makes it plain that His requirements are ethical rather than metaphysical. Magic is therefore rejected as a means of pleasing God. Men do not manipulate God by manipulating some aspect of the creation. The magical formula, "as above, so below," which undergirds astrology, divination, and other forms of ritualistic manipulation, is a false formula. Man is only analogical to God, not a participant with God in some universal "being." God requires ritual, but not ritual devoid of spiritual content. "Will the LORD be pleased with thousands of rams, or with ten thousands of rivers of oil? shall I give my firstborn for my transgression, the fruit of my body for the sin of my soul? He hath showed thee, O man, what is good; and what doth the LORD require of thee, but to do justly, and to love mercy, and to walk humbly with thy God?" (Mic. 6:7-8). This is why God can promise external restoration; it will have been preceded by personal regeneration in the elect, and by outward conformity to the law of God by both the regenerate and the unregenerate.

Fatherhood and Adoption

As far as man is concerned, no more crucial distinction in the Bible exists: created sonship and adopted sonship. Men's eternal

destinies rest upon this distinction. God has created all men. Paul, preaching to the Athenians, announced that God "hath made of one blood all nations of men for to dwell on all the face of the earth" (Acts 17:26a), and therefore all men are brothers in the flesh. This constitutes the *equality* of all men in Adam—absolute total depravity, regardless of race or color—and it serves as the sole *point of contact* in all men for the message of the gospel, since all men are created in God's image. There can be no other point of contact, certainly not in hypothetically "neutral" logical proofs of God.¹⁹ Paul preached to the pagans of Athens, not using logical proofs of God, but using an appeal to their common, but sinful, humanity.

The Christian goal is not the universal brotherhood of man on earth and in time. We already have the brotherhood of man; we have had it since Cain and Abel walked on earth. What the Bible calls for is the adoption of the elect into the family of God. It is no accident that the Gospel of John begins with a call to adopted sonship: "He came unto his own, and his own received him not. But as many as received him, to them gave he power to become the sons of God, even to them that believe on his name: Which were born, not of blood, nor of the will of the flesh, nor of the will of man, but of God" (John 1:11-13). The regenerate "have received the Spirit of adoption" (Rom. 8:15). This is God's greatest gift to individual men: ethical adoption by the imputation of Christ's righteousness into God's holy (set apart) family. "Even so we, when we were children, were in bondage under the elements of the world; But when the fulness of the time was come, God sent forth his Son, made of a woman, made under the law, To redeem them that were under the law, that we might receive the adoption of sons" (Gal. 4:3-5).

Adoption is exclusively in terms of God's total sovereignty and total predestination. "According as he hath chosen us in him before the foundation of the world, that we should be holy and without blame before him in love: Having predestinated us unto the adoption of children by Jesus Christ to himself, according to the good

19. For a Christian refutation of the so-called "proofs of God," see Van Til, *The Defense of the Faith* (2nd ed.; Philadelphia: Presbyterian and Reformed, 1963), pp. 248-59; cf. *Christian-Theistic Evidences*. Van Til asserts that the premise of all human thought must be the sovereign, trinitarian, Creator God of the Bible. Anything other than this as an operating presupposition is simply argumentation from a void to a void.

pleasure of his will" (Eph. 1:4-5). It could not be made any plainer than this. The children of God by adoption were chosen before the foundation of the world, even as God chose Jacob and hated Esau, before either was born or could do evil (Rom. 9:10-13). (The amazing fact, it should be noted, is that God loved Jacob, not that he hated the unregenerate, though unborn, Esau. Secularists and Arminians would paint the picture as a mirror image to the Bible's: it seems astounding to them that God could hate Esau.) In short, writes Paul, "They which are the children of the flesh, these are not the children of God: but the children of the promise are counted for the seed" (Rom 9:8).

God imposes a basic division between men. There is no universal gift of peace on earth, good will toward men. This extremely unfortunate mistranslation in the Authorized (King James) Version of the Bible—loved by all secularists because of its implication of universal salvation—says in the original Greek, "peace on earth toward men of good will" (Luke 2:14). Jesus' own account of His ministry could not be any plainer: "Think not that I am come to send peace on earth: I came not to send peace, but a sword. For I am come to set a man at variance against his father, and the daughter against her mother, and the daughter-in-law against her mother-in-law. And a man's foes shall be they of his own household" (Matt. 10:34-36).

There are therefore two distinct brotherhoods, for there are two fatherhoods: God the Father-Creator of *all* men and God the Father-Redeemer of *some* men. God disinherited the sons of the first Adam; He adopts sinners because of the work on the cross of His own Son, the second Adam (I Cor. 15:45). All men are *brothers metaphysically*, a fact which, were it not for God's saving grace (Eph. 2:8-9), would unite all men in destruction. Not all men are *brothers ethically*; the brotherhood of the promise of grace is limited to God's predestined elect.

Creation and Covenant

The Fall of man was ethical, not metaphysical (that is, having to do with some abstract "being" or essential reality). The creation therefore was originally good. The concern of the gospel of God's grace through Jesus Christ is with adoption. This means that God's concern is exclusively covenantal. God covenants Himself with a chosen and exclusive people. He will be their God; they will be His people. He acts on their behalf as their sovereign monarch. He delivers them from evil. He intervenes in a special way in the history

of His people. The so-called "two tables of the law" given by God to Moses were not separated in terms of two sets of five commandments each (with the second half—social laws—somehow less crucial than the first half, or spiritual commandments). The two tables were almost certainly two sets of the same ten laws, one serving as a copy for God the King, and the other serving as a copy for His covenanted people. This was the standard practice of kings in the second millennium, B.C.²⁰ God the sovereign monarch sets forth the terms of His treaty with His people; His people must respond in obedience, or else suffer the wrath of the monarch's hand upon them. (This is the meaning of both circumcision and baptism; an oath sign promising blessings to the faithful or wrath to the unfaithful.²¹)

The prophets, time and again, confronted the people of Israel with the claims of God. They recapitulated His dealings with them. The God of Abraham, Isaac, and Jacob, who delivered the captive people out of the bondage of Egypt, who led them into a promised land, now calls His people to repentance. The focus is on the history and provisions of the covenant. Stephen, in his testimony before his accusers, begins with God's call to Abraham to leave pagan Mesopotamia (Acts 7:2). In terms of the rituals of the chosen people, God is primarily the God of the covenant. Ritually, He is only marginally the God of Creation. In only one biblical passage, Psalm 136, is the creation mentioned as part of the otherwise familiar recapitulation of God's covenant history.

The fact that must be grasped is that this aspect of Bible history is in absolute contrast to virtually all pagan and "primitive" (that is, degenerate) cultures. The pagans pay exclusive attention to the creation in their accounts of God's activities. The primary Christian and Hebrew festivals are associated with the Passover, that is, the exodus from Egypt. The first communion service held by the Christians was during the Passover (Matt. 26:17-35). Paul writes, "Purge out therefore the old leaven, that ye may be a new lump, as ye are unleavened. For even Christ our passover is sacrificed for us: Therefore let us keep the feast, not with old leaven, neither with the leaven of malice and wickedness; but with the unleavened bread of sincerity

20. Meredith G. Kline, *Treaty of the Great King* (Grand Rapids, Michigan: Eerdmans, 1963), ch. 1.

21. Meredith G. Kline, *By Oath Consigned* (Grand Rapids: Eerdmans, 1969). Kline is as superb in his studies of the meaning of covenant as he is appalling in his "framework hypothesis" concerning the creation. Fortunately, he is better known for his covenant studies.

and truth" (I Cor. 5:7-8). The Passover feast was covenantal and ethical. The pagan creation festivals are exclusively metaphysical. They assume a common bond between God and man—a common bond of pure being. The Passover assumed a covenantal and ethical bond between God and His people; in the communion service, this is symbolized by the eating of bread and the drinking of wine. Christ's body and blood are symbolized, and men participate in His *perfect humanity*. They hope for the day when they shall be recreated and dressed in perfection like His body (Phil. 3:21). But we can never participate in Christ's *divinity*. God is fundamentally different from man.

The pagan festivals have basic similarities. They all are based on the idea that the world was created by God in a massive struggle with chaos. Creation was not out of nothing; it was the triumph of order over chaos. God therefore is said to confront chaos. The implication is that God, no less than men, faces zones of pure chance and unpredictability. He faces a world which is only partially known to Him. In other words, we are like God, only less powerful and less knowledgeable, relatively speaking. By reenacting the original creation, men believe that they can participate in the original pre-time event. Men can share the act of creation, thereby escaping ritually (and, some cultures believe, actually) the bondage of time. Saturnalia, Mardi Gras, and Carnival are all chaos festivals. Laws are broken, mores are violated, masks are worn, and men are revitalized from below. They become co-creators, co-participants with God in the act of original creation.²² The creation, since it was not an absolute creation out of nothing by the fiat word of a sovereign God, can therefore be thought of as just one more finite event, however important. Paradise is to be reestablished through ritual chaos—total moral discontinuity brings back the age of gold.

The biblical promise of the new creation is based upon the grace of a totally sovereign Creator. He restores men ethically. He puts His law in their hearts. This was the promise in Jeremiah 31:31-34; it was fulfilled by Christ (Heb. 8:9-13; 10:16-17). God's promises and His prophecies are being fulfilled or have been fulfilled in this age, the age of the Church, the body of Christ. We can thus celebrate the covenant of God with the people of Israel, for we are called "the Israel of God" (Gal. 6:16).²³ Our celebrations are not disorderly, for

22. See the references to the works of Mircea Eliade, footnote no. 13, p. 441.

23. Roderick Campbell, *Israel and the New Covenant* (Tyler, Texas: Geneva Divinity School Press, [1954] 1982).

they deny the existence of some metaphysical chaos confronting a limited God. Our rule is simple: "Let all things be done decently and in order" (I Cor. 14:40).

The celebrations of the Church call us to acknowledge our total dependence, metaphysically and ethically, on the Creator God. He has covenanted with us out of mercy. We therefore do not celebrate the creation, for that act was exclusively God's as sovereign Creator. We had no part in it, due to the fact that we are the work of His hands. We do not participate in the acts of divinity, for there is an unbridgeable gulf between our being and God's being. The Son of God, through the incarnation, once walked on earth, perfectly human and perfectly divine, two natures in union but without intermixture. This is the foundation of our faith. Only through the greatest discontinuous event of all history—the incarnation of the Son of God—is man restored to wholeness. Christians therefore neglect the celebration of the creation, not because our God is not the Creator, but because He, and He alone, is the Creator. We do not attempt through ritual to participate in His divine acts or His divine being. We acknowledge the greatest of all distinctions, the Creator-creature distinction. And we announce, in confidence: "My help cometh from the LORD, which made heaven and earth" (Ps. 121:2).²⁴

24. This essay first appeared in *The Journal of Christian Reconstruction*, I (Summer, 1974), published by Chalcedon, P.O. Box 158, Vallecito, California, 95251. At the time that I wrote the original version of this essay, the crucially important works of the Benedictine scholar, Stanley Jaki, were not yet in print: *Science and Creation: From Eternal Cycles to an Oscillating Universe* (Edinburgh: Scottish Academic Press, [1974] 1980); *The Road of Science and the Ways to God* (Chicago: University of Chicago Press, 1978); and *Cosmos and Creator* (Edinburgh: Scottish Academic Press, 1980). Jaki argues that without a concept of God, the Creator, and without faith in man's mind as competent to study the externally existent, orderly universe—faith in man as the image of God, in other words—there can be no scientific progress. Without a concept of linear history, there can be no scientific progress. Jaki, as a Thomist, is a realist, and he accepts as valid the proofs of God, something Van Til has effectively refuted, at least insofar as such proofs begin with the assumption of the validity of neutral, autonomous reasoning. Nevertheless, Jaki's extraordinary scholarship makes plain one fact: that all modern science rests on presuppositions concerning *nature's regularities* and the *interpretive ability of men's minds* that are "borrowed premises." Only by assuming the validity of an essentially Christian view of man and the creation have Western scientists advanced their disciplines. And where these premises have not been accepted, there has been no scientific progress. Jaki's studies, along with those of the French scholar, Pierre Duhem, constitute some of the most remarkable works in historical revisionism that have ever been written. Anyone who is not thoroughly familiar with them cannot be taken seriously as an historian of science. This, it should be understood, in 1982 includes the vast majority of those who call themselves scientists. They are abysmally ignorant of the historical and philosophical roots of modern science.

Appendix E

WITNESSES AND JUDGES

And the LORD God commanded the man, saying, Of every tree of the garden thou mayest freely eat: But of the tree of the knowledge of good and evil, thou shalt not eat of it: for in the day that thou eatest thereof thou shalt surely die (Gen. 2:16-17).

Good judgment. The Bible calls it wisdom. What is it worth to a godly man? It is what Solomon asked for, and what the Book of Proverbs says is the most valuable asset a man can seek.

Adam was called upon by God to render good judgment. He was to exercise good judgment in three senses. The first sense was economic or *dominical judgment*, in the sense of technical and leadership skills, as a dominion man. Second, he was to exercise *judicial judgment*: to declare God's word in condemnation of God's enemies. Third, he was to exercise *moral judgment*. Most commentaries dwell exclusively on the moral aspect of Adam's fall, but the dominical and judicial are equally important considerations.

The development of good *dominical judgment* as a godly subordinate was basic to Adam's calling before God. It is basic to humanity, for basic to humanity is the dominion assignment (Gen. 1:28). Adam was placed in the garden temporarily in order to develop his dominion skills and judgment: managerial, agricultural, aesthetic, technological, etc. Later, he was to begin the conquest of the whole earth. *The garden of Eden was a training ground for him.* It was not to become a permanent residence. He could not stay there forever. He was to move out of the garden and into the world at large, bringing it under dominion. The garden was only a temporary residence.

The essence of good judgment in both the economic and judicial sense is the ability to "think God's thoughts after Him" as an ethically dependent subordinate. *Men are to exercise dominion over nature by remaining ethically subordinate to God.* Men are creatures. They are not to

strive to attain exhaustive knowledge, but they are to strive to organize the knowledge that they have in terms of the presuppositions and explicit revelations that God has given to man concerning the creation. God holds men responsible for such intellectual and moral subordination. He rewards them for obedience. *Thus, the starting-point of good judgment is man's affirmation of the reliability and ethically binding nature of God's word.* When men do not start with this presupposition, they cannot hope to exercise good judgment for very long.

Bearing False Witness

The serpent tempted mankind in a very specific way. He first raised doubts in Eve's mind concerning the reliability of her husband's testimony to her concerning God's word. "Hath God said, Ye shall not eat of every tree of the garden?" the serpent asked (Gen. 3:1). He quoted only part of God's word. Hadn't God opened up the entire garden to them?

Initially, she answered him properly. She told him of God's warning that they should die if they ate of one tree. So the serpent escalated his attack: he denied that God's word is reliable. "Ye shall not surely die" (3:4). Then he made the accusation that God had a secret ulterior motive in establishing the prohibition: "For God doth know that in the day ye eat thereof, then your eyes shall be opened, and ye shall be as gods, knowing good and evil" (3:5). In other words, God is jealously monopolizing His position as the Lord of creation, a position which can and should be shared with others. Man, of course, should share in this lofty position, Satan implied. He misled her, for he was the one with the ulterior motive: he believed that ultimately he should occupy God's position monopolistically.

Satan made a three-part claim: *God's word is not what He says it is, God's position is not what He says it is, and the results of eating the forbidden fruit are not what God says they will be.* In short, God is a liar. The heart of Satan's accusation against God was this: God bears *false witness* concerning Himself and the creation.

The phrase, "to know good and evil," implies power greater than mere intellectual comprehension. It implies the ability to *determine* good and evil, as Rushdoony has pointed out. This is a God-like ability, and Adam and Eve desired it. So did Satan. Man hoped to make his own law, carrying out his will without interference from God or other men, and certainly without resistance from the creation. So did Satan. Neither man nor Satan achieved this goal.

Eve saw that the tree was good for food, for aesthetic pleasure ("pleasant to the eyes"), and for wisdom. She did not seek to confirm her new understanding of God's word with her husband. She sought autonomy of interpretation. She would test God's word for herself. She ate, and she gave her husband fruit to eat. The subordinate in the family took control of the situation. The results were predictable for those governed by God's word. Adam and Eve did not predict them.

Why did Satan begin by calling God's word into question? Because this was the essence of the temptation. The fruit was only the symbol; the reliability of God's word, and His authority to bring that word to pass, were the ultimate issues. Satan was challenging both. He was calling God a liar. He also was saying that God is not omnipotent: He cannot bring His word to pass. In short, Satan was saying that he was telling the truth, and that God was a false witness. Man had to decide. He had to make a judgment: Who was the false witness?

Two Witnesses

What modern commentators fail to emphasize, or even to recognize, is this: *the temptation in the garden was fundamentally a judicial proceeding*. Satan was bringing charges against God. The charge was false witness. Yet it was more than false witness; it was the charge of false witness concerning God almighty. Satan charged that God was not telling the truth about the "real" God. It is a capital crime to teach men to worship a false god (Deut. 13:6-11). God was therefore deserving of death. But who would listen? To bring a charge of this magnitude against anyone, the accuser needs two witnesses (Num. 35:30). To begin his rebellion, Satan needed two witnesses to testify against God. (This is why Satan's rebellion probably began in the garden, not in heaven days before or even before time began.)

Furthermore, who had the right to execute the death sentence? Not the accuser. The witnesses have this responsibility: "The hands of the witnesses shall be first upon him to put him to death, and afterward the hands of all the people. So thou shalt put away evil from among you" (Deut. 17:7). Satan needed at least two witnesses who had knowledge of the actual words of God before he could see his goal achieved, namely, *the death of God*.

Adam had been given God's instructions concerning the forbidden tree. He was the witness whose word was fundamental to the

trial. Eve knew of God's instructions, but only because Adam had told her. She had not been present when God had spoken these words to Adam. Her testimony would have been based on "hearsay evidence."

Judicially speaking, God's word could not be legally challenged in this court, for there were not two witnesses. But Satan proceeded as if he were in a position to bring charges. He appealed to Eve, who then acted autonomously, and who subsequently brought her husband into the court as an implicit witness against God, for she gave him fruit to eat, and he ate. Adam never verbally confirmed Satan's charge. He did not verbally lie. He simply acted out his rebellion. *But his act of rebellion constituted his testimony*, for implicit in his eating of the fruit was a denial of the binding authority of God's word.

The Christian view of God is trinitarian. God is three Persons, yet also one Person. Each Person always has the corroborating testimony of the others. Therefore, God's word cannot be successfully challenged in a court. Two Witnesses testify eternally to the validity of what the other Person declares. Each has exhaustive knowledge of the others; each has exhaustive knowledge of the creation. The truth of God's word is established by Witnesses. As the supreme Witness, God casts the first stone on the day of final judgment, and then His people follow Him in executing judgment.

The doctrine of the two witnesses also throws light on the New Testament doctrine of the *rebellious third*. In Revelation 8, we are told that a third of the trees are burned up (v. 7), a third of the sea becomes blood (v. 8), and a third part of the creatures and ships in the sea are destroyed (v. 9). A third part of the rivers are hit by the star from heaven (v. 10), and a third part of the sun, moon, and stars are smitten (v. 12). In Revelation 9, we read that angels in judgment work for a time to slay a third part of rebellious mankind (v. 15), to testify to the other two-thirds of the coming judgment, yet they do not repent (v. 21). A third of the stars (angels) of heaven are pulled down by Satan's tail (Rev. 12:4).

Why these divisions into thirds? Because *for every transgressor, there are two righteous witnesses to condemn him*. God's final judgment is assured, for in God's court, there will always be a sufficient number of witnesses to condemn the ethical rebels.

Instant Judgment

What was the primary lure of this particular fruit? It would make men wise. But what kind of wisdom was this? It was the wisdom given to Solomon by God: *the ability to make wise judgments*. Satan's

promise was that men would be able to determine good and evil and then act upon the information. On the other hand, God had told man that he was to avoid the tree, and by implication, to avoid the quest for instant illumination, meaning instant authority as a judge. But man did not obey. He did not want to wait.

How was man to achieve good judgment? By conforming himself to God's word. Man was and is required first and foremost *to obey God's word*. This requirement applied both to his role as a *judge*, declaring good and evil, and in his role as a *dominion man*, working out the implications of God's word, in time and on earth.

In terms of his role as a subordinate sovereign over nature, he was to attain good judgment by bringing the whole world into subjection to God. When we are speaking of making economic judgments, we say that over time—possibly a lengthy period of time—man's skills in conforming his actions to God's standards would have progressively developed in him the judgment he needed.

In his role as a judge, on the other hand, man's field of testing was limited by God: to stay away from just one tree during a period of testing. Do this, God said, and you will eventually attain good judgment. But Adam wanted to be a judge that day. He was not willing to wait on God for one afternoon. He preferred to be an *instant, self-appointed judge* rather than to serve first as a God-fearing witness for the prosecution against the serpent.

Adam could have achieved a position as a law-abiding, God-appointed judge by the end of the day, for he had another option: to eat of the tree of life. This would have served as a visible, public affirmation of man's belief in God's word. Eternal life is attainable only from that tree. *By eating of the tree of life, man would have declared ritually that he was subordinating himself wholly to God, relying wholly upon God's word concerning the true way of life.* Eating a meal from the tree of life would have meant communion with God—a *ritual communion meal*, eaten in faith while God was physically absent.

The moment Adam and Eve had eaten from that tree, the ethical test—the test of Adam as a judge—would have been over. The possibility of death would have been removed. On the day that they ate of the tree of life, they could not have died. The penalty of eating from the forbidden tree would have been removed. *Without a penalty, there is no law.*

In all likelihood, God would have returned to judge Satan at this point. Adam's test would have been over. God would have declared

the forbidden tree "on limits." Satan's trial would have been held on this day of judgment (presumably the first sabbath). There would have been no need for God to have retained His prohibition after His return to the garden and after the trial, for their ethical temptation would have been over. But as the final Judge, He would have had to declare His acceptance of their provisional judgment against Satan and Satan's interpretation of the tree of the knowledge of good and evil.

By conforming themselves ritually to God's word concerning eternal life, they would have attained man's assigned goal of rendering provisional, subordinate judgment. But then they could not have attained their preferred goal: *autonomous* judgment. The issues were autonomy, the question of the reliability of God's word, and the authority to render final judgment concerning that word.

Witness: An Inescapable Office

The drama in the garden was a courtroom drama. We commonly speak of the garden as a "trial" for Adam, in the sense of a test; it was also a trial in a judicial sense. There was an intruder in the garden. He was tempting them to commit a capital crime—in fact, a crime doubly capital in its offensiveness: eating the forbidden fruit, and perjuring themselves in a court of law regarding another person's commission of a capital crime. The penalty for committing perjury is the punishment which would have been imposed on the innocent victim (Deut. 19: 16-19).

Satan's charge, had he been able to prove it, would have required the death of God. This would have left Satan as the most powerful being in the universe, the one who renders final judgment. It was their responsibility to avoid all further contact with this intruder until they could bring formal charges against him when God returned. He had tempted them to deny the word of God and become false witnesses. He deserved death.

Inevitably, they would have to testify. They were witnesses. Adam had witnessed God's word, and Eve had witnessed Satan's. Before God returned and the trial began, Eve should have gone to her husband and openly asked him what God had said. If she still had doubts, she should have waited for God to return to repeat His law. Had Eve remained faithful to her husband's word, she would have been content to wait for God to declare Himself to her upon His return to the garden.

Had Adam served as a righteous witness, he would have asked Satan to repeat the interpretation of God's word which Satan had given to Eve (unless he had been silently present with her during the temptation). Then Adam would have awaited God's return, so that He might testify to Eve concerning His words to Adam. Then Adam and Eve would have testified against Satan.

They could testify against God or against Satan, but they could not escape testifying. God subpoenas all witnesses. There is also no constitutional "fifth amendment" in God's court — no right to remain silent even if the testimony might convict the witness. From the moment of temptation, man became a witness. *This is the very heart of the experience in the garden: man had to serve as a witness before he could serve as a judge.* This is also the experience of mankind throughout history, with some men testifying for Satan and against God, hoping to become *autonomous judges*, and others testifying against Satan and for God, hoping to become *subordinate judges*. Before becoming judges, men must first exercise judgment concerning which kind of witness they will be. They must also decide whose court it is, and who the prosecutor is. Most important of all, who is the presiding judge: God, Satan, or man?

If they testified against the serpent, and he was convicted, they would also have to execute justice against him. They would crush his head. It is clear why God established stoning as the normal mode of execution in a covenantal commonwealth. *Stoning is the symbolic equivalent of head-crushing.* To crush the convicted person's head is to destroy him. Also, the witnesses for the prosecution must take full responsibility for their testimony. This is the requirement of God for human courts, and it was the requirement in Eden. Bringing charges against Satan, they would have to execute the Judge's judgment.

There was no escape from the ethical obligation to witness against Satan and for God. There still isn't. There is also no escape from the ethical duty of crushing the head of the serpent (Gen. 3:15). It is done progressively, through cultural dominion. Man will eventually judge the angels (I Cor. 6:3).

Man is to crush the head of the serpent, and redeemed man does so as he witnesses against Satan, but now man is vulnerable to the bite of the serpent (Gen. 3:15). This would not have been true if Adam and Eve had gone directly to God upon His return to the garden and had brought charges against the serpent. While they were waiting for God to return, they could have eaten of the tree of

life, and they would thereby have become immune to Satan's bite—his *ethical bite*.

Final judgment was delayed. They had to wait for God to return in order to obtain judgment. There had to be a trial. This delay is part of what repelled them. They wanted to declare instant judgment, and they believed that they could do this only by siding with Satan and eating from the forbidden tree immediately. They ate, thereby becoming *witnesses for Satan*. Their eyes were immediately opened, as promised by Satan—his partial word of truth—but they still had to wait on God. They wanted to become autonomous judges instantly, but they could not achieve their goal. They had to wait for God to return, for only God can declare final judgment.

Judicial Robes

Their immediate response to their new condition—at this point, an *ethical* condition, not yet a physical condition—was to sew fig leaves together to cover themselves. They needed a covering because of their shame. They could no longer work together without coverings. Their sin had interfered with the division of labor between them. I suspect that they worked separately, not as a team. This is an explanation which is most consistent with the nature of their rebellion: they hid from each other until their coverings were in place. Their sin alienated them ethically from God and from each other, as God's images. They sewed fig leaves together; they were probably not working together. Their ability to fulfill the terms of the dominion covenant in the God-designed division of labor was compromised by their perception of their nakedness.

It took time to sew these fig leaves together. They worked, not to subdue the earth, but to cover their shame. Rather than working together in their first joint project on their first day of independent labor, in all likelihood, they worked separately. It was each for his own glory—or at least lack of shame—that they worked. Man's imitation glory is simply a make-shift covering, a hoped-for lack of shame.

Why did they think they needed clothing? Shame is specifically mentioned in the text. But shame over what? Vulnerability? What kind of vulnerability? Was it their fear of God? If they were afraid of God, they needed protection. They still had access to protection: *the tree of life*. What seems astounding in retrospect is that they did not make a mad dash for the tree of life. God later closed the garden to

them, and set a flaming sword in front of it, specifically to keep them from eating from the tree of life and gaining immortality (Gen. 3:22). The tree of life still retained its life-giving power. Why did they refuse to eat during God's physical absence?

We come to the heart of man's sin when we answer this question. *Man would have had to subordinate himself to God's word in order to receive eternal life.* They saw that they were naked. Their eyes had been opened. The serpent's word was partially fulfilled. God had not told them about this aspect of the tree of knowledge, and now the serpent was apparently vindicated. However, the second half of the serpent's word had yet to be fulfilled, namely, that on the day that they ate, they would *not* surely die. But God had said that they would die. So the partial fulfilment of Satan's word—having their eyes opened—was insufficient to prove the case. This was merely Satan's additional information vs. the silence of God. The crucial test was still undecided. What would be the outcome of the two antithetical words? Would the rebels die before the day was over?

Satan had said that they would not die. Why would they believe such a thing? Because God is immortal. By implication, becoming as God would mean that they, too, were immortal. Would they not participate in the very being of God? Would not His attributes become theirs, including immortality? This temptation, James Jordan says, is the origin of the *chain of being* philosophy.

They were still clinging to their false witness. They would not admit that Satan was lying, that God's word was sure. They did not go directly to the tree of life while there was still time remaining prior to the judgment of God. They refused to admit ritually that the day was not yet over, that God would surely come in judgment and slay them as He had promised. Instead, they spent their time making coverings for themselves. It was a question of *saving their skins* or *covering their hides*. They chose to cover their hides. Their pride condemned them.

Jordan argues that they sensed their need for coverings because they understood a judge's need for a robe. The robe in the Bible is a *robe of judicial office*. Joseph's long, sleeved robe (sometimes translated "coat of many colors") from Jacob was just this kind of robe (Gen. 37:3). It signified his authority over his brothers. When he told them of his dream that they would bow down to him (37:5-11), they stripped him of his robe (37:23) and tore it up (37:32). They refused to tolerate his authority over them. They cast him into a pit, and the

pit was in the wilderness (37:22)—another familiar Bible theme.

Robes are given by God or those who are God's lawful subordinates. Adam and Eve wanted to manifest their self-appointed authority as judges, but without robes, they were visibly usurpers. They had judged God's word, and by implication, they had to judge God and execute the sentence. Yet they were naked. A naked judge is not in a position to render judgment.

Adam and Eve were naked, not because they were sinless, but because they were *children*. As they matured, they would have been given clothing by God as a sign of their maturity, and as a sign of their authority as judges. Now that they had autonomously and *prematurely* grabbed judicial authority, they felt compelled to sew coverings for themselves. They were the image of God, and God wears clothing. He wears the glory cloud. In Daniel 8:9, the Ancient of Days is adorned in a white robe. In Revelation 1:13, the son of man has a robe that covers his feet. But God is not a sinner in need of covering. He is a judge who wears a robe. They, too, wanted to wear such robes.

It is significant that God in His mercy killed animals and made coverings for them. He simultaneously saved their skins (temporarily) and covered their hides, but only by sacrificing the life of an animal whose hide became man's covering. They were covered physically because of the shed blood of one or more animals. Their physical shame was temporarily removed from sight. (Ultimately, the shame of death can no longer be successfully hidden by clothing.) But this act of slaying the animal pointed to the necessity of the death of an innocent victim to cover man ethically.

Perhaps they were too ashamed to be seen running for the tree of life. They may have decided to clothe themselves before heading in the direction of the tree. They may have believed that with their coverings, they would not be ashamed in front of each other or the serpent; they could always eat of the tree of life after their coverings were in place. "First things first."

Prior to the judge's rendering of final judgment, witnesses can change their testimony. If they have perjured themselves, they must admit their guilt, but they can avoid the penalty by throwing themselves before the mercy of the court. *They incur shame, but they avoid the penalty for perjury.* But Adam and Eve would not accept shame. Rebellious man never does. They preferred to risk the penalty. Rebellious man always does.

They could have gone to the tree of life. They could have had a ritual communion meal with God. They could have attained eternal life. They refused. It was more important to cover their shame.

They had another option. When they heard God walking in the cool of the day, they could still have run to him and admitted their guilt. Instead, they hid from him, thereby abandoning their last opportunity to escape the penalty.

The Judicial Process

Immediately upon His return, God began His investigation. He looked at the evidence. They were wearing fig leaves. He concluded that their eyes were open. This meant that they had eaten from the forbidden tree (3:11). Adam admitted that he had eaten, but first he blamed his wife. He refused to "take the rap" by himself. Misery loves company. He wanted the "bone of his bone" to suffer the penalty, too.

Then God asked Eve about what she had done. She blamed the serpent. In effect, both Adam and Eve blamed their environment, which God had made. They blamed God indirectly. But neither wanted to suffer the penalty alone.

This is the response of ethical rebels. It is not a godly response. What did Christ say? "Greater love hath no man than this, that a man lay down his life for his friends" (John 15:13). He accepted the full punishment. This is what Isaiah said the messiah would do for Israel: "Surely he hath borne our griefs, and carried our sorrows: yet we did esteem him stricken, smitten of God, and afflicted. But he was wounded for our transgressions, he was bruised for our iniquities: the chastisement of our peace was upon him; and with his stripes we are healed" (Isa. 53:4-5). What is rebellious men's response? Isaiah points to *shame*: "He is despised and rejected of men; a man of sorrows, and acquainted with grief: and we hid as it were our faces from him; he was despised, and we esteemed him not" (52:3). Men hide their faces in shame, just as our parents did in the garden.

God judged the serpent without asking him to testify. No cross-examination was necessary. Adam had admitted guilt; Eve had blamed the serpent. He had lured them into sin. The serpent had nothing to say in his defense. The serpent stood condemned. Soon he would crawl condemned. God had seen and heard. But God did not declare final judgment against the serpent. He declared *definitive*

judgment and announced a *provisional penalty*: the serpent would crawl on its belly and eat the dust of the ground. Eventually, its head will be crushed by the promised man (Gen. 3:15). There will be a final judgment. But Satan now has no response to give in God's court. He has been definitively condemned.

What we see in the story of the garden is that God gives men time to repent and become faithful witnesses to the validity of God's word. But once the final verdict is rendered, there is no escape. Men are cast out of the garden and away from the tree of life. They cannot attain eternal life through a return to the physical garden and a physical tree. Once God pronounces judgment, man's destiny is sealed.

The day in the garden is symbolic of each man's life on earth, as well as mankind's stay on earth prior to the final judgment. There is still time to repent of the act of bearing false witness against God. There is time to eat the tree of life. This is what the communion meal means: a ritual meal eaten in the spiritual presence of God, before He returns physically to render final judgment. When He returns physically, it is the time of final judgment, just as when He draws near spiritually (for example, in the glory cloud in Old Testament times), it is a time of provisional judgment. Ungodly men hide; godly men rejoice. God delays rendering final judgment for mercy's sake. He did so in the garden, and He does so today. But He will eventually return. The time of mercy will end.

Rendering Provisional Judgment

Man wanted to render autonomous judgment. He also wanted to render instant judgment. But as a witness, he was not allowed to declare a final judgment, nor was he allowed to execute final judgment. The combined act of *declaring* judgment and *executing* it is what we call *rendering* judgment. God renders final judgment. Man would have been allowed to render provisional, subordinate judgment, as a witness. He should have rendered provisional judgment by avoiding all further contact with the serpent until God returned. He was not to declare final judgment. Man is a subordinate witness and a subordinate judge. He is not the final judge, nor is he a final witness. God testifies to Himself and against His enemies.

The reason why man today can execute judgment provisionally is because he is made in God's image (Gen. 9:5-6). God has declared His judgment against sin in His word. This was a *definitive* declara-

tion. He brings His judgment to pass in history. This is His *progressive* judgment. He will declare and execute judgment at the end of time. This is His *final* judgment. Men can therefore render provisional judgment because God has declared His judgment and His standards of enforcement in His law. He declared Himself definitively to Moses, as He had to Adam. Men are therefore called to render earthly, provisional judgment in God's name, as His lawful subordinates. But they must render honest judgment in terms of His law.

The temptation in the garden was in the form of a judicial proceeding. So is all of life. We are to render provisional, subordinate judgment in every area of life. We are to master God's law so that we can render honest judgment, just as Adam and Eve should have rendered provisional judgment against Satan in the garden by avoiding him and the forbidden tree before God returned physically to render final judgment.

Man wanted to be able to render autonomous, instant judgment. He ate of the forbidden tree. What he found was that final judgment is delayed. It is delayed against him, but it is also delayed against Satan. Satan remains man's enemy, bruising man's heel. God threw Adam and Eve out of the garden and banned their return to it physically, in time and on earth. But he offered them grace and a promise: man will eventually crush the head of the serpent. Redeemed men will witness against him formally, in the court of life, and then execute judgment against him. But now the delay in God's physical return would be more than one afternoon. Rebellious man declared instant judgment against God and for Satan; redeemed man must now struggle against Satan and the works of Satan's people, developing his good judgment over time.

Man must serve as a judge. He must declare judgment *progressively* in terms of God's *definitive* judgment and the promised *final* judgment. Man is now outside the garden, which was to have served as his training ground before he entered the world at large. Now the garden is closed to him, and the earth is cursed. This cursing of the ground also delays man's judgment, under God. It takes longer to render judgment as he works under God to build up the kingdom of God, in time and on earth. He struggles ethically against Satan and physically against the thorns. Adam had hoped to be an instant judge, but only Satan was willing to promise him that option, and then only if he testified against God.

So man's dream has been turned against him: hoping to render judgment instantaneously, he has had to render *judgment progressively*. His dream of autonomy has also been thwarted: he can declare judgment against God under Satan, or he can declare against Satan under God. But he is a *provisional judge*, not a final judge. He is always under the overall sovereignty of God, but ethically he places himself under the judicial sovereignty of either God or Satan.

Standards of Judgment

What God has declared *definitively* must serve as man's standards *provisionally*, for man will be judged in terms of these standards *finally*. This points inescapably to the continuing validity of biblical law. Rebellious man will attempt to adhere to the dominion covenant by rendering judgment, but as he grows more consistent with his condition as a covenant-breaker, he will seek to declare his own standards, and to render final judgment.

There are two humanistic standards that covenant-breakers substitute in place of biblical law: *natural law* and *positive law*. Natural law theorists declare that man, as judge, has access to universal standards of righteousness that are binding on all men in all periods of time. These standards are therefore available to all men through the use of a universal faculty of judgment, either *reason* or *intuition*. In fact, to declare judgment in terms of such a law-order, the judge must exercise both reason and intuition, in order to "fit" the morally binding universal standard to the particular circumstances of the case. What is therefore *logically binding* becomes *morally binding* in natural law theories. *What is logical is therefore right.*

Positive law does not appeal to universal standards of logic in order to discover righteousness. It appeals to the particular case. Circumstances determine what is correct. The legislature declares *definitively* what the law is, and this becomes the morally binding code of justice. But the legislature has a rival: the judiciary. The judge interprets the law, and this judgment *finally* becomes the true law, *if* "the people" (or the executive) are willing and able to enforce what the judge declares. In short, *what the State can enforce is therefore right.*

Neither system can escape the need to declare some sort of coherent (logical) standard, and neither system can avoid the use of some non-logical human facility (intuition) to apply the law. "Circumstances" do not speak with a universally clear voice, nor does "reason." In fact, each system relies on aspects of the other to impose

man's law. As Cornelius Van Til has said, each side makes its living by taking in the other side's laundry.

Both natural law theory and positive law theory are apostate. Both cry out together against the universally binding nature of God's revealed law. Both sides define justice in terms of what man can discover and enforce, not in terms of what God has declared, has enforced, and will bring to final judgment.

It is more common for self-styled Christian social, political, and legal theorists to declare the doctrines of natural law. Natural law seems at first glance to be closer to a concept of eternal law made by God. Natural law theorists can also appeal to the fatherhood of God (Acts 17:26) as the foundation of their universal valid categories of law. But the fatherhood of God is a doctrine that condemns man, for it points to fallen man's position as a *disinherited covenant-breaker*, not an ethical son. How can a disinherited son agree with an adopted son about the nature of their mutual responsibilities to themselves and to the Father, let alone agree about the final distribution of the inheritance? Did Isaac and Ishmael agree? Did Jacob and Esau agree? Did Cain and Abel?

What was the "natural law" aspect of God's prohibition against eating of the tree of the knowledge of good and evil? Satan at first tried to lure Eve into eating by an appeal to what appeared to be a universal law. Hadn't God said that they could eat of every tree in the garden? In other words, why not eat of this one tree? Eve replied appropriately: God has forbidden us to eat of this particular tree. This was a specific revelation to her husband. If she had stuck with her initial resistance, Satan would have been thwarted in his plans. *If man had relied on natural law theory to guide his actions, he would not have offered even this token resistance to the temptation.*

It is not surprising to find that those Christian scholars who have been most open in their denial of the continuing applicability of revealed Old Testament law have also been vociferous promoters of some version of natural law theory. Natural law theory offers them a time-honored, man-made covering for their shame, for they fear being exposed as unfashionably dressed in the eyes of their humanist colleagues. *Natural law theory is the conservative antinomian Christian's fashion preference in the world of fig leaf coverings.* The "bloody skins of God-slaughtered animals"—the forthrightly biblical morality of God-revealed law—are just not adequate for him.

Conclusion

The development of a godly sense of judgment takes many years. The emphasis of the Bible on the importance of training in the law is central to the question of godly judgment. "And these words, which I command thee this day, shall be in thine heart: And thou shalt teach them unto thy children, and shalt talk of them when thou sittest in thine house, and when thou walkest by the way, and when thou liest down, and when thou risest up" (Deut. 6:6-7). *The mastery of God's revealed law is fundamental for rendering righteous, provisional, subordinate judgment*, just as it was on that first working day in Eden.

One of the main reasons why Christians are culturally impotent today is that for well over a century, they have been taught alternative theories of law. They have been told that Christianity can survive under any system of law. The accent is on mere survival. There is supposedly no prospect of Christians exercising godly rule in every area of life. Of course, we are told, Christianity cannot be expected to flourish under any system of law, not because of specific kinds of flaws in humanistic law systems, but because the church is supposedly impotent by nature in history. For many of those who believe that Christianity is doomed to historical impotence, there seems to be no reason to call forth ridicule, let alone persecution, on themselves by declaring that all humanists are wearing fig leaves, and that revealed law is the only way that God wants us to cover our nakedness, through grace. Meanwhile, they can buy an "off the rack" fig leaf wardrobe from the latest humanist collection—well, maybe not the latest, but a discount version that is only ten years out of date. "Better to be trendy ten years late than never to be trendy at all!"

Fig leaves do not stand up to the howling winters of a cursed world. When Christians finally learn this lesson, they will be ready to begin to exercise godly judgment.

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Two issues of *The Journal of Christian Reconstruction* are devoted to the topic: "Christian Economics" (Summer, 1975) and "Inflation" (Summer, 1980): P. O. Box 158, Vallecito, CA 95251.

Books on economic development by the British economist, P. T. Bauer, are important: *Dissent on Development* (1972) and *Equality, The Third World and Economic Delusion* (1981), *Reality and Rhetoric* (1984), all published by Harvard University Press. He is the co-author (with Basil Yamey) of *The Economics of Under-Developed Countries* (Cambridge University Press, 1957). Bauer stresses the importance of freedom, the attitudes of citizens, people's willingness to sacrifice for the long run, and similar issues. He says that without the proper attitudes toward economic success and the freedom to pursue personal goals, long-term economic growth is unlikely.

Complementary to Bauer's books are Helmut Schoeck's *Envy: A Theory of Social Behavior* (Harcourt, Brace, 1970) and Edward Banfield, *The Unheavenly City Revisited* (Little, Brown, 1974). Both books point to the importance of the future-orientation of economic actors for the success of the economy. Banfield argues that economic classes should be defined in terms of future-orientation, not income or capital. My book, *Successful Investing in an Age of Envy* (Steadman Press, 702 W. 2nd St., Sheridan, IN 46069), applies the insights of Schoeck and Banfield to the economy and politics.

The works of Wilhelm Röpke are very important, not simply because he was a fine economist (greatly influenced as a young man by Mises), but because his perspective was far more broad than virtually all other free markets economists. He asked the tough questions about the effects of market freedom on social institutions. He was interested in the moral foundations of freedom, not just in questions of economic efficiency. Most important are his books, *A Humane Economy* (1957), distributed by the Intercollegiate Studies Institute, 14 S. Bryn Mawr, Bryn Mawr, PA 19010; *Economics of the Free Society* (1963), published originally by Henry Regnery Co., Chicago; *Against the Tide* (1969), a posthumously published collection of his essays, distributed by I.S.I.; *Civitas Humana* (1948); *The Social Crisis of Our Time* (1950); and *International Economic Disintegration*

(1942); all published in London by William Hodge & Co. (British books are most easily ordered through Blackwell's, Broad Street, Oxford, England.)

The books written by Murray Rothbard, the anarcho-capitalist, are all very clear, well documented, and powerfully argued. They include *Man, Economy and State* (1962), published by several firms, but most recently by New York University Press; *America's Great Depression* (1963), available from the Institute for Humane Studies, 1177 University, Menlo Park, CA 94025; and *What Has Government Done to Our Money?* (1964), available from the Foundation for Economic Education, Irvington, NY 10533. His book denying the legitimacy of all civil government is very good on the economic effects of various kinds of government regulation and taxation: *Power and Market: Government and the Economy* (1970), published by Institute for Humane Economy.

F. A. Hayek's books are basic to any understanding of the free market. The most important are: *The Road to Serfdom* (1944), *The Constitution of Liberty* (1960); *Individualism and Economic Order* (1948); *Studies in Philosophy, Politics and Economics* (1967); and the trilogy, *Law, Legislation and Liberty* (1973-80), all published by the University of Chicago Press. Also important is his study of the rise of socialist thought, *The Counter-Revolution of Science* (1952), which has been reprinted by Liberty Press.

By far the best book on the economics of information is ex-Marxist economist, Thomas Sowell: *Knowledge and Decisions* (Basic Books, 1980), which provides more unique insights, page for page, than any economics book I have ever read. His *Race and Economics* (David McKay Co., 1975) is also very good, as are *Markets and Minorities* (1981) and *Ethnic America* (1981), both published by Basic Books.

Two books by Bettina Greaves are suitable for an introduction to free market thought: *Free Market Economics: A Syllabus* and *Free Market Economics: A Basic Reader*, published by the Foundation for Economic Education. FEE also publishes the monthly magazine, *The Freeman* (subscription by request, free). Address: Irvington, NY 10533.

Very important are the works of R. J. Rushdoony, which are related to questions of economics: *The Institutes of Biblical Law*, Vol. I (Craig Press, 1973), and Vol. II (Ross House Books, P.O. Box 67, Vallecito, CA 95251); *Politics of Guilt and Pity* (1970) and *The One and the Many* (1971), both published by Thoburn Press, P.O. Box 6941,

Tyler, TX 75711. Also important for political and social theory is *The Foundations of Social Order: Studies in the Creeds and Councils of the Early Church* (1969), also published by Thoburn Press.

The sociologist Robert Nisbet has written many books that are important for social theory, including *The Quest for Community* (Oxford University Press, 1952), *The Sociological Tradition* (Basic Books, 1966), *Tradition and Revolt* (Vintage, 1969), *Social Change and History: Aspects of the Western Theory of Development* (Oxford University Press, 1969), *The Social Philosophers: Community and Conflict in Western Thought* (Crowell, 1973), *Twilight of Authority* (Oxford University Press, 1975), and *History of the Idea of Progress* (Basic Books, 1980). Nisbet is a pluralist and decentralist, in marked contrast to so many sociologists. His essay, "The Year 2000 and All That," *Commentary* (June, 1968), is important for its investigation of the fascination of the coming of the third millennium, A.D., in Enlightenment thought.

Evolution

Gertrude Himmelfarb's book, *Darwin and the Darwinian Revolution* (1959) created a kind of revolution itself. It is very good on mid-nineteenth-century British thought, and why Darwin appealed to that culture. Reprinted by Peter Smith, Gloucester, MA 01930.

Philip Appleman's *Darwin: A Norton Critical Edition* (Norton, 1970), is very important because of its extracts from Darwin's major works, as well as contemporary criticisms and evaluations of Darwin. It also includes modern evaluations. Conclusion: man must now take control over the evolutionary process.

Henry Morris' book, *The Troubled Waters of Evolution* (C.L.P. Publishers, P.O. Box 15666, San Diego, CA 92115), ch. 2, has many citations from modern evolutionists who have adopted the "man, the animal, becomes man, the predestinator" paradigm. It becomes obvious, after reading pages of these citations, that evolutionism is a religion.

On the coming of Darwinism, see the biography of William Irvine, *Apes, Angels, and Victorians* (McGraw-Hill, 1955); Charles Coulston Gillispie, *Genesis and Geology: The Impact of Scientific Discoveries Upon Religious Beliefs in the Decades Before Darwin* (Harper Torchbook, [1951], 1959); Francis C. Haber, *The Age of the World: Moses to Darwin* (Johns Hopkins University Press, 1959); and Stephen Toulmin and June Goodfield, *The Discovery of Time* (Harper Torch-

book, 1965). Also useful is Robert Nisbet's book, *Social Change and History* (Oxford University Press, 1969). He deals with "development" as an idea and an ideal in Western thought. Loren Eiseley's *Darwin's Century: Evolution and the Men who Discovered It* (Anchor, [1958] 1961) is important, especially for the chapter on Alfred R. Wallace, the co-discoverer of natural selection, who concluded that man's mind could not have evolved by slow, steady steps.

On the humanistic implications of evolution, see George Gaylord Simpson, *The Meaning of Evolution* (Yale University Press, [1949] 1967) and *This View of Life* (Harcourt, Brace, 1964). Simpson gives us most of the clichés of modern humanism. Any he may have neglected are provided by Sir Julian Huxley, in *Knowledge, Morality, and Destiny* (Mentor, 1957), and his essay, "Evolutionary Ethics," in *Touchstone for Ethics, 1893-1943* (Harper & Bros., 1947). Theodosius Dobzhansky's *The Biology of Ultimate Concern* (New American Library, 1967) offers a clear introduction to man, the new divinity.

Indispensable, of course, is anything written by Lester Frank Ward, especially his 1883 classic, *Dynamic Sociology* (Greenwood Press). He used the idea that man has transcended animalistic evolution to promote the idea of a planned society. The new evolution will be a man-directed evolution.

On the importance of the doctrine of creation in the development of modern science, the works of Stanley Jaki are indispensable. Jaki argues that it was only in the Christian West, where men believe in linear time, that science ever developed. Cyclical time, which is the almost universally shared view in pagan societies, never has been conducive to scientific progress. Jaki's erudition and documentation are extraordinary. His works have been neglected by all but a handful of specialists in the historiography of science. His more easily available books include *The Road of Science and the Ways to God* (University of Chicago Press, 1978), a book that is slow reading but overwhelming in its impact; *The Origin of Science and the Science of Origins* (Gateway Editions, 120 W. La Salle, Suite 600, South Bend, IN 46624); and *The Milky Way: An Elusive Road for Science* (New York: Natural History Press, 1975). Extremely important is *Science and Creation: From Eternal Cycles to an Oscillating Universe* (Scottish Academic Press, 33 Montgomery St., Edinburgh, Scotland EH7 5JX) and the small book, *Cosmos and Creator* (Scottish Academic Press).

Also important are the works by the French scholar, Pierre

Duhem. His 10-volume *Système du monde*, published from 1913 through the 1950's, presents a similar thesis to Jaki's books. English-language readers can read translations of two books by Duhem, *The Aim and Structure of Physical Theory* (Atheneum, 1962) and *To Save The Phenomena: An Essay on the Idea of Physical Theory from Plato to Galileo* (University of Chicago Press, 1969).

SCRIPTURE INDEX

OLD TESTAMENT

Genesis

1 16
 1:1 1, 12, 421, 428
 1:1-2 429
 1:2 420f
 1:9 421
 1:10 32
 1:14-16 12, 255
 1:21 32
 1:22 91
 1:24-25 32, 405
 1:26 xl, 27, 68n, 94
 1:26-27 433
 1:26-28 xli, 27ff, 436f
 1:28 91, 145, 147, 163,
 172, 318
 1:29-30 113
 1:31 66, 446
 1:33 236
 2:1-3 66
 2:9 102
 2:12 78
 2:15 84
 2:16-17 xli, 105, 455
 2:17 69
 2:18 67, 133
 2:19 37, 68n
 2:20-23 67, 90
 3:1 456
 3:5 73, 86, 92, 251, 283,
 439, 456
 3:6 100ff
 3:8 69n, 201
 3:11 465
 3:15 163, 172, 185, 461, 466
 3:17-18 447

Genesis

3:17-19 32, 111ff, 145, 204,
 239
 3:22 111
 3:22-23 103
 3:22-24 118ff
 4:1 73
 4:2 132ff
 4:5 140
 4:8 140
 4:9 139ff
 4:12-15 134
 4:17 134
 4:21 185
 5:5 118
 6 146
 7:2 146
 8:20 147
 9:1 437
 9:1-2 28, 145
 9:1-3 xl, 172
 9:1-7 439
 9:1-17 146
 9:3 147
 9:5-6 466
 9:6 27
 9:9-10 146
 11:4 150
 11:6 447
 11:7-8 150ff
 12:1 172
 12:7 157, 172
 12:8 157
 12:11-20 157
 13:2 80, 163

Genesis

13:6	204
13:10	157
13:13	157
14:13-24	163
15:1	162
15:5	163
15:5-6	162ff
15:6	163
15:16	18-20, 163, 165,
17	157
17:1-5	201
17:4-5	164
17:8	164
17:17	157
17:24	157
18:13	158
18:22-32	178
18:23-33	161
19:4	158
19:8	158
19:26	158
19:32-35	158
19:37-38	158
20	157
20:1-18	157
20:12	157
23:4	157
24:22	80
25:2-3	162
25:7	157
25:8	157
25:23	178, 179, 187, 188
25:26	190, 199
25:27	182
25:28	187
25:29	178
25:31-33	177ff
25:32	178
25:34	178, 181
26:34-35	190, 195
27:2-25	190
27:4	187, 203
27:12	188
27:13	188
27:29	188
27:37	189, 191

Genesis

27:39	189
27:41	178, 189n
27:42-45	198
27:44	198
27:46	198
28:1	189n
28:1-5	198
29:20	189n
29:23-28	191
29:30	189n
30:25	189n
30:27	191
30:27-28	191, 213
31:1-13	191
31:5	191
31:7	191, 216
31:16	191
31:19	191, 196
31:33-35	191
31:38	199n
31:38-42	192
31:41	202
31:43	191
32:4	198
32:7-8	198ff
32:9-12	199
32:10	199
32:13-21	199
32:28	201
32:30	202
32:31	202
33:14	203
35:19	199
35:26	199
35:27	199
36:3	231
36:6-7	204, 231
36:7	231
37	463-64
37:1	231
37:3	198, 463
39:2-4	213ff
39:6	213
39:22-23	214
41:25	219
41:28	219
41:32	219

Genesis

41:33-43	219
41:46	189n
41:56	232
41:57	232, 233
45:6	189n
47:9	189n
47:13-22	228
47:14-15	233
47:15-16	231
47:16-17	233
47:18	234
47:22	234
47:23	234
49:28-31	161
50:13	161

Exodus

1:7	231
1:12	231
3:2	201
3:5	201
4:10, 11	426
5:5-14	74
12:37	163, 204, 231
20:8-11	66
20:11	428
20:12	123, 170
22:25-27	445
22:30	70
23:26	114, 165
23:29-30	165
23:31	165
33:11	201
33:20	201

Leviticus

7:31-32	113n
12:3	70
13:12	72
19:35ff	82n
23:10-11	72
25:23-28	445

Numbers

14	108
35:30	457

Deuteronomy

1:10	163, 165
4:2	xxxvi
4:7	433
6:7	170, 470
8	117, 439
8:7	174
8:7-9	117
8:8-9	174
8:11-18	64
8:12-17	124
8:13	174
8:18	445
8:19-20	175
10:22	163
12:15	113n
12:20	113n
13:6-11	457
17:7	457
19:16-19	460
21:15-17	178
23:3-4	158
25:13-15	82n
28	117, 439
28:1-2	440
28:4	174
28:15-68	175
28:21-22	231
29:23	158
29:29	64, 107, 436

Joshua

5:15	201
21:44	165

Judges

1:24-26	185
3:15	185
3:15-25	185
4:17	185
4:18	185
4:20	185
4:25-27	186
5:20	66n
5:24	185f

I Samuel

16:7	436
17:20	140

I Kings

8:27	433
15:18	80
18:21	106
21:18-19	445

II Kings

24:14	33
-------	----

I Chronicles

22:10	172f
-------	------

II Chronicles

36:21	32, 211
-------	---------

Job

1:12	435
1:14-17	164
1:18-19	164
2:6	435
32:8	442
33:6	442
33:13-17	442
38:41	2, 432, 435, 446
38:4-7	443
38:18-20	443
38:33-36	443
42:12	164
42:13	164
42:16-17	164

Psalms

8:3-9	437
8:5	27
19:1	1, 433
19:9-10	80
24:1	35
24:1-3	444
33:6	1, 428
33:9	428f
50:10	64, 106, 444
50:10-12	xxxii
89:3-4	173
89:11	444
89:29	173
90:1-2	432

Psalms

90:2	428
90:3	428
94:10-13	443
97:9	432
99:2	432
102:11	126
104	431
115:16	439, 444
119:72	81
119:105	442
119:124-25	442
119:127	81
121:2	454
127:3	165
135:5	432
136	438
136	452
136:6-9	438
139:7-8	433
139:14-16	443

Proverbs

3:9	170
3:14	81
3:19	430
3:19-20	442
8:10	81
8:19	81
8:22-31	438
8:32	438
8:36	36
11:26	177
13:22	217
16:9	436
16:16	81
21:1	436
22:6	70
30:24-28	438
31:12	85
31:23	85
31:27	85

Ecclesiastes

1	126
9:11-12	396, 397n
12:13	438

Isaiah

1:22	81
2	439
4:10	431
6:9-10	444
14:12-15	432, 440, 446
14:16-23	440
42:5-6	431
43:13	428
45:1-8	64
45:7-9	435
45:12	435
45:18	421
45:23	27
46:9	432
51:6	429f
51:20	231
52:3	465
53:4-5	465
55:5	109
55:8-9	432
57:15	429, 432
64:8	435
65	439, 447
65:17-18	429
65:17-25	98
65:20	117, 123, 124, 440, 447
65:25	113, 123
66	439, 447

Jeremiah

10:10-11	448
18:6	435
23:23-24	433
31:31-34	453
32:9	82

Jeremiah

32:10	82
32:17-18	432
33:25-26	438
50:34	32
50:39	33
51:15-16	430f

Ezekiel

14:4-5	186
14:9-11	186, 444
36	64
37	447f

Daniel

2	359
2:31-35	119
2:35	448
2:36-45	119
6:8	311
6:12	311
8:9	464
8:10	66n

Hosea

12:4	201
12:5	201

Zephaniah

2:8-10	158
--------	-----

Malachi

1:2-3	180
1:3	178, 187
1:3-4	189
3:6	237, 430

NEW TESTAMENT

Matthew

4	9
4:8	446
5:5	437
6:19-21	161, 235
7:13	424
10:34-36	451

Matthew

11:29	437
12:36-37	107
13:10-15	444
13:15	193
20:28	109
20:25-28	217

Matthew

21:12	437
24:35	236, 430
24:36	221
25:41	8, 447
26:17-35	452
26:28	70
27:50-51	445
28:18	31, 76, 173, 217, 440
28:20	31
29:29	66n

Mark

6:7-8	449
7:6-13	170
8:36	101

Luke

1:30-33	173
2:14	451
4:4	38
4:7	317
9:60	447
12:47-48	116
12:48	107
16:27-31	434
23:43	76, 88

John

1	443
1:3	428
1:11-13	450
1:18	201
5:24	447f
6:46	201
8:44	437
8:56	163
14:9	201
15:13	217, 465
17:24	443
20:30-31	428

Acts

7:2	452
15:18	435
17:24-28	361
17:26	450, 469

Acts

17:28	84, 433
17:32	361

Romans

1:18-20	6
1:18-23	428
1:19	38, 42
1:20	2
1:20-25	433f
2:15	434, 438
5	35
5:8	109, 439
5:12	446
5:12-21	439
8:6	118
8:15	450
8:18-23	113, 448f
8:19-23	88
8:21	33
8:24	33
8:28	441
8:28-30	436
9	264
9:8	451
9:10-13	178, 183, 187, 451
9:11-14	189
9:16	396
9:18-21	435f
11:34-36	443
11:36	429
16:20	173

I Corinthians

1:19-21	13
1:20	430
2:16	76
3	89
3:7	439
3:13-15	440
5:7-8	452f
6:3	27, 437, 448, 461
6:19	433
7:20	215
7:21-23	215
9:24	89, 440
10:21	xlii, 106

I Corinthians

11	xlii, 91
11:1-12	91
11:8-9	91, 133
12	91
12:12-20	76
12:12-17	98
14:33	435
14:40	454
15	440
15:22-23	72
15:23	72
15:25-28	448
15:35-55	89
15:39-57	447
15:45	451

II Corinthians

6:2	105
6:16	433
8:9	109
12:4	88

Galatians

3:29	173
4:3-5	450
6:16	173, 454

Ephesians

1	256, 436
1:4-5	450f
1:10	173
1:14	76
2:5	428
2:8-9	173, 451
2:11-16	98
5:16	441
6:10-18	440

Philippians

2:10	27
2:12	24, 42, 108, 147, 439
3:14	89
3:18-19	189
3:20	441
3:21	453

Colossians

1:15-17	1
1:16-17	428
1:20	98
2:4-9	430
3:9	187

II Thessalonians

2:8-12	186
2:11-12	444

I Timothy

4:1-3	113n
5:8	177
6:6-8	215

II Timothy

3:16	429
3:16-17	444
4:7	440
4:7-8	89

Hebrews

1:3	430
1:10-12	429
4:1-11	76
6:17	430
8:9-13	453
8:10-12	438
8:13	xlii
9:22	70
9:27-28	440
10:15-17	438
10:16-17	453
11:3	1
11:20	190
11:31	185
12:16	178, 187, 190

James

1:13-15	447
1:17	439, 446
2:1-9	98
4:1	98

I Peter

4:6	448
-----	-----

II Peter

1:20	429
2:7	161
2:8	161
3:4-7	36
3:9	147
3:9-13	429

I John

5:4-5	448
-------	-----

Jude

13	66n
----	-----

Revelation

1:13	464
1:20	66n
2:11	118
3:1	66n

Revelation

6:10	89, 447
6:13	66n
8:7-12	458
8:12	66n
9:15, 21	458
10:6	440
12:4	458
19:19-21	448
20	89, 94
20:6	118
20:13-14	447
20:14	xxxvii
21	8, 447
21:1	89, 429
21:18	81
22	447
22:2	89, 118
22:3	89
22:18-19	xxxvi

INDEX

- Abel, 140f, 450
- Abortion, 167
- Abraham
 - bargaining, 178
 - burial, 161
 - covenant, 157
 - deception by, 157
 - leadership, 163
 - Lot and, 204
 - pilgrim, 157
 - shield of, 162
 - wealth, 80, 156
- Acquired characteristics, 390, 392
- Action, 31, 89, 107, 111, 236, 351, 354, 355
- Adam
 - alone, 67
 - apprentice, 67, 68n
 - arbitrator, 103
 - Augustine's view, 368
 - autonomy, 31, 73ff, 77, 86f, 103f, 467
 - calling, 85ff, 88, 455
 - choices, 102
 - instant knowledge, 88
 - leadership, 102, Appendix E
 - mind of, 85, 112, 120
 - naming, 85, 93, 150
 - passive, 67
 - probation, 104ff
 - representative, 68n
 - risks, 102
 - sabbath and, 68
 - sovereignty of, 90
 - testing God, 86f, 92, 100ff, 459
- Adoption, 450f
- Administration, 219
- Aesop, 182
- Age, 203
- Aggregates, 53, 58, 63f, 331
- Agriculture, 116, 133, 147f, 206
- Ahab, 445
- Alchemy, 277, 388
- Alchian, Armen
 - chance, 344f
 - choice, 342
 - impersonalism, 344
 - process philosophy, 351
 - purposelessness, 343
 - scientism, 345
 - selection, 344
 - survival, 343f, 346
 - trial and error, 346
- Alfvén, Hannes, 15
- Alienation, 114, 136
- Alternative costs, 75
- Altruism, 304
- Ambrose, St. 154
- Amenemhet I, 234
- Ames, William, 193
- Ammonites, 156
- Analogical knowledge, 442f
- Anatomy, 388f
- Ancestor-worship, 164
- Angels, 27, 66
- Anglican Church, 357, 413
- Animals
 - clean, 146, 147
 - epoch of, 5
 - fear, 29, 146, 147
 - flood, 145
 - grace, 146
 - male-female, 67

- naming, 37, 67, 85
 - sexuality, 90
 - subordinate, 145
 - wild, 165
- Animism, 251
- Anshen, Ruth, 253
- Anthropology, 132
- Antinomies, 55, 238
- Appleman, Philip, 285f
- Apprentice, 67, 75
- Aquinas, Thomas, 17
- Aristotle, 360f, 369n, 370, 390, 418, 429, 431
- Ark, 146
- Asa, 80
- Asceticism, 128, 364, 366
- Asimov, Isaac, 283f
- Assumptions, 52
- Astrology, 121
- Astronaut, 381
- Atheism, 434
- Atomism, 345, 347
- Attitudes, 131n, 170
- Auction, 220, 223
- Auction process, 41
- Augustine, St., 367f
- Austrian School, 23, 55, 58
 - planning, 25
 - purposeful action, 338, 342
- Authority (*see* stewardship; subordination; sovereignty)
- Autonomy, 436, 443
 - Adam, 31, 73ff, 77, 86, 103
 - causation, 19
 - creation, 84
 - law, 32
 - man's, 7, 20, 86, 107
 - market and, 10, 26
 - name, 150f
 - nature, 147
 - omnipotence, 107
 - rebellion, 86f
 - sabbath and, 69, 71, 72
 - testing, 109
 - universe's, 2
 - urbanization, 136
- Babel, 136, 150, 153, 296
- Bacon, Francis, 401
- Bahnsen, Greg, 27n, 31
- Banfield, Edward, 126n
- Banking, 82
- Baptism, 452
- Bargaining, 177ff
- Barnacles, 403
- Barth, Karl 431
- Basil, St., 154
- Bastiat, Frederic, 94
- Batten, C. R., 116n, 209
- Bauer, P. T., 131n, 159
- Becker, Gary, 346ff
- Being, 449, 453
 - in general, 446
 - scale of, 431
- Belly, 189
- Benhadad, 80
- Bentham, Jeremy, 48, 49
- Bevan, Edwyn, 13n
- Bible, 361, 415f
 - corrective data, 7, 9
 - free market, 324
 - rewriting of, 142
 - sovereignty of, 229
 - theocentric world, 19
- Bible-pornography paradox, 41f
- Bible Presbyterian Church, 28, 147f
- Biblical law
 - blessings of, 75
 - capital asset, 109
 - constant, 25
 - cost-cutting, 106
 - gold standard, 82
 - Great Commission, 31
 - higher spirituality vs., 170
 - Kingdom of God, 174
 - normative, 32
 - overcoming cycles, 114, 116f
 - power, 35
 - private property, 195
 - prosperity, 158f, 174
 - tool of dominion, 32, 36, 74, 106, 116
- Bird, Herbert, 141
- Birthright, 178ff, 182, 190f
- Black market, 229

- Blindness, 444
- Bones, 447f
- Boom-bust, 81
- Bourbons, 424
- Bradlaugh, Charles, 19n
- Brain, 283f, 329
- Breasted, J. H., 234f
- Brendt, Richard, 51
- Bribery, 185n
- Brotherhood, 451
- Bruno, Giordano, 370
- Brute facts, 2, 23
- Buddhism, 364ff
- Budd, Susan, 19n
- Buffon, 376f
- Bureaucracy, 141
 - estimating costs, 209f
 - forecasting, 221f, 229f
- Bureaucratic cage, 23
- Burt, E. A., 370n
- Bury, J. B., 369
- Byzantium, 81

- Caesars' coins, 82,
- Cain, 133f, 140, 142, 450
- Caleb, 108
- Calling, 85, 88, 90, 162, 170
 - (see also labor)
- Calvin, John, 184
- Cambridge University, 122
- Camouflage, 189, 193, 194
- Canaan, 158, 163, 165
- Cannon, Walter, 381
- Capital, 164
 - age and, 199
 - biblical law, 109
 - covenantal, 162
 - familistic, 162
 - future-orientation, 131
 - human, 162ff
 - Job's, 164
 - mobile, 161
 - measurable, 158
 - per capita, 56f, 62
 - productivity, 63, 217
 - responsibility and, 131
 - teleology and, 319
 - tool of survival, 293
 - treasures, 161
- Capital punishment, 27
- Capitulation (Christian scholars), 392, 393, 395
- Cardwell, James, 169
- Carnival, 128
- Casuistry, xxxii
- Catastrophism, 379, 392
- Cattle, 204, 206
- Cause and effect, 255f
- Censorship, 307f
- Chain of being, 387f, 405
- Chambers, Robert, 357, 393f
- Chance, 429
 - Adam's test, 87
 - creative force, 430
 - Darwinian, 259ff, 267, 357f, 396, 411
 - determinism and, 326
 - economic survival, 344
 - gambling, 226
 - paganism and, 119
 - (see also randomness)
- Change
 - bureaucracy, 230
 - entrepreneurship, 222
 - historicism, 333ff
 - money, 235
 - monism vs., 362f
 - store of value, 235
 - uniformitarianism, 120, 381
 - values, 335ff
 - value theory, 235ff
 - (see also process philosophy, uniformitarianism)
- Chaos, 2, 359, 366, 373, 421, 453
- Chaos festivals, 359, 441, 453
- Character, 156
- Charity, 180f, 291f, 314, 366f
- Chase, Allan, 110n
- Chastening, 443
- Chicago School, 342, 353
- Children, 163
- China, 160
- Choice, 101, 102, 107f, 129, 342, 351

- Choir, 426
- Chou En-lai, 160
- Christ (*see* Jesus)
 - savior-creator, 428
- Christian economics, xxix, xxx, xxxii
- Christian scholarship, xxxii
- Christian Socialism, 142, 242f
- Christmas, 200
- Chronology
 - creation, 12ff
 - evolutionism's, 14ff
- Chrysostom, St. John, 154
- Church, 173f
- Circumcision, 70
- Circumstances, 192, 194, 195, 196
- Citizenship, 441
- City, 89, 134
- City (London), 160
- City of God, 151
- Civil government, 25
- Civilization, 136
- Class, 126
- Classical liberalism, 24
- Classical religion, 164
- Classification, 387ff
- Class warfare, 98
- Climate, 152f
- Cloning, 93f
- Clough, Shepard, 132f
- Cochrane, C. N., 362, 367f
- Collectivism (*see* holism, socialism, totalitarianism)
- Comets, 369
- Commentaries, xxxi, 240
- Commentary*, 138
- Common grace, 239, 449
- Common ground, 239
- Common sense, 47, 53, 56
- Commons, 116n, 208ff
- Communion, 102f, 105f, 453
- Community, 137
- Comparative method, 387, 388
- Competition, 94f, 293
- Compromise, 422
- Computers, 125, 283f
- Confidence, 439
- Conflict (*see* class conflict)
- Conquest, 128, 131
- Conjectural history, 387n
- Conservation, 210, 211
- Constantine, 240
- Constants, 25, 62, 64
- Consumers, 94f, 215, 220, 223f
- Consumer sovereignty, 216, 220
- Continuity, 251, 271, 286, 287n, 387, 406, 430, 453
- Control, 318
- Cooperation, 25, 93f, 114f
- Coordination, 23, 25, 57, 99
- Copernicus, 247f, 252, 370
- Corn, 177
- Cosmic impersonalism, 2, 7, 372, 407
- Cosmic personalism, 1ff, 431
 - natural law, 32
 - purpose and, 22, 84, 242
 - social order, 24
 - St. Augustine, 368
 - whose?, 8
- Cosmology, 419
 - scientific, 14ff
 - 18th-century, 23
- Cost, 107ff, 133
 - estimating, 209f
 - revelation and, 106
 - waste and, 211
- Counterfeiting, 82, 83
- Courville, Donovan, 231, 234
- Covenant, 24, 451ff
 - Abraham's, 157
 - blessings, 75, 165, 174
 - breaking, 74, 103f
 - calling, 162
 - capital and, 162
 - children, 163
 - future-oriented, 164
 - keeping, 68f, 103f
 - obedience, 103f
 - structure, xxxvi-xliii
- Covenant line, 173, 179, 188, 191, 196
- Cowboy, 135
- Crabbe, Buster, 277
- Creation, 1ff, 360, 366

- discontinuous event, 430
- good, 32, 37, 84, 446ff
- hierarchy, 91
- imputation and, 37
- incomplete, 32, 87f
- not normative, 32
- out of nothing, 427ff
- providence, 1
- rallying issue, 426f
- rituals, 452f
- theocentric, 19
- undeveloped, 84
- Creationism
 - abandoning, 393
 - little conflict, 425
 - pseudo, 384, 389, 392
- Creation myths, 3n
- Creativity, 130
- Creator, 228f, 361f
- Creator-creature, 241, 258, 431ff, 453, 454
- Creature, 207
- Crime, 310
- Crises, 82
- Cultural mandate, 133f, 147f, 436
(*see* dominion covenant)
- Culture, 134, 148
- Curse, 188, 231
 - blessings and, 114ff, 122f
 - dominion and, 206
 - limit on man, 9
 - removed, 89, 123
 - scarcity and, 112ff
- Cycle (life), 113
- Cycles, 113f, 119, 359, 361, 363, 367, 373
- Darwin, Charles
 - barnacles, 403
 - biography, 401f
 - chance, 409
 - children, 403
 - "conversion," 18n
 - continuity, 406
 - cosmic impersonalism, 407
 - definitions, 404, 405
 - design, 11n, 410
 - faith of, 411f
 - Greeks and, 418
 - impersonalism, 279
 - indeterminacy, 405f
 - intellectual revolution, 285
 - Lamarckian, 259
 - leap of being, 407
 - natural law and, 24, 409
 - Paley and, 409f
 - purposeless change, 16
 - randomness, 3
 - sovereign God, 410
 - teleology, 258f, 262, 408, 409
 - temporal autonomy, 249f
 - theories, 402
 - time, 409
 - uniformitarianism, 407
 - Wallace and, 398
 - wiggler, 412
- Darwin, Erasmus, 389f
- Darwinism
 - central planning, 341
 - religion, 281
 - pantheism and, 251
- Das Kapital*, 18, 98
- Davidheiser, Bolton, 404
- Day of judgment, 447, 448
- Death, 103, 113, 118, 440
- Deaths, 29
- Deborah, 185
- Decentralization, 10, 25, 31, 108, 152, 229, 330
- Deception, 184ff, 191
 - Abraham's, 157
 - benefits, 192
 - God's plan and, 192f
 - Rachel's, 197
- Degeneration, 146
- Deism, 17, 257, 417, 431
- Delegation, 213f
- Demand curves, 346f, 348
- Democracy, 310
- Democritus, 375
- Demons, 66n
- Descartes, 371, 373
- Design, 4, 17
 - cooperation, 94

- natural selection vs., 286, 390, 406, 410, 412
- nature, 84
- social theory, 328, 330ff, 338, 354f
(*see also* purpose, teleology)
- Despair, 5
- Despotism, 228
- Determinism, 3
- Devi, Shakuntala, 120f
- Devil, 432, 446
- Devolution, 134
- Diamond-water paradox, 39
- Digby, Bassett, 152n
- Dillow, Joseph, 152n
- Diminishing returns, 204ff, 210, 232, 241f
- Diminishing utility, 44
- Diodorus of Sicily, 360
- Diplomas, 89
- Discontinuity, 247, 276
- Disharmony, 94ff, 99
- Disraeli, Benjamin, 357
- Dives, 434
- Division of labor, 330,
 - Adam and Eve, 67, 85, 91ff
 - Cain and Abel, 133
 - dominion and, 85, 115f, 155
 - intellectual, 426
 - knowledge, 330ff
 - wealth and, 115, 292
- DNA, 277, 278, 283
- Dobzhansky, Theodosius, 245f, 252
- Dominion, 9, 28, 32, 436ff
 - diminishing returns, 210
 - division of labor, 85
 - ecology, 32
 - factors, 155
 - family and, 85, 165
 - human nature, 29
 - profits and, 210f
 - reducing costs, 133
 - rest and, 77
 - sabbath and, 75f
 - subordination and, 31f, 84
 - training for, 88
- Dominion covenant
 - Adam's, 67, 75f
 - antinomianism vs., 145
 - children, 165
 - comprehensive, 145
 - curse, 113
 - diminishing returns, 210
 - division of labor, 91, 93, 115
 - ecological covenant and, 149
 - evolutionism, 317f
 - eternal, 89
 - family, 85, 91, 165
 - humanism's, 277
 - man's history, 98
 - nomadism vs., 133
 - population growth, 165, 174
 - private property and, 210f
 - representative, 90
 - socialist version, 330
- Dr. Faustus, 4
- Dross, 81ff
- Drucker, Peter, 169
- Drugs, 160
- Dualism, 324, 325, 354, 360, 420
- Earnest, 447, 448
- Eckhart, Meister, 364n
- Ecology, 32, 115f, 145ff, 208ff
- Economic crises, 82
- Economic growth, 43, 114, 116f, 123, 128, 131
- Economics
 - assumptions, 52
 - atheistic, 60
 - epistemology, xxxiv, xxxv, 238, 323
 - neutrality, xxxii
 - welfare, 44ff
- Economists, xxxiv
- Eden, 455
- Edinburgh, 382
- Education, 170, 302, 305f
- Egalitarianism, 93
- Egypt, 163
- Ehud, 185, 194
- Eighth day, 68f, 72f
- Einstein, Albert, 254, 371
- Eiseley, Loren, 124f, 132, 376, 379, 406
- Eliade, Mircea, 3n, 128, 441n, 453n
- Eliezer, 162
- Elihu, 442

- Elijah, 106
- Elite
- evolution-directing, 246, 295f, 309
 - planning, 22f, 304ff, 312, 318, 332, 341, 352
 - predestinators, 25
- Elliot, Gil, 29
- Empiricism, 401
- Employers, 215
- Engels, Frederick, 263, 418f
- Enoch, H., 18n
- Entrepreneur, 219 (*see also* middleman)
- Entrepreneurship, 102, 127, 213ff, 218, 219ff
- Entropy, 4, 5, 25, 257, 270
- Environment, 113, 433
- Envy, 67n, 170
- Epicureans, 361
- Epicurius, 375
- Epistemology, xxxiv, xxxv
- common sense, 47, 53, 56
 - creationist, 1
 - dualism, 324, 333
 - neutrality, xxix, xxxii
- (*see also* knowledge, values)
- Equilibrium, 348, 350ff
- Equality, 92
- Erosion, 210
- Esau, 178, 187, 190, 451
- present-oriented, 198
 - 400 servants, 198
- Eternal life, 105, 118
- Ethics, 4, 26, 96, 266f, 271, 449
- Ethical rebellion, 98 (*see also* rebellion)
- Eugenics, 21
- Evangelism, 148
- Eve
- Adam's calling, 85
 - creation of, 67
 - forecasting, 102
 - helper, 85, 91
- Evolution
- ancient paganism, 2
 - humility, 281f
 - leap, 129
 - man-directed, 22, 25, 245f, 267ff, 286, 295, 298, 309
 - meekness and, 437
 - religion, 283
 - religious, 247
 - sleight-of-hand, 253, 264, 267ff, 279
 - social, 266
 - society, 133
 - three kinds, 376
- (*see also* devolution)
- Evolutionism
- atheism, 418
 - chronology, 14ff
 - dominion covenant, 310, 317f
 - historicism, 337
 - ministers and, 389, 402, 413f, 415
 - process, 287
 - religion, 289
 - social, 328
- Exchange, 9, 26, 153, 180, 195
- Exhaustive knowledge, 2, 6f, 107, 317, 377
- Exodus, 163
- Externalities, 209
- Failure, 315
- Faith, 331, 337, 397, 411f
- economic growth, 130
- Fall, 250
- Adam's mind, 85
 - curses, 9, 35
 - harmony, 91
 - knowledge and, 9
 - time and, 122
- (*see also* rebellion)
- False witness, 196
- Family, 451
- Babel and, 153
 - calling, 90f
 - design, 86
 - division of labor, 91
 - dominion and, 85, 90f
 - functions, 91
 - Potiphar, 214
- Family planning, 315
- Famine, 170, 211f, 219, 228, 231, 232

- Fasting, 179
- Fate, 287n, 361
- Faustus, 4
- Feedback, 209
- Ferguson, Adam, 11n, 20, 23, 327
- Fertility rate, 166
- Field, George, 14n
- Final judgment, 4
- Firstfruits, 72, 449
- Flash Gordon, 277
- Flood, 381f, 389
- Flyspeck earth, 248n, 275, 282
- Fontenelle, Bernard de, 373
- Forecasting (*see* entrepreneurship)
- Foreign aid, 120, 180
- Forestalling, 177, 183
- Form-matter, 360
- France, 166
- Franklin, Ben, 200
- Fraud, 81
- Freedom, 129, 234, 242
- Free enterprise, 242
- Free market
 - autonomy, 10, 26
 - biblical, 99
 - choices and costs, 108
 - clearing price, 218
 - coordination, 22, 25, 57, 99
 - decentralization, 10, 22, 108, 229
 - defense of, 108, 320, 322ff
 - designed, 11, 20
 - economic growth, 159
 - ethical defense, 26
 - harmony of interests, 94ff, 99
 - "impersonalism," 9ff, 25, 215f
 - loss of faith in, 24f
 - process, 342, 344f, 347f
 - vs. self-deification, 10
 - service to, 217f
 - survival, 337
 - spontaneity, 20, 21f, 319
 - theory, 330
- Friedman, Milton, 238
- Fundamentalism, 28, 30, 149, 252f
- Future-orientation
 - bargaining, 183
 - covenants and, 164
 - Jacob, 183, 203
 - money and, 233
 - population and, 171f
 - Rebekah, 188
 - wealth and, 183, 215
 - (*see also* present-orientation)
- Galileo, 252, 369
- Galton, Francis, 21
- Gambling, 226
- Gamow, George, 374, 418
- "Gap" theory, 420f, 429n
- Garden of Eden, 84
 - battlefield, 106
 - training camp, 68n, 69, 87, 118
- Genetic engineering, 278, 283
- Genetics, 3, 388
- Geology, 378ff
- Geocentricity, 369
- Germany, 166
- Ghetto, 126n, 130
- Ghiselin, Michael, 401n, 404
- Gilkey, Langdon, 427, 437f, 441
- Gillispie, Charles, 381, 393, 422
- Gnosticism, 277
- GNP, 53
- God
 - chastens, 443
 - city of, 151
 - Commander 27, 174
 - constant, 64
 - Creator, 427, 454
 - cross-examination by, 465
 - decree 441
 - decree of, 440
 - eliminating, 247f
 - exhaustive knowledge, 6f
 - fatherhood of, 139, 449ff
 - grace, 102
 - Holy Spirit, 428
 - honoring, 27
 - image of, 27ff, 32, 35, 36, 64f
 - immanence 433ff
 - imputation, 64, 100f, 236
 - Imputer, 37
 - Israel of, 454
 - judgment, 70, 119, 124, 142, 175f, 417

- kingdom of, xxxiii
- law of, xxxiii, xxix, xxxii, 74, 106, 109, 117, 417
- law-order, 27, 87 (*see* biblical law)
- laws, 158f
- laws of thought, 6
- mind of, 6
- moral law, 36, 82
- objective values, 42
- omnipresent, 433
- omniscience, 101, 106, 109
- owner, 106
- plan, 59f, 85
- planner, 64
- plan of, 2, 6f, 22, 24, 64
- power, 433
- promises of, 199f
- proofs of, 256, 450
- providence, 26, 252
- purpose, 441
- purposes, 87f
- randomness vs., 20
- redeemer, 427
- revelation, 106f, 428
- revelation of, 431, 434
- Satan vs., 7
- shield, 162
- shoving out, 20, 22, 249, 272, 279, 317, 379, 414
- sovereignty, 22, 27, 59f, 87, 89, 396, 410, 435f, 437, 443, 446
- space and, 371
- standards, 37, 38, 60
- stone of, 448
- testing, 86f, 100f, 110
- theophanies, 200f
- time and, 380
- transcendent, 432
- unchanging, 430
- whole counsel, xxxii, 149
- wisdom, 442
- wisdom of, 430
- word of, 103ff, 107, 109
- Godhead, 320
- Gold, 233
 - eating, 236
 - historic value, 80
 - intrinsic value, 80
 - money, 78ff
 - unit of account, 79, 80
- Gomorrah, 157
- Goodfield, June, 14f
- Government, 25 (*see also* civil government, self-government, state)
- Grace, 102, 114ff
- Graham, William, 260, 262
- Grass, 126
- Gray, Asa, 259, 403, 409, 410
- Great Commission, 31
- Greeks, 164, 239, 359f, 368, 418, 438
- Greeley, Horace, 19n
- Greene, Marjorie, 257
- Growth, 114, 123, 128, 159f, 174f, 381
 - limits to, 175
 - points to final judgment, 175f
- Guidelines, xxxii, xxxiii
- "Gunsmoke," 135
- Guye, Charles, 374
- Gypsies, 134
- Gyroscope, 381
- Habits, 69
- Handler, Philip, 282
- Handmaids, 197
- Hapgood, Charles, 369n
- Hardin, Garrett, 116n, 122, 209
- Harmony, 90ff, 95
- Harrod, R. F., 46ff
- Harvard, 426
- Hayek, F. A.
 - career, 326f
 - collectivism, 96f
 - decentralization, 10, 330
 - defense of freedom, 331
 - design, 11n, 20f, 328
 - dualism, 333
 - evolution, 319
 - faith, 337
 - faith of, 331
 - historicism, 333, 335
 - impersonalism, 9

- individualism, 330
- knowledge, 330, 331
- least-common-denominator, 96
- Mises' subjectivism, 60
- morals, 97, 334, 336
- political hierarchy, 96f
- process philosophy, 333f, 335
- Social Darwinism, 329
- social evolution, 328
- subjectivism, 38, 63
- subordination, 337
- "tools," 339f
- totalitarianism, 97
- tradition, 334, 339
- two rationalisms, 327
- Heart, xxxii
- Heaven, 88f, 447
- Heber the Kenite, 185
- Hecateus of Miletos, 360
- Heisenberg, Werner, 397
- Hell, 118, 129, 447
- Henslow, J. S., 401
- Heresy, 426
- Hermit, 29
- Hesiod, 119, 258f
- Heth, 157
- Hierarchy, 84, 91
 - inverted, 92
 - values, 101
- Higher consciousness, 88
- Hikers, 210
- Himmelfarb, Gertrude, 357, 400
- Hinduism, 362
- Historicism, 131n, 333f, 335
- History, 98
 - cyclical, 114, 119
 - linear, 119, 163
 - meaning of, 440
- Hitchhiking, 134
- Hoarding, 177
- Holism, 24, 56f, 57, 59
- Holy of Holies, 445
- Holy pretense, 192
- Holy Spirit, 428, 433
- Hong Kong, 159f
- Households, 347
- Hoyle, Fred, 418
- H.M.S. *Beagle*, 401
- Hubble's Constant, 255n, 276
- Huguenots, 216
- Human action (*see* action)
- Humanism
 - baptized, 241
 - economics, 52, 54, 93, 239f
 - goal of, 26, 93
 - God vs., 187
 - nineteenth-century, 23
 - occultism and, 277
 - pessimistic, 4f, 124
 - population, 166
 - purpose and, 23
 - Social Gospel, 142f
 - tests, 109f
 - unified god, 150
 - universities, 240f
 - zero growth, 175
- Humility, 281f
- Hunger, 179
- Huns, 134
- Hutton, James, 379f, 389, 393
- Hutton, Richard H., 416
- Huxley, Aldous, 244, 307
- Huxley, Julian
 - destiny, 280
 - ethics, 271ff
 - leap of being, 271
 - new humanity, 276
 - one-world State, 274
 - process philosophy, 273
 - relativism, 272f
 - social evolution, 271
- Huxley, Thomas H., 399
 - chance, 396f
 - flyspeck earth, 248n, 282
 - Judaism (creationism), 423f
 - man controls, 270
 - man vs. nature, 271
 - pre-Darwin evolutionism, 393, 418
 - Social Darwinism, 270f
- Idealism, 438
- Ignorance, 223
- Image of God, 27f, 32, 35, 36, 64
- Immanence, 433ff

- Impersonalism, 279, 344
- Impersonal market, 215f
- Imputation
 - God's values, 37, 42, 59f, 64, 100f, 107
 - gold's value, 83
 - man's, 38, 42, 59f, 107
 - market's, 42
 - (*see also* values)
- Incarnation, 201, 202
- Incommensurability, 51
- Indeterminacy, 405f
- Individualism, 24, 57, 58, 292, 330 (*see also* anarchism)
- Industrialism, 34
- Industrialization, 166
- Infinity, 433
- Inflation, 81ff, 123, 129, 243
- Information, 106, 108
- Intellectuals, 294
- Interest rate, 126, 128, 182, 207
- Interpersonal comparisons, 46ff, 55
- Interpretations, 60
- Interventionism, 195
- Intuition, 238
- Investment, 127
- Ireland, 166
- Isaac
 - commentators and, 203
 - fought God, 188, 189
 - interventionist, 195
 - present-oriented, 187
 - stew, 187
 - word of, 191
- Islam, 77
- Israel (Jacob), 201, 202
- Israel of God, 454

- Jabin, 185
- Jablow, Eric, 121
- Jacob, 193, 451
 - (Israel), 201f
 - limp, 202
 - old man, 198f, 203
- Jael, 185, 194
- Jaki, Stanley, 114n
- James, Will, 135n
- Jastrow, Robert, 374
- Jeremiah, 82
- Jesus
 - parables, 192f
 - power, 173
 - restored week, 70
 - sabbath and, 76
 - temptation of, 8
 - throne of David, 173
 - uncertainty of, 221
- Jericho, 184
- Jevons, W. S., 41, 49
- Jewels, 78
- Jews, 138, 216
- Job, 164
- Jordan, James, 189n
- Joseph, 189n
 - authority of, 213f
 - buys Egypt, 234
 - competence, 219
- Joshua, 108
- Judgment, 119, 124, 142, 175f, 221, 267, 382, 417, Appendix E

- Kant, 324, 351, 373, 375, 420,
 - evolutionist, 425
 - god of, 4
- Karate, 137
- Karma, 365
- Keepers, 139ff
- Kelvin, Lord, 409
- Kennedy, John F., 30
- Kepler, 371
- Kerouac, Jack, 134n
- Kidner, Derek, 13n
- Klimister, Clive, 14n
- Kline, Meredith, 452n
- Kingdom of God, xxxiii
- King, Martin Luther, Jr., 19n
- Kirzner, Israel
 - aggregates, 348
 - aggregation, 55ff
 - Becker and, 347ff
 - equilibrium, 350f
 - holism, 57
 - individualism, 347, 348
 - per capita capital, 61

- plan (one), 319
- plan revisions, 348
- plans, 56f
- purposeful action, 347
- teleology, 319
- Klein, Willem, 120, 125
- Knight, Frank H., 213f, 221, 238
- Knowledge
 - analogical, 442ff
 - forbidden, 86
 - instant, 88, 102
 - power and, 86, 439
 - (*see* exhaustive knowledge; epistemology)
- Koyré, Alexander, 19n
- Kristol, Irving, 340
- Kuhn, Thomas, 269
- Kuznets, Simon, 171

- Laban, 191, 196, 213
- Labor
 - autonomous, 73f, 77
 - control of nature, 90
 - cursed, 112f
 - environment, 113
 - fruit of, 75, 116, 215
 - meaningful, 75f, 89, 164, 242
 - (*see also* calling)
- Labor theory of value, 39, 58
- Laissez-faire*, 24, 52f, 303, 313
- Lake of fire, 8, 447
- Lamarck, Jean Baptiste, 259, 266, 389f, 391f
- Lamb, 72, 113
- Land, 205f
 - "free," 209
 - inheritance, 163
 - value of, 157, 159
- Language, 151, 152, 153, 268
- Latrines, 169
- Law
 - biblical (*see* biblical law)
 - cost-benefit, 109
 - cost-cutting, 106
 - God's, xxix, xxxii, xxxiii, 27, 468-69
 - linear growth, 114
 - moral, 35
 - natural, 438 (*see* natural law)
 - nature's, 1, 468-69
 - power, 35,
 - power and, 438f
 - prosperity, 158f
 - tool of dominion, 32, 36, 74, 106 417, 438
- Laymen, xxxiv, 426
- Leah, 191
- Leap of being, 129, 246f, 271, 287n, 310, 329, 340, 392, 407, 414
- Leakey, Louis, 132
- Leakey, Richard, 132
- Leaven, 230
- Lee, Francis N., 18n, 28n
- Legalism, 186
- Legislation, 304
- Legislators, 311f
- Leibniz, 372
- Leisure, 115, 126
- Letwin, William, xxxii
- Lewis, C. S., 318, 370, 414
 - Screwtape, 8
- Libanius, 154
- Liberalism (classical), 24
- Libertarianism, 24
- Lie, 187
- Life (*see* eternal life)
- Life spans, 119, 122f, 129, 146
- Lightening, 431
- Linear growth, 114, 116f
- Linear time, 163f, 367, 372
- Linnaeus, 388f
- Lion, 113
- Localism, 152
- Logic, 446
 - limits of, 436
 - nature and, 438
- Logos, 368
- Losses, 220, 224
- Lot, 156ff, 204
- Lovejoy, Arthur, 248, 369, 383f
- Luck, 227, 361
- Lutz, Mark, 52
- Lux, Kenneth, 52
- Lyell, Charles, 289, 380f, 382ff, 393, 398, 401, 406

- Magic, 130, 216, 370, 449
 Magicians, 8
 Malthus, Thomas, 21, 301, 314, 402
 Mammon, xxxiii
 Mammoths, 152
 Man
 animal, 267
 as God, 252
 authority of, 147
 autonomy, 436
 autonomous, 20, 73ff, 77, 316f
 central planner, 330
 collective vs. individual, 290
 developing being, 69, 70
 development, 113
 evolution-directing, 20, 263,
 266, 268f, 275, 352, 414
 Fall, 69ff, 73ff, 86, 250
 "god," 20
 image of God, 27f, 120
 imputing, 38, 235f
 interpreter, 4
 meaning, 280
 minister, 146
 naming, 150f
 not static, 69
 omniscience, 225, 227f, 352
 pilot, 252
 purpose, 20, 290
 recreative, 68
 self-aware, 252, 276
 self-transcendence, 252, 276
 service, 147
 sovereign, 20, 263
 sovereignty of, 20, 22
 Mänchen-Helfin, Otto, 134n
 Manicheanism, 28
 Manser, A. R., 258
 Maps, 369
 Mardi Gras, 128, 441, 453
 Marginalism, 38
 Market (*see* free market)
 Marketplace of ideas, 337f, 341
 Marsden, George, 149n
 Martyr, Justin, 69n, 239
 Marx, Karl, 18, 39, 98, 335, 339
 Darwin and, 18
 Marxism, 58f, 98, 281
 Masses, 246, 281, 295, 305, 306,
 309, 314, 341
 Masters, 216f
 Materialists, 8
 Mathematics, 125, 438
 Matthew, Patrick, 398
 Maya, 362
 McIntyre, Alasdair, 51
 McIntyre, Carl, 148
 Meaning, 151, 440
 God's decree, 317
 man-determined, 249, 280
 planning and, 310
 process vs., 287, 368
 science vs., 372
 Zen vs., 366
 Meat, 113n
 Medawar, Peter, 3, 20, 257f
 Medes and Persians, 310
 Meekness, 436ff
 Mencken, H. L., 388
 Mendel, Gregor, 403n, 408
 Menger, Karl, 41
 Mephistopheles, 4
 Mercy, 70, 181, 182, 183
 Mesopotamia, 3n
 Messiah, 151, 188
 Metallurgy, 378
 Methodological covenantalism, 24
 Methodological individualism, 58
 Middle Ages, 124
 Middleman, 223, 225f
 Migration, 232
 Military, 194
 Miller, Eugene, 333
 Mill, John Stuart, 38, 51
 Ministers, 389, 402, 413f, 415
 Miracles, 328, 257
 Miscarriages, 165
 Mises, Ludwig von
 aggregates, 63
 a priorist, 238
 career, 326
 comparing wealth, 64
 dualism, 324
 economic calculation, 62

- entrepreneurship, 224f
- equilibrium, 352n
- evolution, 319
- general treatise, xxx
- gold, 78n-79n
- Hayek's evaluation, 60
- interest rate, 126n
- money, 79
- per capita capital, 60f
- pessimism, 341
- pragmatism, 352n
- process philosophy, 323f
- regression theorem, 79
- theology as irrelevant, 43
- trade vs. war, 155n
- Missions, 148
- Moabites, 156
- Modernism, 439
- Moloch, xxxiii
- Moloch State, 128
- Money
 - certification, 82
 - debasement, 82
 - continuity, 79
 - defined, 232
 - fluctuating value, 233
 - future-orientation, 233
 - gold, 80, 156
 - historic value, 80, 236
 - imputation, 79
 - mobile, 156, 161
 - most marketable, 78f, 232
 - store of value, 79, 235
 - uncertainty and, 79n, 235
- Money changers, 437
- Monism, 153, 361ff
- Monopoly, 95, 222, 296
- Moodey, Samuel, 200
- Moore, G.E., 52
- Moral law, 35
- Morals, 334, 336
 - economic calculation, 339
- More, Henry, 371
- Muggeridge, Malcolm, 257
- Muller, Hermann, 245, 281
- Murder, 114, 115, 140, 144, 178, 180
- Murray, John, 184, 194
- Mutants, 293f
- Mutations, 3, 16
- Mysticism, 284
- Naboth, 445
- Name, 150f
- Nasser, 160
- National Academy of Sciences, 282
- National Secular Society, 19n
- Natural law, 17, 24, 32, 36, 300, 409, 411, 438, 468-69
- Natural religion, 17
- Natural selection, 2f, 3, 16, 26, 257, 259, 286, 357, 399
- Nature, 417
 - autonomy, 147
 - balance of, 84
 - battle with, 89
 - faith in, 24f
 - "harmony," 33
 - not normative, 9, 114, 119
 - passive, 84
 - predestination and, 25
 - purpose, 84
 - restraints on, 84
 - subordinate, 84f, 145
 - undeveloped, 87f
 - unfulfilled, 88
- Nature-freedom, 324
- Nebuchadnezzar, 119, 359
- Negative feedback, 35, 208
- Neoplatonism, 28
- Neptunism, 379, 381, 389
- Netherlands, 166
- Neutrality, xxix, xxxii, 239, 240, 439
 - legislation, 45
- New heavens, 8, 72, 89, 98, 129
- New Jerusalem, 81
- Newton, Isaac, 372
- New World Order, 296, 335, 339
- Nietzsche, F., 252
- Nikhilananda, Swami, 15n, 362f
- Nisbet, Robert, 137, 373, 387n, 423
- Noah, 28, 145f, 389
- Nomad, 53, 132ff, 153, 157
- Northwest Christian College, 240

- Nuclear war, 54
- Objective value, 43, 64
(*see also* values: objective)
- Occultism, 121f, 130, 216, 277, 283, 370
- O'Driscoll, Gerald, 58n
- Omniscience, 57, 101, 220, 352, 355
man's, 223, 225, 227f, 330
(*see also* equilibrium)
- One-many, 153, 155, 331, 349, 354, 364
- One-six, 72
- One-world order, 151, 155
- Opportunities, 130
- Oppression, 177, 183
- Optimism, 30n, 286, 373, 386, 441
- Order
origin of, 19f
- Oriental despotism, 228
- Ownership, 208ff, 241, 444f
- Padan, Aram, 189n
- Pagan festivals, 452f
(*see also* Chaos festivals)
- Paganism, 176
- Paley, William, 17, 256f, 259, 390, 409f
- Pantheism, 251, 417, 431
- Parables, 192f, 444
- Paradise, 76, 88, 89, 113, 118, 453
restoration, 123
return to, 128
- Passive-active, 31, 33, 84
- Passover, 72, 452f
- Pastors, xxxiv, 426
- Peace, 451
- Perjury, 464
- Penial, 202
- Perkins, William, 193
- Persons, Stow, 17
- Pertec Computer Corp., 283
- Pessimism, 4f, 30
- Pharaoh
divinity of, 228
dream of, 219
revelation to, 227
- Pharisees, 170, 437
- Pietism, 203
- Pigeons, 399
- Pilgrim, 157, 163
- Pin-sticking, 44, 332f, 354
- Plague, 232
- Plan (God's), 59f, 64
- Planning, 229
central, 10, 22, 23, 26, 56f
decentralized, 23, 229
God's, 24, 64
Jacob's, 202
omniscience, 57
time and, 126ff
two forms, 338
- Plan revisions, 348
- Plans
Jacob's, 202
market, 56f
meshing, 57, 99
(*see also* coordination)
- Plato, 360, 418
- Pleasure and pain, 44f
- Point of contact, 450
- Pollution, 33ff, 115f, 123
- Policy-making, 47, 49f, 52
- Poole, Matthew, 184
- Poor Richard*, 200
- Population, 124, 148, 165ff, 175, 205, 314f, 318
- Positive feedback, 175
- Potiphar, 213f
- Pottage, 181f (*see also* stew)
- Poverty, 115, 130
- Powell, Enoch, 41n
- Power, 173, 266
central planning, 10
knowledge and, 86, 439
law and, 35, 36
liberal theologians and, 31
quest for, 10
- Pragmatism, 216f
- Prayer, 199, 202
- Predestination, 23f, 436
- Premises (*see* presuppositions)
- Present-orientation
childlessness, 168
Esau's, 181ff

- exchange, 190
- ghetto, 130
- Isaac's, 187, 195
- underdevelopment, 126
(*see also* future-orientation)
- Presuppositions, xxix, 411
 - anti-God, 239, 393
 - Christian scholarship, xxxiii
 - methodologies, 418
 - professions', xxxiv, 374
 - subjective value, 63f
- Price, 41, 64, 108, 111, 177
 - clearing, 218, 223
- Price index, 58n, 61
- Pride, 34f, 440
- Primitivism, 136
- Prison, 214
- Private property (*see* property)
- Probability, 215, 262, 358, 374
- Process philosophy, 273, 287, 323f, 333f, 335, 339, 351, 355, 419f
- Process theology, 373, 430
- Prodigies, 120ff
- Production mix, 206
- Productivity, 206, 217
- Profit, 101, 220f, 223, 224
 - dominion and, 210
- Progress, 36, 258, 300, 388
 - myth of, 5
 - worship of, 34
- Progressives, 296
- Promised land, 163
- Proofs of God, 450
- Property, 445
 - confiscation, 139
 - ecology and, 208ff
 - private, 99, 115f
- Prophet, xxxiii, 228
- Prosperity, 107, 158f, 218
- Protestant ethic, 170
- Providence, 1, 390, 430f
 - Augustine's view, 368
 - economics and, 9, 328, 355
 - fixed species idea, 393
 - regularities, 9, 26, 328
 - social order, 155
- Proxmire, William, 169
- Psychological equality, 48
- Ptolemy, 247, 369, 370
- Public, 210
- Pulpit, 142, 143
- Puritans, 127, 210, 367, 373, 386
- Purpose
 - astronomy, 12ff
 - God's, 441
 - human action, 38, 319f, 328, 338
 - immanent, 23
 - man-given, 249, 329
 - man's, 267, 290, 319f
 - science vs., 3f, 16, 19ff, 256, 391, 413
 - society and, 138
 - sovereignty and, 22
 - Zen Buddhism vs., 366
- Purposelessness, 16, 342ff
- Quasars, 255n
- Race, 215
- Rachel, 197
- Radio button, 434
- Rahab, 184f, 195n
- Rainbow, 146, 147
- Ramanujan, 121f
- Randomness
 - origin of universe, 19f, 22, 374f
 - revolt against, 22
 - science and, 3f, 19f, 257, 261, 408
(*see also* chance)
- Ranganathan, S. R., 121
- Rauschenbusch, Walter, 142
- Ray, John, 389
- Rebekah, 179, 188, 193
- Rebellion, 439, 446
 - active-passive, 33
 - Adam's, 69ff, 73
 - bondage of time, 122
 - cost of, 112
 - division of labor, 115
 - escaping time, 130
 - ethical, 98
 - imputation, 38, 60
 - Isaac's, 190, 195
 - judgment, 119

- nature's resistance, 35
- penalty, 102
- risks, 103, 107
- scarcity and, 111f
- testimony of, 72
- value judgments, 42
- Reconstruction, 138
- Redemption, 427
- Reformation, 124
- Regularities, 9, 24, 26, 36
- Reincarnation, 365
- Relativism, 42, 272f, 287n, 430
- Religion (classical), 164
- Remnant, 109, 146, 448
- Renaissance, 216, 277, 370
- Repentance, xxxii
- Responsibility
 - choice and, 266
 - dominion covenant, 28, 66, 145, 149
 - ecology, 33, 145ff
 - impersonalism and, 4
 - nomadism vs., 134ff
 - personal, 24, 65, 94, 108, 141, 364
 - predestination and, 24
 - risk-taking, 215
 - search for truth, 6
 - sharing, 107
 - social, 94, 139, 149
 - statism and, 269
- Rest, 67
 - dominion and, 77
 - fellowship and, 76
 - God's gift, 75
 - life and, 71f
 - redemption, 72
- Restoration, 448, 449
- Resurrection, 76f
- Retreat, 421
- Revelation, xxix, 6, 444
 - costs and, 106
 - natural religion and, 17
 - testing, 106
- Revolution, 128
- Rewards, 89
- Rhetorical question, 140, 143
- Ricardo, David, 204
- Risk, 102, 226
- Rituals, 452f
- Robber barons, 296
- Robbins, Lionel, 46ff
- Roman Empire, 82, 216
- Romania, 167
- Romans, 164
- Romanticism, 392
- Rome, 362
- Rootlessness, 136, 137
- Röpke, Wilhelm
 - disharmony, 94f
 - monopoly, 95f
 - non-autonomous market, 95
- Rostow, Walt, 131n
- Rothbard, Murray
 - aggregation, 55
 - comparing wealth, 55
 - gambling, 226
 - usury laws, 129n
- "Route 66," 135
- Rushdoony
 - authority, 101
 - Babel, 150f
 - covenant, xxxv-xxxvi
 - creation myths, 3n
 - Darwinism, 24
 - death-bed conversions, 19n
 - dominion, 29
 - entropy, 25
 - environment, 92
 - failures, 315
 - Godhead's unity, 150f
 - humanistic law, 265
 - laissez-faire, 24
 - name, 150f
 - predestination, 23
 - process philosophy, 287n, 420
 - Society of Satan, 315
 - subsidizing evil, 180f
 - theology and power, 31
 - unity of godhead, 274
- Russell, Bertrand, 4
- Russia, 116n
- Sabbath
 - Adam's view, 68ff
 - dominion and, 75f

- fellowship and, 76
- one-six, 72, 77
- six-one, 70f, 77
- Sabbath year, 32
- Sacrifices, 70
- Sagan, Carl, 14n
- Sanctification, 173, 440, 448
- Sarah, 157
- Saslaw, William, 247
- Satan, xxxii, 7, 35, 69
 - communion feast, 106
 - defeat of, 76
 - hates man, 74
 - rebellion of, 66, 421
 - society of, 151
 - subordination to, 92
 - temptation by, 73f, 86, 317, 467
- Satori, 366
- Saturnalia, 453
- Sauvy, Alfred, 171
- Scale of being, 365
- Scarcity
 - defined, 111, 207
 - dominion and, 206, 211
 - law vs., 117
 - zero, 239
- Scattering, 122, 136, 151, 152, 153
- Schoeck, Helmut, 126n
- Schumpeter, Joseph, 205ff
- Science
 - chance and, 260f
 - Christianity and, 114n, 124f
 - impersonalism, 2
 - linear history, 114n
 - optimism, 441
 - purposelessness, 4, 16
 - revelation vs., 426, 430
- Science ideal, 342, 347, 351
- Scientism, 345
- Scientists, 309f, 312
- Scottish philosophy, 328
- Scottish rationalists, 11n, 20
- Screens, 169f
- Screwtape, 8
- Secularism
 - economics and, xxix, xxxiv, xxxv, 52ff
 - nomadism, 138
 - pollution and, 34, 241, 262f
 - stagnation, 166
- Seed, 162, 172f
- Selection, 344
- Self-defense, 136f
- Self-deification, 34f
- Self-government, 25
- Self-interest, 115
- Selfishness, 336
- Servants, 217
- Service, 147, 217f
- Sesostris I, 234
- Sesostris III, 235
- Sexual relations, 73
- Shanghai, 160
- Shaw, G. B., 257
- Sheep, 141
- Shelton, Herbert, 178f
- Shenoy, Sudha, 58
- Siberia, 153
- Simpson, George
 - anti-teleology, 264
 - apes, 249n
 - impersonalism, 265
 - man, 414
 - purposelessness, 413
 - relativism, 417
 - sleight-of-hand, 268f
 - social evolution, 266
 - uniformitarianism, 254n
- Singer, C. Gregg, 142, 143n
- Sisera, 185
- Situation ethics, 196
- Skinner, B. F., 413
- Slavery, 74
- Sleight-of-hand, 63, 279, 320, 337, 338
- Smith, Adam, 20, 155
 - general treatise, xxx
 - value theory, 38f
- Smith, William ("Strata"), 389
- Smart, J. J. C., 51f
- Snow, C. P., 412f
- Social Darwinism, 270f, 290ff, 329
- Social evolution, 272
- Social Gospel, 30, 139f, 142
- Socialism

- harmony of interests, 97, 99, 242
- logic of, 332
- Social Security, 168f
- Social utility, 45
- Society, 312
- Sodom, 157f, 178
- Solomon, 126
- Soul, 447
- Sour grapes, 182
- Sovereignty, 435f
 - authority, 101
 - Bible's, 229
 - chance, 87
 - family, 91
 - God's, 22, 27, 31
 - market, 25
 - process, 22
 - purpose and, 22f
 - State's, 139f
 - subordinate, 28
 - time, 119
- Space, 247f
- Special creation, 384f
- Specialization, 133, 153
- Species, 405
- Speculation, 226f (*see* entrepreneurship)
- Speed of light, 254
- Spencer, Herbert, 290ff
 - survival of fittest, 21, 250
- Spock, 285
- Spontaneity, 319
- Spying, 184, 193, 194
- Stagnation, 222
- Stars, 12ff, 66n, 163
- Star Trek*, 284
- State, 274, 303, 312
 - centralized, 97, 230
 - divine, 228
 - humanism and, 265
 - keepers, 141
 - monetary unit, 81f
 - time and, 130
 (*see also* socialism)
- Statism, 96f, 195
- Statistics, 58, 59
- Status quo, 426
- Steady state, 380f, 418
- Stephen, 452
- Stew, 195, 203
- Stewardship, 35, 69, 202, 214, 215f, 444ff
- Stewart, James, 204
- Stoics, 361
- Store of value, 233, 235
- Strangers, 157, 163
- Subjectivism, 57
 - dead-ends, 55
 - imputation and, 41
 (*see also* values: subjective)
- Subordination, 68, 73, 76, 84ff, 92f, 104, 145, 216, 337, 365
- Successive creatures, 384f, 394, 424
- Suicide, 29, 36
- Sumner, William G., 290ff
 - "forgotten man," 313f
- Sun god, 228
- Supermen, 294
- Supply and demand, 39f, 112
- Survival, 26, 257f, 261, 289ff, 293, 337, 343, 346
- Sutton, Ray, xxxvi-xxxviii
- Suzuki, D. T., 364ff
- Switzerland, 341
- Take-off, 131
- Talismans, 216, 388
- Taxes, 141
- Technology, 207, 210
- Teleology
 - Darwin and, 408f
 - elites, 304ff
 - impersonalism and, 255f
 - individualistic, 319
 - Lyell's, 383
 - man's, 268f, 299ff
 - Marx and Darwin, 18
 - natural selection vs., 286
 - Paley's, 390
 - science vs., 262, 268, 377, 391
 - 19th-century theology, 286
- Temple, 172f
- Temptation, 8, 447
 - revelation, 106
- Temptations, 449
- Ten commandments, 452

- Testing, 86f, 92, 100ff, 109, 439, 446
- Testing man, 110
- Testing (period of), 104f
- Theater, 218
- Theft, 45
- "Then Came Bronson," 135f
- Theocentric, 19
- Theodoret, 154
- Theophany, 200f
- Thrift, 170, 217
- Throne, 172f
- Time, 118ff
 - burden of, 440, 441
 - changeless, 129f
 - creation's framework, 430
 - curse of, 130
 - cyclical (*see* cycles)
 - dominion and, 127
 - endless, 253, 370, 376, 409
 - escape from, 128, 130
 - fear of, 441
 - God and, 380
 - Greek views, 359ff
 - limited, 207, 440
 - linear, 119, 163f, 367, 440
 - means of production, 441
 - opportunity, 120, 127, 130
 - pagans' god, 119, 196
 - processes of, 129f
 - Rebekah, 194
 - "safe," 392
 - scarce resource, 126
 - vast, 376
 - waste of, 74
- Time-preference, 126f, 127, 182, 207
- Tithe, 445
- Totalitarianism, 97, 137, 151, 153
- Toulman, Stephen, 14f, 419
- Tower of Babel, 150 (*see* Babel)
- Townsend, William, 389
- Toynbee, Arnold, 34
- Trade, 153ff
- Tradition, 334, 335, 339
- Transcendence, 34f, 414, 432f
- Treason, 184, 185
- Treaty, 185
- Tree of knowledge, 69, 86, 87, 100ff, 102ff
- Tree of life, 102ff, 105
- Turgot, 204, 205
- Two tables, 452
- Uncertainty, 79n, 215, 220f, 221f, 235, 345, 346, 348
- Uniformitarianism
 - Buffon, 376
 - Christianity vs., 422f
 - Darwin, 407
 - defined, 253f
 - Hutton, 379f
 - man overcomes, 272
 - removing God, 393
 - social change, 129
- Unity, 150, 365f
 - ethical, 151
 - man's, 150f
 - political, 151
- Universe
 - autonomous, 249
 - depersonalized, 265, 279
 - size, 247
- Universities, 174f
- University of Oregon, 240f
- Ur of the Chaldees, 156
- U.S. Labor Party, 161n
- USSR, 116n
- Usury laws, 128ff
- Utilitarianism, 44ff, 49
- Utility
 - aggregation, 48, 54ff
 - comparisons, 331, 332, 336
 - diminishing, 44
- Values
 - aggregation, 43ff, 60ff
 - evolutionary, 333f
 - hierarchy, 101
 - historic, 79, 80, 236
 - imputed, 37ff, 42ff, 59f, 100f, 107, 233
 - intrinsic, 236f
 - labor theory, 38f, 58
 - measure of, 235
 - objective, 37ff, 42ff, 59f, 100f, 107

- store of, 233, 235
- subjective, 37ff, 100f
- Van Til, Cornelius, xxix, 325, 350, 382, 431n
- atheism, 434
- creation, 6
- exhaustive knowledge, 2n, 7
- facts, 2n, 7
- God's plan, 2n, 6f
- heresies, 3n
- proofs of God, 450n
- radio button, 434
- reasonable faith, 444
- revelation, 6, 434
- sovereignty, 446
- transcendence, 432f
- washing, 64
- Vapors, 431
- Vegetarianism, 113
- Veil of Temple, 445
- Victory, 203, 217
- Vietnam, 160
- Viner, Jacob, 154
- Void, 371f
- Voyager, 284
- Vulcanism, 379, 381, 389
- Wage, 224, 227
- Wage controls, 232
- Wallace, A.R., 260, 329, 395f, 398
- Walras, Leon, 41
- War, 115, 126, 155
 - deception in, 196
- Ward, Lester F.
 - biography, 297
 - censorship, 307f
 - control, 307
 - crime, 310
 - democracy, 310
 - education, 302, 305f
 - elites, 304f, 309, 312
 - influence of, 21
 - legislators, 304, 311f
 - masses, 305, 306, 309, 314
 - morals, 299, 312
 - natural laws, 300
 - nature's waste, 301
 - nature vs. man, 299f, 314
 - population, 314f
 - religion, 298f
 - scientists, 309f, 312
 - Social Darwinism, 21, 299f
 - social progress, 300
 - society = state, 312
 - State industry, 312f
 - summary, 316
 - teleology, 299, 301, 304, 306
 - waste, 298
- Waste, 106, 298, 301
- Watchmaker, 257
- Wealth, 156, 241
 - character and, 156ff
 - Christ's remnant, 109
 - desire for, 206, 208
 - division of labor, 116, 153
 - gold and silver, 156
 - judgment and, 124
 - transfers, 44ff, 53f, 142f
- Weber, James, 171
- Weights, 82
- Welfare, 130
- Welfare economics, 44ff, 53f
- Wells, William, 398
- Whipple, Fred, 14n
- White, Lynn, 33f, 124
- Whitrow, Gerald, 14n
- Wigglesworth, Michael, 386
- Wigner, Eugene, 397n, 438n
- Wilson, James M., 250f
- witness, Appendix E
- Wittfogel, Karl, 228
- Wolf, 113
- Work (*see* calling, labor)
- Worship, 7, 433
- Yardstick, 46, 54, 61f
- "Ylem," 374, 418
- Young, Davis, 287ff, 385, 420
- Young, Edward, 429n
- Young, Robert, 259

WHAT IS THE ICE?

by Gary North, President, ICE

The Institute for Christian Economics is a non-profit, tax-exempt educational organization which is devoted to research and publishing in the field of Christian ethics. The perspective of those associated with the ICE is straightforwardly conservative and pro-free market. The ICE is dedicated to the proposition that biblical ethics requires full personal responsibility, and this responsible human action flourishes most productively within a framework of limited government, political decentralization, and minimum interference with the economy by the civil government.

For well over half a century, the loudest voices favoring Christian social action have been outspokenly pro-government intervention. Anyone needing proof of this statement needs to read Dr. Gregg Singer's comprehensive study, *The Unholy Alliance* (Arlington House Books, 1975), the definitive history of the National Council of Churches. An important policy statement from the National Council's General Board in 1967 called for *comprehensive economic planning*. The ICE was established in order to *challenge* statements like the following:

Accompanying this growing diversity in the structures of national life has been a growing recognition of the importance of competent planning within and among all resource sectors of the society: education, economic development, land use, social health services, the family system and congregational life. It is not generally recognized that an effective approach to problem solving requires a comprehensive planning process and coordination in the development of all these resource areas.

The *silence* from the conservative denominations in response to such policy proposals has been deafening. Not that conservative church members agree with such nonsense; they don't. But the con-

servative denominations and associations have remained silent because they have convinced themselves that *any* policy statement of any sort regarding social and economic life is *always* illegitimate. In short, there is no such thing as a correct, valid policy statement that a church or denomination can make. *The results of this opinion have been universally devastating.* The popular press assumes that the radicals who do speak out in the name of Christ are representative of the membership (or at least the press goes along with the illusion). The public is convinced that to speak out on social matters in the name of Christ is to be radical. *Christians are losing by default.*

The ICE is convinced that conservative Christians must devote resources to create alternative proposals. There is an old rule of political life which argues that "You can't beat something with nothing." We agree. It is not enough to adopt a whining negativism whenever someone or some group comes up with another nutty economic program. We need a comprehensive alternative.

Society or State

Society is broader than politics. The State is not a substitute for society. *Society encompasses all social institutions:* church, State, family, economy, kinship groups, voluntary clubs and associations, schools, and non-profit educational organizations (such as ICE). Can we say that there are no standards of righteousness—justice—for these social institutions? Are they lawless? The Bible says no. We do not live in a lawless universe. But this does not mean that the State is the source of all law. On the contrary, God, not the imitation god of the State, is the source.

Christianity is innately decentralist. *From the beginning, orthodox Christians have denied the divinity of the State.* This is why the Caesars of Rome had them persecuted and executed. They denied the operating presupposition of the ancient world, namely, the legitimacy of a divine rule or a divine State.

It is true that modern liberalism has eroded Christian orthodoxy. There are literally thousands of supposedly evangelical pastors who have been compromised by the liberalism of the universities and seminaries they attended. The popularity, for example, of Prof. Ronald Sider's *Rich Christians in an Age of Hunger*, co-published by Inter-Varsity Press (evangelical Protestant) and the Paulist Press (liberal Roman Catholic), is indicative of the crisis today. It has sold

like hotcakes, and it calls for mandatory wealth redistribution by the State on a massive scale. Yet he is a professor at a Baptist seminary.

The ICE rejects the theology of the total State. This is why we countered the book by Sider when we published David Chilton's *Productive Christians in an Age of Guilt-Manipulators* (1981). Chilton's book shows that the Bible is the foundation of our economic freedom, and that the call for compulsory wealth transfers and higher taxes on the rich is simply *baptized socialism*. Socialism is anti-Christian to the core.

What we find is that laymen in evangelical churches tend to be more conservative theologically and politically than their pastors. But this conservatism is a kind of *instinctive conservatism*. It is *not* self-consciously grounded in the Bible. So the laymen are unprepared to counter the sermons and Sunday School materials that bombard them week after week.

It is ICE's contention that *the only way to turn the tide in this nation is to capture the minds of the evangelical community*, which numbers in the tens of millions. We have to convince the liberal-leaning evangelicals of the biblical nature of the free market system. And we have to convince the conservative evangelicals of the same thing, in order to get them into the social and intellectual battles of our day.

In other words, *retreat is not biblical*, any more than socialism is.

By What Standard?

We have to ask ourselves this question: "*By what standard?*" By what standard do we evaluate the claims of the socialists and interventionists? By what standard do we evaluate the claims of the secular free market economists who reject socialism? By what standard are we to construct intellectual alternatives to the humanism of our day? And by what standard do we criticize the social institutions of our era?

If we say that the standard is "reason," we have a problem: Whose reason? If the economists cannot agree with each other, how do we decide who is correct? Why hasn't reason produced agreement after centuries of debate? We need an alternative.

It is the Bible. The ICE is dedicated to the defense of the Bible's reliability. But don't we face the same problem? Why don't Christians agree about what the Bible says concerning economics?

One of the main reasons why they do not agree is that the question of biblical economics has not been taken seriously. Christian

scholars have ignored economic theory for generations. This is why the ICE devotes so much time, money, and effort to studying what the Bible teaches about economic affairs.

There will always be some disagreements, since men are not perfect, and their minds are imperfect. But when men agree about the basic issue of the starting point of the debate, they have a far better opportunity to discuss and learn than if they offer only "reason, rightly understood" as their standard.

Services

The ICE exists in order to serve Christians and other people who are vitally interested in finding moral solutions to the economic crisis of our day. The organization is a *support ministry* to other Christian ministries. It is non-sectarian, non-denominational, and dedicated to the proposition that a moral economy is a truly practical, productive economy.

The ICE produces several newsletters. These are aimed at intelligent laymen, church officers, and pastors. The reports are non-technical in nature. Included in our publication schedule are these monthly and bi-monthly publications:

Biblical Economics Today (6 times a year)

Christian Reconstruction (6 times a year)

Covenant Renewal (12 times a year)

Biblical Economics Today is a four-page report that covers economic theory from a specifically Christian point of view. It also deals with questions of economic policy. **Christian Reconstruction** is more action-oriented, but it also covers various aspects of Christian social theory. **Covenant Renewal** explains the Biblical covenant and works out its implications for the three social institutions of culture: family, church and state.

The purpose of the ICE is to relate biblical ethics to Christian activities in the field of economics. To cite the title of Francis Schaeffer's book, "How should we then live?" How should we apply biblical wisdom in the field of economics to our lives, our culture, our civil government, and our businesses and callings?

If God calls men to responsible decision-making, then He must have *standards of righteousness* that guide men in their decision-making. It is the work of the ICE to discover, illuminate, explain,

and suggest applications of these guidelines in the field of economics. We publish the results of our findings in the newsletters.

The ICE sends out the newsletters free of charge. Anyone can sign up for six months to receive them. This gives the reader the opportunity of seeing “what we’re up to.” At the end of six months, he or she can renew for another six months.

Donors receive a one-year subscription. This reduces the extra trouble associated with sending out renewal notices, and it also means less trouble for the subscriber.

There are also donors who pledge to pay \$10 a month. They are members of the ICE’s “*Reconstruction Committee*.” They help to provide a predictable stream of income which finances the day-to-day operations of the ICE. Then the donations from others can finance special projects, such as the publication of a new book.

The basic service that ICE offers is education. We are presenting ideas and approaches to Christian ethical behavior that few other organizations even suspect are major problem areas. *The Christian world has for too long acted as though we were not responsible citizens on earth, as well as citizens of heaven.* (“For our conversation [citizenship] is in heaven” [Philippians 3:20a].) *We must be godly stewards of all our assets*, which includes our lives, minds, and skills.

Because economics affects every sphere of life, the ICE’s reports and surveys are relevant to all areas of life. Because *scarcity affects every area, the whole world needs to be governed by biblical requirements for honest stewardship* of the earth’s resources. The various publications are wide-ranging, since the effects of the curse of the ground (Genesis 3:17-19) are wide-ranging.

What the ICE offers the readers and supporters is an introduction to a world of responsibility that few Christians have recognized. This limits our audience, since most people think they have too many responsibilities already. But if more people understood the Bible’s solutions to economic problems, they would have more capital available to take greater responsibility — and prosper from it.

Finances

There ain’t no such thing as a free lunch (TANSTAAFL). *Someone has to pay for those six-month renewable free subscriptions.* Existing donors are, in effect, supporting a kind of intellectual missionary organization. Except for the newsletters sent to ministers and teachers, we “clean” the mailing lists each year: less waste.

We cannot expect to raise money by emotional appeals. We have no photographs of starving children, no orphanages in Asia. We generate ideas. *There is always a very limited market for ideas, which is why some of them have to be subsidized by people who understand the power of ideas—a limited group, to be sure.* John Maynard Keynes, the most influential economist of this century (which speaks poorly of this century), spoke the truth in the final paragraph of his *General Theory of Employment, Interest, and Money* (1936):

... the ideas of economists and political philosophers, both when they are right and when they are wrong, are more powerful than is commonly understood. Indeed, the world is ruled by little else. Practical men, who believe themselves to be quite exempt from any intellectual influences, are usually the slaves of some defunct economist. Madmen in authority, who hear voices in the air, are distilling their frenzy from some academic scribbler of a few years back. I am sure that the power of vested interests is vastly exaggerated compared with the gradual encroachment of ideas. Not, indeed, immediately, but after a certain interval; for in the field of economic and political philosophy there are not many who are influenced by new theories after they are twenty-five or thirty years of age, so that the ideas which civil servants and politicians and even agitators apply to current events are not likely to be the newest. But, soon or late, it is ideas, not vested interests, which are dangerous for good or evil.

Do you believe this? If so, then the program of long-term education which the ICE has created should be of considerable interest to you. What we need are people with a *vested interest in ideas, a commitment to principle* rather than class position.

There will be few short-term, visible successes for the ICE's program. There will be new and interesting books. There will be a constant stream of newsletters. There will be educational audio and video tapes. But the world is not likely to beat a path to ICE's door, as long as today's policies of high taxes and statism have not yet produced a catastrophe. We are investing in the future, for the far side of humanism's economic failure. *This is a long-term investment in intellectual capital.* Contact us at: **ICE, Box 8000, Tyler, TX 75711.**