

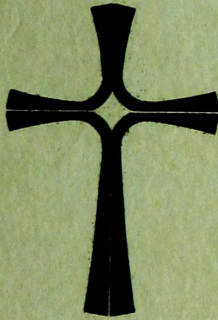
THE JOURNAL OF CHRISTIAN RECONSTRUCTION

VOL. I

SUMMER, 1974

No. 1

A CHALCEDON MINISTRY



Symposium on Creation

THE JOURNAL OF CHRISTIAN RECONSTRUCTION

This journal is dedicated to the fulfilment of the cultural mandate of Genesis 1:28 and 9:1—to subdue the earth to the glory of God. It is published by the Chalcedon Foundation, an independent Christian educational organization (see inside back cover). The perspective of the journal is that of orthodox Christianity. It affirms the verbal, plenary inspiration of the original manuscripts (autographs) of the Bible and the full divinity and full humanity of Jesus Christ—two natures in union (but without intermixture) in one person.

The editors are convinced that the Christian world is in need of a serious publication that bridges the gap between the newsletter-magazine and the scholarly academic journal. The editors are committed to Christian scholarship, but the journal is aimed at intelligent laymen, working pastors, and others who are interested in the reconstruction of all spheres of human existence in terms of the standards of the Old and New Testaments. It is not intended to be another outlet for professors to professors, but rather a forum for serious discussion within Christian circles.

The Marxists have been absolutely correct in their claim that theory must be united with practice, and for this reason they have been successful in their attempt to erode the foundations of the non-communist world. The editors agree with the Marxists on this point, but instead of seeing in revolution the means of fusing theory and practice, we see the fusion in personal regeneration through God's grace in Jesus Christ and in the extension of God's kingdom. Good principles should be followed by good practice; eliminate either, and the movement falters. In the long run, it is the kingdom of God, not Marx's "kingdom of freedom," which shall reign triumphant. Christianity will emerge victorious, for only in Christ and His revelation can men find both the principles of conduct and the means of subduing the earth—the principles of Biblical law.

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GARY NORTH

Editor

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I. SYMPOSIUM: SIX-DAY CREATION

BASIC IMPLICATIONS OF THE SIX-DAY CREATION

GARY NORTH

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 *adiophora*, 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 academic 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 su-

premely 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" [83-84].

The doctrine of the Trinity—the eternal, infinite, self-revelation and communion of the 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

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"—eons of time between Genesis 1:1 and 1:2—and the literary or framework hypothesis, which argues against the chronological succession of the seven days of creation.

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 heavens 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. He who distorts the testimony of God as to His creative activity simultaneously calls into question the testimony of God to His saving 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 dan-

gerous 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 vapours 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

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.

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 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 link between 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, saith the LORD, 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 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].

3. Van Til, *Survey of Christian Epistemology*, p. 16.

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). The problem is not their lack of revelation; it is 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

4. Van Til, *A Letter on Common Grace* (Philadelphia: Presbyterian and Reformed, 1955), pp. 40-41.

5. Van Til, *Common Grace* (Philadelphia: Presbyterian and Reformed, 1954), p. 54.

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? [vss. 18-21]

God therefore sets 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 fulfil 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 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

6. Arminians will, in rare instances, affirm the doctrine of predestination. The most common example is the promise given to unattractive daughters by their mothers that God has a special man all picked out for them. In times of desperation, even the most hardened opponent of predestination will appeal to the sovereignty of God.

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

7. Gilkey, *Maker of Heaven and Earth: The Christian Doctrine of Creation in the Light of Modern Knowledge* (Garden City, N. Y.: Doubleday Anchor, [1959] 1965), pp. 203-04.

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* (Syllabus, Westminster Theological Seminary, 1961), chs. 6, 7.

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 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

9. A classic example of liberal religion's opposition to the concept of the fall of man is found in the Rev. James Maurice Wilson's essay, "The Religious Effect of the Idea of Evolution," in *Evolution in the Light of Modern Knowledge* (London: Blackie & Son, 1925). He was a contemporary of Darwin's, and he recalled the effect of Darwin's teachings on his generation and the one following. "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. It might have been easy for us in the light of science to treat that story, like those of the Flood or of Babel, as imaginative, if it had not been for the close connection, which has characterized Christian theology, between the doctrine of the Fall and the doctrine of the 'Atonement' through Christ's self-sacrifice. . . . 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. . . . How does Jesus save His people from their sins? *He makes men better*" (pp. 497-99). "Salvation is not then thought of as an escape from hell; but as a lifting us all out from living lives unworthy of us. Religion so conceived is not the art of winning heaven, but the effort to become better and to work with God" (p. 501). Man is to work his way up the scale of being. Wilson is far more aware of the implications of evolution than most of our contemporary evangelical Christians are. "Evolution is now approaching the citadel of our Christian faith. It is affecting Soteriology and Christology. The fact must be faced" (p. 499). "The idea of evolu-

The ethical rebellion took place in time and on earth. The death and resurrection of Christ took place in time and on earth. The firstfruits 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 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).

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 salva-

tion 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" (p. 501). There is, for example, continuity in intelligence. "What a chain it is!" From plants to animals to man to. . . . He does not say God, but it is implied: "You cannot find the end of the chain." This, contrary to Wilson's explicit denial, is the theology of pagan antiquity. Cf. Arthur O. Lovejoy, *The Great Chain of Being* (New York: Harper, [1936] 1965).

tion" (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 fallen world (Rev. 10:6). God is the ruler of time.

Sanctification in a personal sense is a progressive process, once God has imputed the perfect sanctification of Christ to the regenerated man. 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 impersonal, 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 of 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.

10. Gilkey, *Maker of Heaven and Earth*, pp. 188-89.

11. *Ibid.*, pp. 65-66.

12. Cf. Gunther Stent, *The Coming of the Golden Age: A View of the End of Progress* (Garden City, N. Y.: Natural History Press, 1969).

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 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

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), chs. 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, N. J.: Craig Press, 1968).

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 shouldest know the paths to 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; 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

15. Van Til, *Common Grace*, p. 62.

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.

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 10 through 29 indicate, 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; 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 op-

16. Gary North, "Stewardship, Investment, and Usury: Financing the Kingdom of God," in R. J. Rushdoony, *The Institutes of Biblical Law* (Nutley, N. J.: Craig Press, 1973), Appendix 3. This is also reprinted in my book, *An Introduction to Christian Economics* (Nutley, N. J.: 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.

position 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) 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 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

18. Van Til, *Survey of Christian Epistemology*, pp. 19-20.

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 “Prophesy 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 premise 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 travaileth 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

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; *Christian-Theistic Evidences* (Syllabus, Westminster Theological Seminary, 1961). 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.

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 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 mis-translation of 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 century, 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 in 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 and truth" (I Cor. 5:7-8). The Passover feast was

20. Meredith G. Kline, *Treaty of the Great King* (Grand Rapids, Mich.: 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.

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, in some cultures, 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 re-established 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 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 cre-

22. See the references to the works of Mircea Eliade, footnote no. 13.

23. Roderick Campbell, *Israel and the New Covenant* (Philadelphia: Presbyterian and Reformed, 1954).

ation, 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).

INTERPRETING EARTH HISTORY*

STUART E. NEVINS

Historical geology is the field of study which seeks to decipher the clues and records bearing on the earth's history. Since the historical geologist cannot observe the history he attempts to interpret (he cannot relive ancient times), scientific methods involving repeatable observation and experimentation cannot be utilized. The method relied upon is much like that used by a detective as he seeks to unravel the many evidences and furnish a tentative description of a crime. The conclusions reached by the historical geologist, as those of the detective, rely on numerous assumptions and much fragmentary evidence making scientific proof impossible. The conclusions made in any type of historical investigation—no matter how “scientific” they are claimed to be—depend largely on the basic conceptual framework (values, beliefs, and methodology) used by the investigator.

Uniformitarianism

In the seventeenth century great scientific and technological discoveries were made by the English scientists Isaac Newton, Robert Boyle, and Robert Hooke. These discoveries were fostered by *empiricism*, a philosophical theory of knowledge stressing the importance of the scientific methods of hypothesis, observation, and experimentation. Francis Bacon (1561–1626) and John Locke (1632–1704) were the early advocates of the empirical method, stressing the importance of sense experience above reasoning procedures to understand the natural causes in the physical world.

In keeping with the early success of empiricism in physics and chemistry, an attempt was made to apply the method to other fields of inquiry. If empiricism could explain natural events solely in terms of physical causes or laws, must not this apply also to the origin of religion, the writing of the Bible, and the life of Jesus Christ? Must not the action of present processes and laws also explain the origin and present configuration of the earth? It is, therefore, not surprising that a framework for historical geology based primarily on observation of present types of processes (called

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uniformitarianism) first appeared late in the eighteenth century in Britain and Scotland.

James Hutton (1726–1797), a Scottish doctor, agriculturalist, and member of the Royal Society of Edinburgh, was one of the first advocates of the uniformitarian framework for interpreting earth history. To Hutton the earth was a giant machine composed of solid earth, oceans, and atmosphere. Understanding the *present* operation of the three-part system could be used by analogy to decipher the earth's history. The present was used as the key to the past.¹

The essence of the Huttonian theory and his uniformitarianism was belief in the constancy of the laws of nature, and belief that geologic processes were cyclic and dynamic, operating at essentially the same rates as observed today. This prevailing uniformity and slowness of geologic processes which Hutton imagined allowed for almost unlimited amounts of time for earth history. Although Hutton credited the present operations of nature as worthy of divine wisdom, his empirical approach did not allow for an original creation or divine suspensions of the laws of nature. The earth has always existed in a state more or less like it exists today.

Charles Lyell (1797–1875), a British lawyer, was responsible for popularizing the uniformitarian framework through his published work titled *Principles of Geology*. Lyell claimed that the progress of geology had been hindered by Christian views suggesting a limited time span for earth history, catastrophes such as Noah's Flood as important geologic events, and supernatural interference in the normal course of nature. To controvert the popular catastrophist view of the early nineteenth century, Lyell proposed an empirical framework assuming both uniformity of natural laws in space and time, and uniformity of process rates or material conditions.²

Not only did he maintain that natural laws were invariant through time, but he believed that the earth was essentially a balanced and steady-state system with the forces tending to produce processes with a faster rate restrained constantly by forces tending to produce processes of slower rate. Like Hutton, Lyell envisioned essentially unlimited geologic time and considered it fruitless to speculate on the origin or future destruction of the earth.³

Although the interpretive frameworks of Hutton and Lyell relied somewhat on rationalism to extrapolate observed rates and laws into the unseen

1. James Hutton, *Theory of the Earth with Proofs and Illustrations*: Facsimile reprint (New York: Hafner Pub. Co., Vol. 1, 1959), p. 19.

2. K. M. Lyell, *Life, Letters and Journals of Sir Charles Lyell* (London: John Murray, Vol. 1, 1881), p. 234.

3. William B. N. Berry, *Growth of a Prehistoric Time Scale Based on Organic Evolution* (San Francisco: W. H. Freeman, 1968), pp. 12, 13.

past, their frameworks were based primarily on empiricism. We notice that Hutton and Lyell were very reluctant to speculate on the origin of geologic phenomena unless their origin could be observed in the present. Thus, one of Hutton's works was titled, "Theory of the Earth; or an Investigation of the Laws Observable in the Composition, Dissolution and Restoration of Land upon the Globe." We learn that Lyell's major work had an empirical slant from its full title, *Principles of Geology; Being an Attempt to Explain the Former Changes of the Earth's Surface by Reference to Causes Now in Operation*.

Lyell failed to adequately refute catastrophism and his extreme view soon became inconsistent with geological evidence. Study of the differences between modern oceanic sediments and ancient marine sedimentary rocks led geologists to recognize that different regimes of climate and sedimentation existed in the past. Lava flows in the ancient rock record reveal tremendous volcanic episodes dwarfing any of modern times. Meteorite impact craters in the earth's crust up to 50 miles in diameter have been well documented.

Although many modern historical geologists give lip service to the empirical framework of Lyell, few geologists are willing to accept his static, steady-state view. Most modern geologists have a dynamic, evolutionary view of earth history which is quite different from that originally proposed by Lyell.

Evolutionary-Uniformitarianism

Three types of research led to the demise of the classical uniformitarian framework. These are: (1) evidences for a finite age to the earth rather than an earth eternally old, (2) evidences for unique and catastrophic processes during geologic history, and (3) theories suggesting evolution of the solid earth. Because of these, Lyell's empirical framework was significantly modified late in the nineteenth century to form an evolutionary-uniformitarian framework. Thus, the earth's history under the new approach was to be interpreted by analogy to modern laws and processes *and also* after an evolutionary model postulating a *historical* (not static), step-by-step development of the earth.

The evolutionary approach was based, to a large degree, on *rationalism*, a philosophy suggesting that the employment of certain procedures of reasoning would lead to historical knowledge about the earth. Under the philosophy of rationalism the principal measure of a good geologic theory was not necessarily how well it accorded with present process rates and natural laws, but how well it formed a logical portion of an entire conceptual history.

It is not surprising that the first of the modern rationalist philosophers, René Descartes (1596–1650), a French mathematician, was also the first

since classical times to propose a *plausible* secular theory utilizing the innate natural processes of gaseous condensation and gravitational attraction to form the earth. This theory was modified to form the famous "nebular hypothesis" by the German rationalist Immanuel Kant (1724–1804). Kant influenced Georg Hegel (1770–1831) to found a rationalist school in Germany called "higher criticism." These rationalists later systematically discounted the supernatural elements of the Bible as products of mythology.

The French rationalist G. L. Buffon (1707–1788) was one of the first scientists to question the account of the six days of creation in the book of Genesis. Buffon imagined that the earth originated through detachment of a hot portion of the sun during a near collision with a great comet. He allowed a great interval of time for the earth to cool to its present temperature.

Rationalist criticism of the biblical account of creation was greatly promoted by Charles Darwin's book *Origin of Species by Means of Natural Selection* (1859). Darwin's observation that natural selection was an inherent process in the biological world led him to propose a rationalistic, evolutionary theory supposing that all the species had developed from a few separate stocks.

Geology of the present century has been dominated by rationalistic, evolutionary theories. Geologists have recently labored with models for the evolution of the earth's crust suggesting that a single supercontinent broke apart with fragments drifting to their present locations. For several years geologists have attempted to construct a plausible physical and chemical environment under which life could have spontaneously appeared from inorganic substances. One's mind is stretched to imagine how processes operating with extreme slowness over millions of years could cause significant changes to occur.

The evolutionary-uniformitarian synthesis of the empirical and rationalistic frameworks of earth history appeared late in the nineteenth century and is presently the popular framework among modern geologists. The popular framework is evolutionary because it visualizes an unfolding, unidirectional development of the earth through time. The popular framework is also uniformitarian because of its distaste for catastrophes and need for gradually acting processes over vast periods of time. However, Lyellian uniformitarianism has little place. The empirical uniformity is in vogue only to the extent that it helps promote the rationalistic, evolutionary view.

Biblical Catastrophism

"Faith," as the author of Hebrews says, "is the substance of things hoped for, the evidence of things not seen" (Heb. 11:1). Faith forms a valid means of perceiving earth history for "through faith we understand that the

worlds were framed by the word of God" (Heb. 11:3). As an alternate path to the perilous way of the empiricist, who trusts in his ability to observe the regularity of nature, or the rationalist, who trusts in his ability to frame a plausible conceptual history from basic immanent characteristics of matter, the Bible-believing Christian recognizes that his unaided mind and faculties of observation cannot solve the basic problems dealing with earth history. The Christian trusts in a revealed record from God, Himself, providing a basic framework within which the data of historical geology must be interpreted. Such a revealed history from a credible observer is the only way man can have absolute knowledge about the earth's history.

The basic framework which the Christian is to accept by faith is the one plainly taught in Scripture. This framework is biblical catastrophism. The Bible-believing Christian accepts three great events which form a framework into which the data of geology are to be interpreted. First is the special creation of the universe by the spoken word of God (Gen. 1: 1-31; Ps. 33:6, 9; Heb. 11:3). Second is the Fall, subsequent curse, and entrance of death into the world as a result of man's sin (Gen. 3:1-24; Rom. 5:12; 8:19-22; I Cor. 15:21). Third is the worldwide Noachian Flood (Gen. 6-9; Ps. 104:6-9; II Pet. 3:5, 6). Thus, the Bible is the Christian's vital key to the past.

Among Bible-believing Christians there should be little disagreement about the status of the empirical, uniformitarian framework and the rationalistic, evolutionary framework. Both are untrue. Thus, the Apostle Peter specifically warned that scoffers of the faith would come in the last days denying the imminent and personal return of Christ, the great Flood, and the miraculous creation of the cosmos by the spoken word of God (II Pet. 3:3-6). Peter warned that these scoffers would propose an empirical, uniformitarian framework, supposing that "all things continue as from the beginning of the creation" (II Pet. 3:4). The Apostle Paul denied the empirical philosophy when he said, "We walk by faith, not by sight" (II Cor. 5:7).

The rationalistic approach epitomized by the evolutionary model is merely an exercise of man's wisdom, being an attempt to explain earth history by a conceptual scheme derived from the basic rudimentary and elementary characteristics inherent in nature. This system denies God from the outset. The Apostle Paul, who was well educated in the rationalism of the Greeks, gave a stern reprimand of this thinking when he admonished Christians to beware of philosophy "according to the traditions of men, after the rudiments of the world" (Col. 2:8) which does not follow Christ. In contrast to the rationalistic approach, the truth which Paul proclaimed to the Greek Christians at Corinth was not "words which man's wisdom teacheth, but which the Holy Ghost teacheth" (I Cor. 2:13).

The Proverbs warn us, "There is a way which seemeth right unto a man" (Prov. 16:25). Each of us is admonished to "Trust in the Lord with all thine heart, and lean not unto thine own understanding" (Prov. 3:5).

The previous comments do not imply that the Christian denies the validity of sense experience or reasoning procedures. Sense perception and reason were given to man by God. The problem occurs when man separates from God and attempts to place reason or perception on a higher level than the Word of God.

The Significance of Man

Each of the three approaches to interpreting earth history leads to a different view of man's condition. The empirical, uniformitarian framework supposes that everything can be explained by the interaction of the immutable laws of nature. Man in this view becomes trapped in the deterministic machine of nature. He is a helpless pawn powerless to choose his own destiny. If God exists, He is certainly unable to help man because everything continues in the same fashion under the autonomous, eternally operating system.

The rationalistic, evolutionary framework attempts to explain the origin of everything without need for a supernatural power by a naturally operating, integrative process. Man in this view is a cosmic accident, the product of the impersonal evolutionary process operating by blind chance over vast eons. On the basis of reason there is no meaning, purpose, or significance to man's existence. There is only pessimism concerning man. His condition must continue to be improved by struggle and death or his species will face extinction. A philosophy of despair is also the rational outcome of the evolutionary framework.

Not all evolutionists are pessimists. There is presently a popular movement known as "optimistic evolutionary humanism" which believes that a glorious future is ahead for man. The leaders of this philosophy insist that man's normal evolutionary method (a cruel and immoral process of struggle and death leading to the survival of the fittest) must be eliminated in the future by the acceptance of a new evolutionary mystique stressing more virtuous behavior. Thus, according to the leaders of optimistic evolutionary humanism, society will function better by believing in the existence of a god, even though no god is actually present. The philosophy involves a non-rationalistic leap of faith, for in order to be optimistic and benevolent, man must believe and function upon what his reason tells him is a lie.

In the Christian view man is created in the image of God. Although man is deliberately sinful, he continues to be God's image-bearer and is of great value to God, who made atonement through Christ for man's sin. Each person by trusting Christ as Saviour is restored to fellowship with

God and given purpose and reward for all eternity. There is no reason for man to despair, for he has been given a position of dignity in God's creation. Christianity is not a nebulous set of experiences or an irrational leap in the dark, but a faith which has substantial basis in valid experience and a rational groundwork in real evidence (Heb. 11:1).

BIBLICAL PRESUPPOSITIONS AND HISTORICAL GEOLOGY: A CASE STUDY

CHARLES A. CLOUGH

For this they are willingly ignorant of, that by the word of God the heavens were of old, and the earth standing out of the water and in water: whereby the world that then was, being overflowed with water, perished: but the heavens and the earth, which are now, by the same word are kept in store, reserved unto fire against the day of judgment and perdition of ungodly men [II Pet. 3:5-7].

Introduction

One of the most glaring examples of the urgent need for Christian reconstruction is the so-called "Genesis Flood controversy." This controversy, though simmering for several centuries, has recently boiled over into a steaming debate among evangelical Christians. At stake is the real pertinence of the orthodox confession that Genesis, including its early chapters, is the inerrant Word of God. This issue is this: does Genesis present a view of early history that cannot be reconciled with the view of modern historical science, and, if it does, should Christians loyally remain with Genesis and begin the long, arduous task of reconstructing historical science today? This issue was known, of course, long ago, but in 1961 two conservative scholars published their book, *The Genesis Flood*,¹ in which they challenged Christians to stop trying worn-out harmonizations and to start reconstructing the historical sciences, including historical geology. The controversial aftermath of their work and the lessons to be learned from it form the content of this article.

Definition of the Issue

The issue involves a three-sided controversy over Genesis 1-11 and the historical natural sciences (chiefly geology, paleontology, and chronometry). Failure to see the debate as a *three*-sided one, not just a two-sided one, is widespread. If Genesis 1-11 appears to report by the traditional interpretation a kind of history radically at odds with the historical sciences, there remain only three options.

1. John C. Whitcomb, Jr., and Henry M. Morris, *The Genesis Flood* (Philadelphia: Presbyterian and Reformed Publishing Co., 1961).

First, one may try to reinterpret the Genesis text in the hope that it can be brought into conformity with present non-biblical, historical models. This option is a legitimate one as long as the doctrine of inerrancy is followed, and the normal, literal method of interpretation is applied. The problem encountered during the many attempts at reinterpretation, however, is the limitation involved. Can the Genesis text be reinterpreted enough to permit the wholesale realignment required?

A *second* option remaining is to reinterpret the scientific-historical data that have been used to build up the present secular viewpoint. This option, too, is legitimate, if one adheres to the goal of giving an account for each piece of data available. There should be nothing sacrosanct about contemporary scientific-historical models. Again, however, we encounter the matter of limitations. How far can this reinterpretation process go before one is being dishonest with the strata, the fossils, and various chronometric data?

A *third* option, and one being taken by increasing numbers of professing Christians, is to forsake Genesis as a source of anything pertinent historically and scientifically and to go on and formulate historical models without any reference whatsoever to the Genesis text. The early chapters of Genesis, it is claimed, give only the religious picture, not the historic-scientific one. Unfortunately, this option lands one squarely in the arms of neo-orthodoxy and, therefore, radically denies historic Christianity.

Into this three-sided controversy plunged the authors of *The Genesis Flood* (hereinafter referred to as *TGF*). They affirmed that a real clash exists between Genesis 1–11 as traditionally interpreted and contemporary historical science. As a solution they dogmatically proclaimed that the only viable option today for an orthodox Christian is the second one—a broad-scale reconstruction of the historical sciences from the ground up. Before one studies the details of *TGF* argumentation, however, one must first understand how previous Christians struggled with the problem.

The Past Three Centuries of Debate

Much time currently being wasted in repeating past mistakes can be saved, if one is willing to learn from the last three centuries of Church history. Twentieth-century evangelicals are not the first believers in the Church to feel the force of the problem of the conflict between historical science and Genesis.

The Evidence and the Framework. To make clear the significant shift in apologetic thought over the past three centuries, it helps to discuss the question of the past in light of the evidence used to answer it. If the question is encountered, "What happened in the past?," three kinds of evidence are available: (1) documents or legends of eye-witness observations, such as Genesis (personal historical record); (2) mute remains,

such as fossils (impersonal historical record); and (3) natural processes observed today, such as the precipitation cycle. Evidences (1) and (2) are primarily *historical*; evidence (3) is primarily *scientific*. Study of the past, then, involves a mixture of both fields—history and science.²

The many and often violent disagreements arise from how much weight is given to each kind of evidence, and therefore the discussion focuses upon the presuppositional framework being used to interpret the evidence. Orthodox Christians, for example, have traditionally worked in terms of a framework in which Genesis is taken as part of category (1) evidence, and not only as *an* evidence, but as *an inerrant, authoritative* evidence. All other evidence, whether historical or scientific, is of lower weight or authority in constructing models of the past. As a contrasting example, recent naturalistic science works from a framework in which there is maximum uniformity over time and space of natural processes.³ Observations from the past that seem to dispute this dogma of uniformity are discounted. As a result, category (3) evidence is given much authority, with less authority being assigned to categories (1) and (2). How the evidence is handled by traditional Christianity and naturalistic science can be pictured as follows:

<i>Kinds of Evidence</i>	<i>Order of Authority Assigned to Each</i>	
	<i>Christianity</i>	<i>Naturalism</i>
personal, historical record (chiefly the Bible)	1	3
impersonal, historical records (e.g., fossils)	2	2
natural processes (e.g., precipitation cycle)	3	1

The positions are in exact disagreement. Christianity, under the authority of the Word of God, is preoccupied with the historical evidence; naturalistic science, under the authority of hypothetically autonomous

2. Strictly speaking, type (3) evidence can be subdivided into two parts. The precipitation process, for example, consists of *basic laws* (adiabatic processes, heat transfers resulting from change of state, etc.) and a *system* or concatenation of those laws determined by what are called "boundary conditions" (current patterns of large-scale heat, water, and momentum transfers between the atmosphere and its boundaries—outer space and the planetary surface).

The important thing to note is that both the basic laws and their concatenations are derived from (historical) observations: one does not operate the other way around. Therefore it would seem more logical to teach at least some phases of historical geology, to cite an illustration, in the history department rather than in the science department.

3. Recent discussions of this question may be found in: Reijen Hooykaas, *Natural Law and Divine Miracle* (Leiden: E. J. Brill, 1959); Claude C. Albritton, Jr., *Uniformity and Simplicity* (Boulder, Colo.: The Geological Society of America, 1967); and Henry Morris, *Biblical Cosmology and Modern Science* (Grand Rapids: Baker Book House, 1970), chapters 2 and 3.

reason, is preoccupied with present processes.⁴ If a question arises concerning a catastrophic, universal flood in the past, Christians would consult the historical observations made in the Scriptures and then try to explain how it might have occurred. Naturalistic scientists, on the other hand, would consult the catalog of possible physical mechanisms now known and then judge—reconstruct—the observation recorded in the historical document. The two frameworks are moving in opposite directions.

The Evidence and the Shift in Framework. Using the information just discussed, one can analyze what happened over the past three centuries of apologetic debate over early Genesis. By carefully watching the framework being used in the background, the spiritually sensitive scholar will avoid being led astray by the numerous details and technical jargon. Instead he will wonder: is the interpreter *starting* with the Word of God, or is he *starting* with a uniformitarian universe? If the Word of God and uniformitarian presuppositions collide, which is followed?

In the 1600's, the Christian position was followed by pioneering geologists like Steno (1631–1687) and Woodward (1667–1727). Taking category (1) evidence of Scripture as the standard, they interpreted the fossil evidence of category (2) in terms of the Genesis flood.⁵ The main difficulty, and one that has plagued biblical geology ever since, was the defining of an adequate process to account for *how* the flood laid down the observed rock forms.

As a harbinger of what was to come, the English clergyman and naturalist Thomas Burnet (1635?–1715) tried to improve the harmony between the Genesis historical record and the supposed geological processes. On the surface his work, *Sacred History of the Earth* (1681), seemed orthodox. He divided earth history into three ages based upon II Peter 3:5-7: Creation to Deluge (Antediluvian Age); Deluge to Conflagration (Present Age); and Conflagration to Eternity (Millennium).⁶ Below the surface, however, he made a mistake that was to cost him his victory—a mistake which has been repeated hundreds of times since. He adopted the idea of the absolute uniformity of processes inside nature, and he claimed that what appeared miraculous in the biblical account could be explained by science as products of naturalistic processes.

Predictably his critics showed that known present processes could *not* explain events like a global flood recorded in the Bible. Faced with the

4. This preoccupation of autonomous man is not just a recent one. See Rousas J. Rushdoony, *The Mythology of Science* (Nutley, N. J.: Craig Press, 1967), pp. 59-78.

5. A brief survey and excellent bibliography may be found in N. A. Rupke, "Prolegomena to a Study of Cataclysmal Sedimentation," *Why Not Creation?*, ed. Walter E. Lammerts (Nutley, N. J.: Presbyterian and Reformed Publishing Co., 1970), pp. 141-151.

6. Francis C. Haber, *The Age of the World: Moses to Darwin* (Baltimore: The Johns Hopkins Press, 1959), pp. 71-83.

choice between biblical type (1) evidence and the naturalistic type (3) evidence, Burnet surrendered biblical authority, making visible his previously hidden humanistic presuppositions. By 1691, in his work *Archeologia Philosophicae*, he explicitly abandoned biblical authority by "re-interpreting" Genesis allegorically.⁷

Of course Burnet was only one of many churchmen who found themselves moving in the direction of modern apostate thought. The towering works of figures like Descartes (1644), de Maillet (1748), de Buffon (1749), Hutton (1785), and Lyell (1830) cast long and influential shadows over the intellectual world. The writings on early earth history by these thinkers developed a tremendous momentum away from the biblical position.

To the naive observer, all that Christian apologists of the period *appeared* to be doing was making minor changes in the interpretation of the text (the first option mentioned above). Nevertheless, what they *really* were doing was converting completely over from a biblical framework to a naturalistic one. Two illustrations clearly show the point. One seemingly minor change was to abandon the traditional interpretation of the days of Genesis as literal, 24-hour periods and to claim that the days represented ages. When this was done, however, the earth's geological formations could be viewed within a framework of naturalism in which eons of time were required to build them up. This step led, in turn, to the very logical deduction that a global flood was unnecessary to account for the strata, and moreover, that such a flood was impossible, since the field evidence was now explained by long, gradual processes rather than by a miraculously catastrophic environment.⁸ What began as an innocent change in one interpretation ended in making a wholesale change in overall viewpoint. A Pandora's box of additionally required interpretational changes had been opened. The traditional global flood was now out of the question.

A second illustration of how one apparently innocuous textual reinterpretation led to an uncontrollable avalanche of required reinterpretations is the matter of a gap between Genesis 1:1 and 1:2. Although the idea of a gap had been toyed with by scholars much earlier in Church history, it had been done so for *theological*, not *apologetic* reasons.⁹ In 1804,

7. "Burnet treated the Mosaic account of history as allegory and abandoned the biblical age of the world as inadequate." *Ibid.*, p. 83.

8. A flood of global proportions great enough to lift the ark over two miles above present mean sea level would have to have left *some* evidences. The contrary position, that it did not leave any such evidences, is called the "Tranquil Flood" theory, and it is adequately refuted in *TGF*, pp. 97-106.

9. See the discussion in Arthur Custance, *Without Form and Void* (available from the author, Box 291, Brockville, Ontario, Canada, K6V5V5). The most famous statement of the position can be found in John Milton, *Paradise Lost*, Book I.

however, the Scottish clergyman, Thomas Chalmers, picked up the gap idea as his answer to the tension between historical science and Genesis. No sooner had this been done than exegetes discovered they were worse off than with the day-age reinterpretation. Dating all the geological ages prior to Genesis 1:2 automatically surrendered all geological data to the absolute uniformity of natural processes. Since all geological data were sufficiently "explained," there were no type (2) data left unexplained as the needed evidence of a global flood. Not only was there no evidence of a global flood, but now there was no evidence of *any* catastrophe between Genesis 1:1 and 1:2. The problem of harmonization had not been solved at all; it had been doubled.¹⁰

The important thing to notice about what happened over the past three centuries of debate is that "reinterpretations" are not minor; they result from a shift in the intellectual framework going on in the background. Churchmen like Burnet and Chalmers made naive commitments to the humanist framework long before they tampered with the traditional exegesis of Genesis. In practice, regardless of their official theoretical pronouncements, they attached supreme authority to type (3) process evidence and tried to fit scriptural type (1) evidence and stratigraphic type (2) evidence into a naturalistic, process-centered viewpoint.

"The Genesis Flood" Position

Both Drs. Morris and Whitcomb were well aware of the previous debate summarized above when they wrote their book. They were, therefore, determined not to abandon the biblical framework by fanciful "reinterpretations." This attitude explains why so much of their book is taken up with a detailed defense of the traditional exegesis of Genesis 1-11.¹¹ After establishing the sound limitations of literal interpretation, they next proved that Genesis 1-11 cannot be harmonized with present historical science. In terms of the three-sided nature of the controversy discussed above, they found option one illegitimate, and they declined option three. Thus, their work strongly urged Christians to take the second option, the option of reconstruction in historical science.

The Limitations of Sound Interpretation. In chapters 1-3 of *TGF*, the flood is proved to have been global in extent by many arguments. Of these, this writer believes the most powerful are: (1) the depth-time argument; (2) the ark size and purpose argument; and (3) the apostolic commentary in II Peter 3:5-7. Why is the matter of the flood treated

10. Haber, pp. 201-3. Few proponents of the gap as a geological "panacea" understand what they are really saying. By conceding the cause of observed earth strata to pre-Genesis 1:3 processes, gap advocates remove Genesis 1:4 ff. and the flood from all effective contact with history. God's work after Genesis 1:3 is then historically irrelevant.

11. Four out of seven chapters in *TGF* deal with matters of interpretation.

with such prominence compared to other details in Genesis 1–11? In light of the previous debate, it was the inability of the harmonizations to cope with a geographically universal flood that doomed them to failure. The matter of a global flood, then, is a sort of touchstone that marks apologetical success or failure. *Harmonies which are sellouts to naturalistic, uniformitarian science eventually always have to minimize the dimensions of the flood.*

To show the unbiblical nature of any “reinterpretations” that would try to minimize the flood, *TGF* authors put forth their depth-time argument based upon Genesis 7:19–20:

If only *one* (to say nothing of *all*) of the high mountains had been covered with water, the flood would have been absolutely universal; for water must seek its own level—and must do so quickly!¹²

It is to be noted that the validity of this argument does not depend, as with former arguments, upon the word “all” in Genesis 7:19. The argument rests upon the *combination* of time and depth together. Valid exegesis simply cannot be stretched to allow for anything less than a global flood.

A second argument appearing in *TGF* to support this point is the matter of ark size. If the flood were less than global, why build such a large ark (equal in volume to over 500 railroad stock cars!) when the much simpler and more efficient method of evacuation could have been used as was done later in the case of Sodom?

A third argument found in *TGF* showing that legitimate interpretation cannot be loosened up enough to permit a local flood is the apostolic commentary found in II Peter 3:5–7. Although this New Testament passage has been used to prove universality at least as far back as Thomas Burnet’s 1681 work mentioned above, there has been a strange lack of treatment by local flood proponents. In 1955, for example, Ramm never bothered to list this passage in his index to *The Christian View of Science and Scripture*, preferring to remark hastily, and ungrammatically: “An examination of the references of the New Testament to the flood are not conclusive, one way or the other, but permit either a local or universal flood interpretation.”¹³ No other critic of the universal flood interpretation has satisfactorily dealt with this passage.

Obviously, then, sound interpretation limits the orthodox Christian to a universal flood. Desperate “reinterpretations” are woefully uncon-

12. *TGF*, pp. 1–2.

13. Bernard Ramm, *The Christian View of Science and Scripture* (Grand Rapids: Wm. B. Eerdmans Publishing Co., 1955), p. 249. This is doubly striking, since he was careful to uphold only a year later (1956) the time-honored principle that Scripture interprets Scripture: *Protestant Biblical Interpretation* (Boston: W. A. Wilde Co., 1956), pp. 125–26.

vincing. As a zoologist once reflected on how a Bible teacher will "fudge" his exegesis when dealing with passages like the flood narrative:

I still wonder whether he's given me more time (in the genealogies of Genesis) because I demand it, or because it's really there. *The same question applies to the days of Genesis and to the universality of the Noahic Flood* [emphasis supplied].¹⁴

The *TGF* authors skillfully quoted the sardonic observation of T. H. Huxley: "A person who is not a Hebrew scholar can only stand aside and admire the marvelous flexibility of a language which admits of such diverse interpretations."¹⁵ Clearly, therefore, option one in the three-sided controversy discussed above is dead. The biblical account is not to be reinterpreted by "autonomous" science.

Present Historical Science Irreconcilable. The next step by *TGF* authors was to show that a universal flood can in no way be reconciled to present day historical science. They wrote:

Either the Biblical record of the Flood is false and must be rejected or else the system of historical geology which has seemed to discredit it is wrong and must be changed.¹⁶

Critics who do not carefully follow the argument find this statement too difficult to accept and "tune out." Yet, when considered in light of the previous three centuries of debate and the limitations of sound interpretation, *it is the only conclusion possible* (unless one wishes to leap into the neo-orthodox heresy). If the first option is dead, and the third one unacceptable, the three-sided controversy can be resolved only by moving in the direction of the second option: biblical reconstruction.

In an unwitting confirmation of this thesis, an evangelical geologist, William Tanner, claimed that a local flood in the Tigris-Euphrates Valley "was the best a geologist could produce."¹⁷ The maximum depth allowed by present historical geology for such a flood, according to Tanner, is 20 feet, but then no land over 100 miles away would have been affected. Not only would such a relatively midget flood not even momentarily cover the 300-400-foot mounds along the Euphrates, but it would have swept the

14. J. Frank Cassel, "The Origin of Man and the Bible," *Journal of American Scientific Affiliation*, XII, No. 2, p. 15.

15. *TGF*, p. 60.

16. *Ibid.*, p. 118. Note that this statement occurs in *TGF* after four chapters in which the limitations of legitimate interpretation are established. An example of the furious reaction to such an assertion among evangelicals is this one from a professor-friend of the writer: "The book by Whitcomb and Morris . . . is not worth your attention intellectually. . . . If, in order to remain a Christian, I had to adopt the blinder Morris wears on his mind, I would abandon my faith."

17. William F. Tanner, "Chronology of the Ice Ages," *Journal of the American Scientific Affiliation*, XVII, No. 4, p. 115. See also his article, "Geology and the Great Flood," in the same *Journal*, XIII, No. 4, pp. 119-21.

ark *downstream*, away from the mountainous areas associated with Ararat rather than toward them.¹⁸

If this river flood (a phenomenon conceived to fit naturalistically with type [3] evidence, be it noted) is "the best a geologist can produce," it would be fair to agree with *TGF* authors that present historical geology cannot be reconciled to a biblical, universal flood.

A Call for Reconstruction. The final part of *TGF* was a challenge to Christians to reinterpret the data of historical geology, paleontology, and chronometry within a soundly biblical framework. The authors, cognizant of the numerous times this framework had been abandoned over the past centuries of debate, were determined to work with the biblical authority kept highly visible. Biblical type (1) data reported a recent and rapid direct creation, a nature-transforming fall, and a global flood, so they insisted that fossils and other type (2) data be interpreted in terms of these biblically revealed *events* rather than in terms of *present processes*. All animal fossils, for example, show death. Since death began with the event of the fall, all fossils must be post-dated after a "recent" fall rather than being products of a billions-of-years-old process.

Recently one *TGF* author, Dr. Whitcomb, pointed out several other specific illustrations of why this reinterpretation of the scientific data is required. In Joshua 10, to cite one illustration, it is recorded that the Lord cast great stones down from heaven. How could these stones, many probably still in the vicinity of Beth-horon, be interpreted within the naturalistic process-centered framework? Without the eyewitness evidence in Joshua 10 no geologist could be sure where they came from.¹⁹ In terms of this article, type (1) data (Joshua 10) must be used to explain adequately type (2) data (stones at Beth-horon). The *scientific* problem of elucidating possible secondary processes involved (type [3] data) remains, but the *historical* problem of time and place of occurrence is solved. Only when the observations of *what* happened become available, can scientific study of *how* it happened proceed with some degree of confidence. The naturalistic, present-centered humanist, because he hates history, cuts himself off from the very observational data he needs even to begin speculation on the processes involved!

Returning to the main geological problem, then, one can readily see Whitcomb and Morris' viewpoint. Since a valid historical record of the major events from the beginning of the universe is available, why not use it to establish what factually happened in the past rather than to guess

18. *Downstream* motion instead of the needed *upstream* motion toward Ararat is another central failing of all local flood models.

19. John C. Whitcomb, Jr., *The World That Perished* (Grand Rapids: Baker Book House, 1973), p. 130 f. Dr. Whitcomb presents in this work responses to *TGF* criticism more recent than the writer's study done in 1968.

at what *might* have happened based upon processes observed today? Not to do so, incidentally, is tantamount to discrediting the integrity of the observer (who in this case is God). It may be true that no process adequate to explain the data scientifically is presently known. It may even be true that such a process will never be known, because a directly miraculous and unique action was the cause. Yet why deny that a well-reported event has occurred, just because *we* know no satisfactory explanatory process? At this point a strong case can be made that Christian reconstruction in the historical sciences is our only hope. If science depends upon observational data to elucidate processes, the rejection of valid observations (even of non-recurring past events) can only stunt scientific growth.

The Controversial Aftermath

Although previous books had promoted a universal flood,²⁰ none so stirred controversy as *TGF*. In the controversial aftermath one would have expected critics to rebut the Whitcomb and Morris thesis by showing either that option one is valid (i.e., that valid interpretation does not require a recent direct creation and universal flood), or that a universal flood is reconcilable with current historical geology. Nevertheless, in his detailed study of all major *TGF* reviews, this writer concluded:

The most surprising and disappointing part of this study has been the complete failure on the part of *TGF* critics to refute the work at its basic foundation: exegesis of Genesis 6–8. As emotional brick bats were thrown at the authors, positive, constructive criticism never once appeared.²¹

Those interested in Christian reconstruction can profit from observing the kind of criticism *TGF* received. The response to *TGF* will most likely parallel future critical responses to reconstructive work in other fields. For convenience the response to *TGF* will be noted under four headings: (1) apostasy, (2) procrastination, (3) hastiness, and (4) separation.

Apostasy. Above it was noted that increasing numbers of professing Christians are opting for the third way out—neo-orthodoxy. The limitation of sound interpretation is supposedly respected, in that Genesis is said to teach what the traditional Christian view declares it to teach, but the whole Bible is viewed from prior humanist presuppositions as a story, full of *religious* truths, but devoid of authentic *historical* truths. Thus the supposed author(s) of the flood account thought it was a real historical

20. Examples would be: George McCready Price, *The New Geology* (Mountain View, Calif.: Pacific Press Pub. Assn., 1923); Byron C. Nelson, *The Deluge Story in Stone* (Minneapolis: Augsburg Publishing House, 1931); Harold W. Clark, *The New Diluvialism* (Angwin, Calif.: Science Publications); and Alfred M. Rehwinkel, *The Flood* (St. Louis: Concordia Pub. House, 1951).

21. Charles A. Clough, "A Calm Appraisal of *The Genesis Flood*" (Unpublished Th.M. thesis, Dallas Theological Seminary, 1968), p. 170.

event, although today we "know" it never happened that way, and so the story only teaches us the religious truth of judgment.²²

Those who finally realized from *TGF* that reinterpreting the text is a dead option openly embraced the presuppositions of apostate neo-orthodoxy. Dr. Aldert Van Der Ziel, for example, published his book, *Genesis and Scientific Inquiry* (1965), in which he followed the lead of the neo-orthodox Old Testament theologian, Gerhard von Rad. Even the *A.S.A. Journal*, which has been solidly anti-*TGF* since 1961, remarked about Van Der Ziel's neo-orthodox option:

Those who are not satisfied with their present viewpoint regarding science and early Genesis may find Van Der Ziel's presentation a reassuring live option. On the other hand, they may be greatly disturbed by the apparent sacrifices one must make in order to solve the centuries-old problem.²³

More recently, a Dutch geology professor at the Free University of Amsterdam, J. R. van de Fliert, wrote a direct attack upon *TGF* in the *International Reformed Bulletin* entitled "Fundamentalism and the Fundamentals of Geology."²⁴ He remains adamantly inside his naturalistic, process-centered framework and denies that the Bible's observations of past geologically important events are relevant. He writes:

The Bible does not give outlines of historical geology. . . . Christians . . . corrupt scientific work when they start from pretended biblical . . . geology, into which then the geological data will have to fit. . . . For the fundamentalist . . . the reliability of the Bible as the Word of God is related to *scientific* reliability.²⁵

Van de Fliert's neo-orthodoxy is obvious. Paraphrasing Jesus' statement in John 3:12, one could epitomize the position of van de Fliert and his American and Dooyeweerdian admirers as: "If I have told you earthly things and ye believe not, go ahead and believe anyway, when I tell you heavenly things." Included, of course, among the American evangelicals who applaud van de Fliert are Dr. Clarence Menninga of Calvin College, Dr. Donald C. Boardman of Wheaton College, Dr. Roger J. Cuffey of Pennsylvania State University, and Dr. Richard Bube, past president of the American Scientific Affiliation.²⁶ *TGF*, then, has forced the issue and has brought out into the open the latent apostasy within present-day evangelicalism.

22. The neo-orthodox approach is by far the one most frequently encountered in clergy meetings and on college campuses today.

23. Richard T. Wright, "Review of *Genesis and Scientific Inquiry* by Aldert Van Der Ziel," *Journal of the American Scientific Affiliation*, XIX, No. 4, p. 32.

24. Spring, 1968, issue. Details of reprints and counter criticism are given in Whitcomb, *The World That Perished*, pp. 111-28.

25. *Ibid.*, p. 113.

26. *Ibid.*, pp. 111-12.

Procrastination. A second kind of response to *TGF*, largely among conservative Old Testament scholars, has been one of withholding encouragement of efforts directed toward reconstruction. The neo-orthodox option is avoided, but the reconstruction option is feared. The Whitcomb-Morris "flood theory," as it is called, is given the tongue-in-cheek treatment, and desperate pleas are made that such a "dogmatic," startling thesis must not be allowed to contaminate young minds. William S. LaSor, for example, in his review wrote:

This is an exceedingly difficult book for me to review for while I find in it much with which I am in entire agreement, I strongly oppose the methodology and the dogmatism in which it is presented. . . . The authors begin with the conviction that the Bible teaches a planet-wide flood. This conviction is immediately transferred into a dogma from which no "Bible believer" is permitted to differ.

As it stands, I fear it will drive some young people further from their Bible, it will serve to divide Christians even more into two camps. . . .²⁷

John Warwick Montgomery, incongruously, in the midst of his book describing his search for the literal Noah's ark on literal Mt. Ararat, took careful pains to dissociate himself from the Whitcomb-Morris "theory" of a universal flood!²⁸ He neglected to tell his interested readers, however, how he thought the ark travelled two miles up Ararat without a geologically catastrophic global flood.

Gleason Archer and R. K. Harrison, in their Old Testament introductions, and more recently R. Laird Harris in his work, apparently fully accept without question the current framework of historical geology.²⁹ In spite of the fact that a genuine and irreconcilable contradiction exists between early history as described in the Old Testament and a history acceptable to naturalistic thought, these scholars are somehow hoping a solution will suddenly appear by itself. They procrastinate without decisively taking any option in the three-sided controversy.

Hastiness. A third response to *TGF* has been a rash of hasty catastrophic theories to account for the flood and other events. Patten, for instance, in his work *The Biblical Flood and Ice Epoch* (1966) and in later writings, has tried to establish physically consistent models of the secondary processes involved.³⁰ This response, while beneficial in stimulating creative

27. William S. LaSor, "Review of *The Genesis Flood* by John C. Whitcomb, Jr., and Henry M. Morris," *Eternity*, XII, No. 8, p. 43.

28. John W. Montgomery, *The Quest for Noah's Ark* (Minneapolis: Bethany Fellowship, 1972), p. 41.

29. Gleason L. Archer, Jr., *A Survey of Old Testament Introduction* (Grand Rapids: Wm. B. Eerdmans Pub. Co., 1969), pp. 96-102, 147-63, 553-4; and R. Laird Harris, *Man: God's Eternal Creation* (Chicago: Moody Press, 1971), pp. 25-71.

30. Donald W. Patten, *The Biblical Flood and the Ice Epoch* (Seattle: Pacific Meridian Pub. Co., 1966); his editions, *Symposium on Creation* I, II, III, and IV (Grand Rapids: Baker Book House, 1969, 1970, 1971, and 1972, respectively); and

thought, neglects the detailed study needed to pin down more accurately *what* happened before moving on to speculating on *how* something happened. For instance, what can be definitely said with biblical authority about the condition of the antediluvian land surface? What can be known for sure *versus* what can only be inferred about the antediluvian climate? What is the exact nature of postdiluvian physical catastrophes, such as the destruction of Sodom and the Exodus plagues?

Historical questions must be well on their way toward solution *before* scientific questions can be dealt with. The question of whether unique miracles or secondary providence were involved must be thoroughly discussed. After all, who would propose a "physical model" to account for the transformation of Christ's natural body into his resurrection body?

Putting first a careful historical analysis based upon authoritative Scripture saves Christian reconstruction from the charge that it destroys the possibility of science. A stock argument by believers in the absolute uniformity of natural causes is that to abandon this presupposition destroys all possibility of scientific knowledge, since "anything goes." The limit of one's scientific proposals is the limit of one's imagination, it is claimed. Such is *not* the case if *one's scientific proposals are controlled by what actually happened in history*. Thus, a hasty revolution in scientific models is no truly fruitful approach. Careful historical study must first be done.

Separation. The final category of response is a separatist movement among strongly biblical thinkers. In 1964, for example, a new group was organized by TGF supporters called the Creation Research Society. Serious thinkers always realize the value of criticism, but they also recognize that criticism must emanate from commonly shared presuppositions. If a community of scholars is divided by radically different presuppositions, it is foolish to stay tightly locked together. New communities must form.

Dr. Pollard has well said that "science is much more distinctively a human community than it is a body of subject matter or a particular method."³¹ Because knowledge is too vast for one man to master, groups of men must share and interact for scientific progress to occur. Osteopathy in medicine and parapsychology in psychology are clear illustrations of new fields opening up on their own, although they are discredited by members of the original academic or professional guilds.

TGF has led to the formation of a new community of strict six-day creationists. Several organizations form the concentration points for

his composite work, *The Long Day of Joshua* (Seattle: Pacific Meridian Pub. Co., 1973). By the adjective "hasty" is *not* meant sloppiness in generation of models, but generation of the models before dealing intensively with the historical data.

31. William G. Pollard, "Science as Community," *Journal of the American Science Affiliation*, IV, No. 2, p. 39.

pooling ideas, disseminating information, and publishing of papers.³² This separation will in the long run prove to be *TGF's* most important contribution. The foreboding of LaSor quoted above has come true; and it is a blessing, not a cursing.

Conclusion

The "Genesis Flood controversy" is a twentieth-century learning experience for proponents of Christian reconstruction. The three-sided nature of that controversy has been explained. Faced with an unavoidable collision between Genesis 1–11 and present naturalistic, historical science, the Christian can move in only one of three directions: (1) reinterpret Genesis to force it into line with naturalistic models; (2) reinterpret the data in the historical sciences to bring them into line with Genesis; or (3) keep present positions on both Genesis and historical science by opting for neo-orthodoxy's brand of irrationalism. The third option destroys the Christian faith, and *TGF* has shown that the first one is dead. Thus, only the second option, a Christian reconstruction of the historical sciences, remains.

Of the responses which have occurred since 1961, only one offers hope of true future progress—the creation of a separated community of scholars to work on a base of solid biblical presuppositions. A thorough analysis of all the scriptural data as well as other historical data such as fossils, strata, and chronometric materials must take place before anything approaching a "scientific" model can exist. It may be that truly scientific models of the past will never exist, because of the miraculous and unique nature of biblical history.

The lesson for Christian reconstructionists in other fields is that the most effective move in the present hour will be to gather a scholarly group, faithful to the presupposition that God's Word is "the discernor of the thoughts" in every corner of endeavor—religious, historical, and scientific. Otherwise, Christian reconstruction will never get off the ground.

32. These include:

Bible-Science Association. An organization mostly of laymen who are interested in learning about strict biblical creationism. Box 1016, Caldwell, Idaho 83605.

Creation Research Society (C.R.S.). Founded in 1963 by some A.S.A. members who believe strongly in strict creationism and want to do research in the subject. Has about 1000 members and publishes a *Quarterly*. 2717 Cranbrook Road, Ann Arbor, Michigan 48104.

Creation Science Research Center. A small group of strict creationists whose chief interest is publishing and distributing creationist materials. Particularly concerned for the school problem. 4250 Pacific Highway, Suite 117, San Diego, California 92110.

Institute for Creation Research. Another small group of strict creationists affiliated with Christian Heritage College whose chief interest is conducting research projects and writing textbooks. 2716 Madison Avenue, San Diego, California 92116.

THE CREATIONIST MOVEMENT IN THE UNITED STATES: A PERSONAL ACCOUNT

WALTER E. LAMMERTS

Introduction

Unlike high school students now, we were not exposed to the evolution theory when I went to high school from 1918 to 1922. Then, in the fall of 1923, I went to the University of California, Berkeley, to major in agriculture. During the spring semester of my botany course, the theory was discussed in considerable detail. The textbook used was John N. Martin's *Botany with Agricultural Applications*.¹ He devoted seventeen pages to the question of origins of plant species at the end of his book. The idea of the evolution as opposed to creation of plant species, Darwin's theory of evolution by natural selection, and mutation as a possible factor in species formation, were discussed. Various objections to the theory also were given, so I was not much impressed. The discussion of genetics and plant breeding was much more interesting.

In my sophomore year, geology was a required course. Our textbook was Pirsson's *Physical Geology*.² When we came to the chapter on sedimentary rocks, their great thickness was presented in considerable detail. It was clearly shown that the present acting forces of erosion, that is, rain, wind, river, and ocean, are very slow. Millions of years supposedly must have elapsed to build up such great thicknesses of stratified rocks as are exposed in, for example, the Grand Canyon of the Colorado River. Slow acting as it was pictured, natural selection might very well have transformed species during such great lengths of time. Surely, it seemed to me, the earth must be much older than the Bible claims it is.

Then, in the middle of my sophomore year, a most fortunate event occurred. I was working my way through college as a shelver of returned books at the University Main Library. One of the books on the top shelf of my truckload of books was entitled, *The New Geology*.³ The author

1. John N. Martin, *Botany With Agricultural Applications* (New York: John Wiley & Sons, Inc., 1920).

2. Louis V. Pirsson, *Physical Geology* (New York: John Wiley & Sons, Inc., 1915).

3. George McCready Price, *The New Geology* (Mountain View, Calif.: Pacific Press Publishing Assoc., 1923).

was George McCready Price, and it had a rather attractive format. Glancing through it, I quickly noticed he was not at all "orthodox" in his geological concepts. Checking the book out, I read it carefully. Basically, he claimed that a worldwide catastrophe had occurred during the life of Noah. At that time practically all of the stratified rocks were deposited. He presented many lines of evidence to show that the succession of strata had no time significance. Indeed, as regards the fossils contained in them, any kind of rock could be lying right next to or on top of the basic granite rocks. This book was most stimulating, and when I discussed Price's ideas with the section leader in my geology laboratory class, he had no adequate answers for Price's claims. (Actually, Price had no real explanation for the undoubted fact that in general the fossils *do* occur in a sort of ascending order of complexity. He completely denied this and spent much space describing locations such as the Chief Mountain area in Glacier National Park, where rocks with very simple forms of life are on top of those [Cretaceous] with very highly developed forms.) Thereafter, I began to read as much as possible about what others before him had to say about evolution and geology.

Some Eminent Scientists Have Always Opposed the Evolution Theory

I soon found that others were highly critical of evolution concepts. Dr. Albert Fleischman, professor of zoology and comparative anatomy at the University of Erlangen, Germany, had been writing highly critical articles since 1901. Unfortunately, his publications were in German, so most American students were unable to read them. My German heritage and my ability to read the language easily were most helpful. Most of Fleischman's argument consisted in showing how complex the differences really are among the various kinds of animals. The many difficulties involved in postulating any conversion from a common ancestral type were shown in great detail. Furthermore, I soon found that the evolution theory never was so completely popular in Continental Europe, especially in France, as in England and later in the United States. Baron Georges Leopold Cuvier (1769–1832), founder of the sciences of comparative anatomy and vertebrate paleontology, had no use for the evolutionary theories of Lamarck and other contemporaries. The influence of his teaching was very strong and made many later European scientists skeptical of Darwin's theory. Perhaps the greatest of these students was Jean Louis Agassiz (1807–1873). He was a Swiss zoologist famous for his classification of fossil fishes and the development of the science of glaciology. He and Joachim Barrande (1799–1883), Etienne d'Archiac (1802–1868), and Francois Pictet (1809–1872) were determined partisans of the fixity of the species. Agassiz, like Cuvier, claimed that all animals could be classified into one of four basic types or plans existing in the mind of the Creator, namely:

- (1) Vertebrata (fish, amphibians, reptiles, birds, and mammals)
- (2) Articulata (lobsters, insects, and spiders)
- (3) Mollusca (snails and squids)
- (4) Radiata (corals and jelly fish)

These four groups are irreducible animal kingdoms independent of one another, created thus by God. He claimed that evolutionary embryology lost sight of the boundaries separating each primary type. Evolutionism is, he argued, "a doctrine which from a notion descends to the facts and searches for facts to support an idea."

L. Vialleton published *L'Origen des Etre Vivants* in 1930. The impossibility of deriving the main groups of the animal kingdom from common ancestors by means of natural selection of variations is clearly shown by Vialleton. M. Caullery wrote *Le Probleme de L'Evolution* in 1931. In this book he says: "Without doubt today we feel farther from representing how evolution has been effected than 40 years ago when the writer began to study zoology" (p. 17). He further states: "The greatest difficulty at the present time is to reconcile this [genetic] stability with the mutability that the very notion of evolution supposes" (p. 240). Jean Henri Fabre (1823–1915) was a famous French entomologist known for his delightful writings on insect life, such as the *Social Life of the Insect World*. His close observation of insect habits and instincts led him to regard the evolution theory "as a solemn hoax."

A. Wigand (1821–1886), professor of botany at Marburg, published an extensive work in three volumes called *Darwinism And The Science of Newton And Cuvier*. In this book, Wigand comes out strongly for the "idea of creation." He said: "And no one can deny that Darwinism, materialism, and atheism are in the closest alliance with one another, so that this constant nihilism speaking with scorn about God as about the laws of science, at least more than all halfway views, may lay claim to being a consistent world view."

This discussion of eminent scientists in the era from about 50 years before Darwin until 1930 is by no means complete. It suffices to show that the evolution theory never enjoyed any complete acceptance during that period on the European continent.

Furthermore, in England the theory certainly was not without opposition from the start. Such eminent paleontologists as Edward Forbes (1815–1854), Sir Roderick Murchison (1792–1871), and Adam Sedgwick (1755–1873), were quick to point out the obvious fact that great gaps exist in the geological record as regards transition fossils connecting the various families and even genera of plants and animals. (Darwin was compelled to devote many pages of his *Origin of Species* in an attempt to refute this criticism.) Later English paleontologists for the most part accepted evolution, since it seemed to explain the succession of animal life from the

relatively simple to the complex. A notable exception, however, was L. Merson Davies, who wrote extensively for the *Transactions of the Victoria Institute* (ca. 1927–1939). This organization was formed in 1865 and was dedicated to creation concepts. Davies was much impressed by the fact that numerous fossilized forms of animals are identical to species living today. Incidentally, in 1951 the Victoria Institute had a membership of about 600!

In the field of genetics, the most outstanding authority, in fact the founder of the science, William Bateson (1861–1926), insisted that we do not know anything at all about “the origin of species.” At the annual meeting of the American Association for the Advancement of Science, December 1921, he said: “It is impossible for scientists longer to agree with Darwin’s theory of the origin of species. No explanation whatever, after 40 years, no evidence has been discovered to verify his genesis of species. . . . We no longer feel as we used to do that the process of variation, now contemporaneously occurring, is the beginning of a work which needs merely the element of time for its completion; for even time cannot complete that which has not yet begun.”

A world-renowned entomologist, Dr. W. R. Thompson, was for many years director of the Commonwealth Institute of Biological Control, located at Ottawa, Canada. He was selected to write the Foreword to the Everyman’s Library series’ new edition of Darwin’s *Origin of Species* (1956). In it he said: “As we know there is a great divergence of opinion among biologists, not only about the causes of evolution but even the actual process. This divergence exists because the evidence is unsatisfactory and does not permit any certain conclusion.” In a later discussion, “Evolution and Taxonomy” (*Studia Entomologica*, vol. 5, October 1962, p. 567), he writes: “When Professor [George Gaylord] Simpson says that homology is determined by ancestry and concludes that homology is evidence of ancestry he is using the circular argument so characteristic of evolutionary reasoning. When he adds that evolutionary developments can be described without paleontological evidence, he is attempting to revive the facile and irresponsible speculation which through so many years, under the influence of Darwinian mythology, has impeded the advance of biology.”

An effective critic of the evolution theory writing in the period from 1931 to 1950 was Douglas Dewar, fellow of the Zoological Society of England. His first book, *Difficulties of the Evolution Theory*, deals primarily with the problems involved in conversion of anatomical or mechanical features from one kind of animal to another.⁴ The assumed

4. Douglas Dewar, *Difficulties of the Evolution Theory* (London: Thynne & Co., Ltd., 1931).

transformation of an amphibian into a reptile involves such complex changes that he asks, "How did the embryo contrive to survive during the long period of transition?" In his later book, *More Difficulties of the Evolution Theory* (1938), he goes into an extensive critique of the recapitulation hypothesis, so-called vestigial organs, dating of geological deposits, absence of fossils in the Pre-Cambrian rocks, sudden appearance of vast numbers in the Cambrian, origin of families, and finally so-called "evolution" within the family.⁵

Another critic during this period was L. Trenchard More, who wrote *The Dogma of Evolution* in 1925.⁶ In it he stated that "the collapse of the theory of natural selection leaves the philosophy of mechanistic evolution in a sorry plight." Unfortunately, many scientists who were critical of this general philosophy found that the average scientific journal was unwilling to accept their articles. Accordingly, various attempts were made to form alternative societies and to publish their own journals.

Growth of Creation-Oriented Societies

Aside from the long-existing Victoria Institute, one of the first of these was the Christian Evidence League of Malverne, New York. It published a series of articles regarding creation, the age of the earth, and the Noachian Deluge, in 1946. These were written by D. J. Whitney. Though having only a bachelor's degree in science, he presented some solid ideas. He offered the ingenious thesis that the oceans of the earth could not be anywhere near the billions of years of age postulated by uniformitarian geologists, because of the small percentage of sulphates contained in them.

In 1931, a little book was published by Byron Nelson entitled *The Deluge Story in Stone*.⁷ In it he traces the history of the idea that most of the sedimentary rocks were deposited by a worldwide flood. It is most interesting to find that from 1681, when Thomas Burnet published *A Sacred Theory of the Earth*, followed by John Woodward's *An Essay Toward a Natural History of the Earth* in 1695, until 1800, the Flood was generally accepted as the causal agent of the stratified rocks. Incidentally, Woodward was the outstanding geologist of his era and a friend of Newton. Cuvier was the first geologist to consider the Flood as the last of many universal catastrophes.

Also in 1931, a group of Adventist scientists and friends decided to hold meetings and formed "The Society for the Study of Deluge Geology and Related Sciences." George McCready Price and Cyril B. Courville, a

5. Douglas Dewar, *More Difficulties of the Evolution Theory* (London: Thynne & Co., Ltd., 1938).

6. Trenchard L. More, *The Dogma of Evolution* (Princeton, N. J.: Princeton University Press, 1925).

7. Byron Nelson, *The Deluge Story In Stone* (Minneapolis, Minn.: Augsburg Publishing House, 1931).

medical doctor specializing in embryology, were the editors of the society's publication, *Bulletin of Deluge Geology*. The first report was published in July 1941. Subjects discussed were, "The Recapitulation Theory and Causal Significance of Parallelism," by Courville, and "Visible Proofs of the Flood," by Price. These were detailed discussions, and they still are of considerable value. "The Geologic Age of the Mississippi River," by Benjamin Franklin Allen, was considered to have offered such worthwhile data that it was republished by the Creation Research Society in 1972. Unfortunately, this Adventist organization had too small a membership base and was discontinued in 1945. The Adventist members continued to publish in their Loma Linda Academy journal.

Another very prolific Adventist writer of this period (continuing into the 1960's) was Harold W. Clark. Among his books are *Back to Creation* (1929), *Genes And Genesis* (1940), *The New Diluvialism* (1946), and *Wonders of Creation* (1964), all published by the Pacific Press Publishing Co., in Mountain View, California. His most recent book, *Fossils, Flood, and Fire*, published by Outdoor Pictures, Escondido, California, is a beautifully illustrated book presenting the evidence for a worldwide flood. In this, he suggests ecological zonation as the explanation for the sequence of fossils found in the stratified rocks. This idea does not seem to have had much popularity among flood geologists.

Meanwhile, a group of five scientists, interested in showing the scientific reasons for their acceptance of the Bible as the Word of God, formed the American Scientific Affiliation at a meeting held September 2-5, 1941. Their first annual convention, delayed because of World War II, was held in 1946. Many of the pioneer members of this society were creationists, and the first quarterlies contain a number of fine creation-oriented articles. When I was asked to join in 1943 by Alton F. Everest, he assured me that the stance of the society would be anti-evolutionary. At least that was my understanding of the editorial policy to be followed. There were only about 40 members then, and I was at the University of California, Los Angeles, doing plant breeding work and teaching ornamental horticulture. Easy access to the library made research into the intricate aspects of the important *Drosophila* fruit fly genetics quite easy. I also had close contact with men at the California Institute of Technology, where much genetic research along this line was still being continued. The anti-evolutionary viewpoint of the A.S.A. at that time is clearly shown in the first book published by them, *Modern Science And Christian Faith*.⁸ The chapter on "Biology and Creation Faith," written by William J. Tinkle and me, presents many genetic reasons for not accepting any sort of evolutionary explanation for the origin of species. In 1948, when this book was pub-

8. William J. Tinkle and Walter E. Lammerts, *Modern Science and Christian Faith* (Wheaton Ill.: Van Kampen Press, 1948), pp. 58-97.

lished, the society had a membership of only about 100 members. Nevertheless, by 1951 it had 220 members, according to L. A. Copperwaite's article, "Twenty Years With The A.S.A."⁹

Along with this growth, however, theistic evolutionists increased in influence and numbers, so that by 1963 such men as Bernard Ramm, Richard Bube, Walter R. Hearn, David O. Moberg, William F. Tanner, J. Lawrence Kulp, and J. Frank Cassel dominated the thinking of this organization. Though a few of these allowed for some sort of original creation, in general their concept was that evolution was God's method of creation, that is, they were unquestionably theistic evolutionists.

It was by then clear to many of us who originally had joined the society under the impression that its thrust would be definitely against evolution—the idea that the derivation of all forms of life stem from one or a few basic types—that articles pointing out the many fallacies of the theory were few and far between. At the time of publication of the A.S.A. directory of membership in December of 1956, many committed creationists and Flood geologists were still members. These included Arthur Custance, R. Laird Harris, John R. Howitt, John W. Klotz, Frank L. Marsh, Henry M. Morris, and William J. Tinkle. I was still a member also, though increasingly dissatisfied with the editorial policy of the journal.

Several publications, meanwhile, made quite an impact with respect to catastrophism as the explanation of much of the sedimentary rock formations and tremendous volcanic rock flows. Immanuel Velikovsky's *Worlds In Collision* (1950)¹⁰ and *Earth In Upheaval* (1955) caused quite a sensation, particularly with interested laymen.¹¹ In these books, he states the crux of the problem: "Did the earth change in a slow process, a year added to a year and a million to a million, the peaceful ground of nature being the broad arena of the contest of throngs, in which the fittest survived? Or did it happen too that the very arena itself, infuriated, rose against the contestants, and made an end of their battles?" Velikovsky is not a creationist, since he argues for "cataclysmic evolution." That is, he postulates that the cosmic radiation accompanying these global catastrophes caused mutation in *many characteristics* to occur *simultaneously* in one plant or animal, resulting all at once in a new species, genus, or even family. Needless to say, such *multiple mutations* have never been observed. They would all have to be closely coordinated to make a smoothly working new species. Furthermore, in animals it is difficult to imagine how a male and female could *both* have the same coordinated

9. L. A. Copperwaite, "Twenty Years With The A.S.A.," *Journal of the American Scientific Affiliation* 13 (1961), 4, p. 100.

10. Immanuel Velikovsky, *Worlds In Collision* (New York: The Macmillan Co., 1950).

11. Immanuel Velikovsky, *Earth In Upheaval* (Garden City, N. Y.: Doubleday & Co., Inc., 1955).

mutations. Even the most powerful neutron radiation has not caused this type of multiple mutation.¹² However, these two books were temporarily given wide circulation by Macmillan and Doubleday & Co., and they caused many people to reconsider the role of catastrophism in nature. One of these men was Donald Patten.¹³ He suggests that the planet Mercury approached within 15,000 to 30,000 miles of the earth in about 2800 B.C. He postulates that Mercury then contained a great deal of ice, in the form of either rings or satellites. This close approach caused a worldwide flood, including the formation of great areas of basaltic plateaus on two continents. Due to the earth's greater gravitational force, great amounts of ice were dumped upon the earth. During the flood, vast amounts of sedimentary rock were laid down. Immense numbers of plants and animals were killed, forming the fossils now found in the rocks. This event, he claims, is recorded in the Bible as the worldwide Flood during the life of Noah. His tenth chapter is an excellent critique of both the Darwinian concept of natural selection by the survival of the fittest and the whole concept of organic evolution.

Though not distributed in any comparably wide fashion, Alfred M. Rehwinkel's *The Flood* (1951) made quite an impact within religious circles, especially in the Lutheran Church.¹⁴ The necessity of postulating a worldwide catastrophe to account for the stratified rocks was ably presented by Rehwinkel. Also, John W. Klotz published his *Genes, Genesis, and Evolution* in 1955.¹⁵ He presents strong arguments to show that, contrary to Bernard Ramm's idea, the days of Genesis 1 were ordinary days. Furthermore, he shows that there is no gap between Genesis 1:1 and 1:2. Speaking both as a well-trained theologian and accomplished scientist, he comes out strongly for an age of the earth in terms of thousands rather than millions of years. His presentation of "Problems for the Evolutionists" clearly shows the inadequacy of evolutionary theory. This book by Klotz made a strong impression on both theologians and laymen in the large 2,000,000-member Lutheran Church, Missouri Synod.

A Personal Narrative

My own interest in the evolution question waned considerably after I left the University of California, Los Angeles, in 1945, to work for

12. W. E. Lammerts, "Planned Induction of Commercially Desirable Variations in Roses By Neutron Radiation," *Creation Research Society Quarterly* 2 (1965) 1: 39-43.

13. Donald Patten, *The Biblical Flood And the Ice Epoch* (Seattle, Wash.: Pacific Meridian Publishing Co., 1966).

14. Alfred M. Rehwinkel, *The Flood* (St. Louis, Mo.: Concordia Publishing House, 1951).

15. John W. Klotz, *Genes, Genesis, and Evolution* (St. Louis, Mo.: Concordia Publishing House, 1955), pp. 87-92, 501-48.

Manchester Boddy, then editor of the Los Angeles *Daily News*, at his Rancho del Descanso. My work there was to help his superintendent, Howard Asper, with the various technical problems involved in developing this large estate. Boddy had just finished moving about 50,000 camellias, some very large, from another estate. He had planted them under the beautiful oak trees, and wished to start a camellia breeding program. As part of my research preparation for this new job, I found out about the existence of many lovely varieties of a very large-flowered species, *Camellia reticulata*, in China. Fortunately, I was able to import them, and soon found that they could be cross-pollinated with the *C. japonica* varieties planted under the oak trees. Since I had been interested in rose breeding since working for Armstrong Nurseries in 1935–40, I continued this work along with lilac, pyracantha, and ornamental peach tree breeding. In order to have a base for the introduction of my new roses, I developed a rose growing business. When Boddy converted his “Rancho” into a public garden and sold it to Los Angeles County, my work was moved to Livermore, California. There I was also associated with Paul DeVor’s large hothouse rose growing business, and spent about half of my time breeding roses for hothouse growing. Needless to say, with all this activity, I had little time for consideration of any evolution vs. creation argumentation in the period from 1945 until 1960. Then Henry Morris asked me to read a manuscript he was writing called *The Genesis Flood*. In this manuscript, he argued most persuasively for the historicity and actuality of a worldwide flood. This event, he showed, destroyed the entire antediluvian human population. All land animals were also destroyed. Most of the sedimentary rocks were deposited during or soon after this catastrophe. He argued that we would expect to find the first or lowermost layers of sediment to have mostly marine invertebrates. In them the order of deposition would be largely determined by *size* and *specific gravity* of the then living animals. As a result of this proof-reading, my interest again was aroused concerning the various problems involved in this whole concept. I was still a member of the American Scientific Affiliation, but it was clear that there was no hope of reclaiming this organization—recalling it to its original aggressive creation and Flood geology policy.

Formation of the Creation Research Society

A meeting of the A.S.A. with the Evangelical Theological Society was held at Asbury College in Wilmore, Kentucky, June 19–21, 1963. For several years I had been corresponding with a “Team of Ten” scientists, who for various reasons rejected the evolution theory. Several of them planned to be at the meeting, since they were fellows of the A.S.A., so I decided to go to this meeting too, and there we made the first draft of our statement of belief. This was amended to its final form at a meeting in the

home of John J. Grebe. He was then physical research chemist for the Dow Chemical Co., in Midland, Michigan.

Our statement of belief is the key to the strength of our society. In our constitution, one of the provisions is that it may never be changed. This was written into the constitution so as to avoid the sad state of affairs which has taken place in the American Scientific Affiliation, mostly as a result of the influence of men like Bernard Ramm and Walter R. Hearn. Our statement of belief is as follows:

1. The Bible is the written Word of God, and because it is inspired throughout, all its assertions are historically and scientifically true in all the original autographs. To the student of nature this means that the account of origins in Genesis is a factual presentation of simple historical truths.
2. All basic types of living things, including man, were made by direct creative acts of God during the Creation Week described in Genesis. Whatever biological changes have occurred since Creation Week have accomplished only changes within the original created kinds.
3. The great Flood described in Genesis, commonly referred to as the Noachian Flood, was an historic event worldwide in its extent and effect.
4. We are an organization of Christian men of science who accept Jesus Christ as our Lord and Saviour. The account of the special creation of Adam and Eve as one man and woman and their subsequent fall into sin is the basis for our belief in the necessity of a Saviour for all mankind. Therefore, salvation can come only through accepting Jesus Christ as our Saviour.

Since I had initiated the "Team of Ten" series of letters, this group of founding scientists insisted that I be the Society's first president and editor of our proposed quarterly. Fortunately, I had retired as full-time director of research with Germain's Seed Co., in order to go into the plant breeding business for myself. Accordingly, I had considerably more time for these tasks, though development of my new seven-acre ranch in Corallitos, about seven miles from Watsonville, California, was quite time-consuming.

One of my first considerations was to lay a firm foundation for the editorial policy of our journal or quarterly. So, after writing a short history of how I became interested in the creation versus evolution problem, I wrote the following introduction to our first Annual, which we published in the spring of 1964: "Our aim is an audacious one, namely the complete re-evaluation of science from the theistic viewpoint. Christian men of science have allowed themselves to be dominated by a certain code, that is, all legitimate scientific inquiry must proceed on the basis of appealing only to processes, forces, and reaction rates *now* in operation. As a result, great progress has been made in such sciences as chemistry, physics and biology, particularly genetics and medicine. The increasingly successful ap-

plication of engineering principles has led successively to the exploitation of power from coal, oil, electricity, and finally in a fantastic way nuclear energy. Equally startling is the resulting expense and danger to the taxpayer. [How much more true this statement now is with the 1974 energy crisis and high cost of gasoline!] However, many scientists have mistakenly come to the conclusion that these laws express the totality of nature. Accordingly the wonderful adaptations everywhere so clearly pointing to design are popularly credited vaguely to Nature, and spoken of as being the result of evolution by natural selection. Rarely does one see or hear the phrase, 'As we gaze at the beauty of this rose we marvel at the glory of God whose creation it is. . . .'

Building and Growth of the Creation Research Society

My first big task was the building up of our membership from ten founding members to one large enough to support the costs of publishing our quarterlies. I wrote many letters to scientists who might be of help. All the other members of the "Team of Ten" did also, and within a year we had 75 scientist members, that is, men with an M.S., Ph.D., or M.D. degree. One of our best practical decisions was to have two classes of membership, scientist or voting members, and sustaining or non-voting members. The latter class included educators, pastors, theologians, and interested laymen. Membership dues were the same for each class and first set at \$5.00 per year. Thanks to inflation, these had to be raised gradually to the present \$8.00 a year. Another astute decision made at the 1965 annual meeting of the board of directors was that no one was to be paid for his services. This meant essentially that no executive director would be hired. Accordingly, aside from membership dues, our society has never had to ask for contributions and has always been "in the black"! Indeed, often we end the year with a surplus, which is put into a savings account. Finally, no annual meeting of members is held. Voting members elect the members of the board of directors, totalling 18, who meet annually in April. Formulation of the main editorial policy, decisions as to worthwhile research, and election of officers, are the tasks accomplished at this meeting. Election of the board of directors is by mailed ballot, on a revolving basis, that is, six at a time for three-year terms.

No Relationship to Other Creation-Oriented Societies

Though some people may be confused, since so many creation-oriented organizations have been formed recently, our Creation Research Society has no affiliation with any of them, nor does it take part in any political or promotional activity. Individual members, however, have been active in the campaign for equal space in high school textbooks for both creation and evolution. Thus, I testified at the Board of Education meeting in San

Francisco and have written a number of statements outlining our position. Various other members, such as John Ford, vice-president of the State Board of Education, have been very active in demanding equal time at later meetings in Sacramento, California. Mrs. Nell Seagraves and Mrs. Jean Sumeral, two of our sustaining members, have been very active in this campaign. As a result, textbooks in California must now clearly state that evolution is only a theory, and also not make it appear as if all scientists accept this philosophy. Their effort was not completely successful, for at present equal space has not been given to both concepts.

Our society members give many speeches promoting the cause of creation and Flood geology. I have spoken twice at the University of California, Davis, and at the last talk about 600 students and faculty members were present. Even Dr. Ledyard Stebbins, a most zealous evolution-minded botanist, attended, and during the question period he challenged my claim that all mutations are harmful. Drs. Henry Morris and Duane Gish have given many lectures and have even had formal debates on this issue. Therefore, our stand is well known and is presently arousing considerable concern among the evolution-minded educators who formerly thought that creationism was long ago dead and buried.

Textbook Publication

In the fall of 1965, I appointed Dr. Thomas Barnes as chairman of a committee to plan the writing of a biology textbook stressing the creation viewpoint. He in turn selected a dozen of us as members of the committee, later adding half a dozen more to its list. John N. Moore and Harold Slusher were appointed as editors. After four years of writing and re-writing, the manuscripts were finally ready for publication. This was done by the Zondervan Publishing Co., of Grand Rapids, Michigan, in 1970. The title of this book is *Biology, a Search For Order in Complexity*. Its production was unique in that the committee never actually met together as one group; progress was made entirely by correspondence and phone conversations.

This textbook has been remarkably successful. Royalties from its sale go into our research fund, and are used to help various members purchase needed equipment for their research. So far, not one of the men doing various research projects has been paid for the time spent in his work. However, now that we have a considerable fund accumulated, we are giving serious consideration to some plan of modest payment for actual time spent on approved research projects.

For the past two years, John Moore has been very busy with the preparation of the revised edition of our textbook. A teacher's manual and student's laboratory guide book are also being prepared. The new edition

will have a considerably enlarged section on the remarkable D.N.A. developments. We are all grateful to John Moore for his remarkably fine work as managing editor of our journal for the last nine years. He has established a very high level of pleasing format, freedom from typographical errors, and illustrations.

Our First Ten Years

In addition to our textbook, I was asked to collect and edit all the articles of lasting interest published during the five years when I was editor. This involved sending them to their authors for necessary updating, as well as the elimination of sections having only transitory interest. As a result, two books were published, *Why Not Creation?* in 1970 and *Studies in Special Creation* in 1971. The Presbyterian and Reformed Publishing Co., of Nutley, New Jersey, is the publisher. These books sold so well that the publisher decided to print them in paperback editions, in cooperation with the Baker Book House in Grand Rapids, Michigan.

After four years, my work as both president and editor became so time-consuming that I asked to have someone else elected as president, and that he should make plans to locate a new editor. Accordingly Dr. Henry M. Morris was elected president. Our society had by then grown to about 200 scientists and over 500 sustaining members. Interest was growing in our journals and correspondence was very heavy. Fortunately, we were able to get Dr. George Howe, then at Westmont College, now at Los Angeles Baptist College, to take over as assistant editor, and in 1968 he was appointed as editor. He has done a remarkably fine job, but decided that a five-year period for any one man was long enough. He is now busy editing a paperback edition of articles selected from our quarterly journal as having lasting interest. At our last board of directors meeting in April 1973, Harold Armstrong was appointed as editor for the next five-year term. He lives in Kingston, Ontario, Canada.

Meanwhile, Henry Morris decided to devote all of his time to the promotion of creationism; he resigned from his position as head of the Department of Civil Engineering at Virginia Polytechnic Institute, Blacksburg, Virginia. He moved to San Diego and set up his own Institute for Creation Research. This is closely connected with the Christian Heritage College in a small town near San Diego, called El Cajon. I recently visited him at the college and was much impressed by the large size and beauty of the campus and buildings. Originally, it was built as a Roman Catholic college and cost some \$3,000,000. As part of a retrenchment program caused by the decreasing number of men and women going into teaching as a vocation, the Catholic educational council decided to sell this fine college. A group of creation-oriented members of the Scott Memorial Baptist Church in San Diego, at the suggestion of Dr. Morris, decided to

purchase it. They had for some time been interested in starting a Bible college, and the advantages of tying in with a strong creation research-oriented group of scientists were obvious. Members of the staff include several Creation Research Society members, such as Duane Gish, William J. Tinkle, and Harold Slusher.

Because of his increasing load of work and possible public confusion between the two societies, Henry Morris felt it would be best to resign as president of our society. At the April 1973 director's meeting, Dr. Thomas Barnes was elected president. He is a professor of physics at the University of Texas, El Paso, and also consultant for the Globe Universal Sciences. Until recently he was also head of the Schellenger Institute.

The Bible-Science Association

In 1965, a Lutheran Church—Missouri Synod pastor, Walter Lang, decided that the message of creationism had to be carried more aggressively to the churches. He also quite correctly pointed out that the articles in our quarterlies were far too technical for the average layman or even a pastor untrained in the terminology of modern science.

Accordingly, he started publication of the monthly *Bible-Science Newsletter*. Backed by a large group of interested laymen, he has been able to raise substantial sums of money for his many enterprises. In the summer of 1973, the association backing him had a successful campaign to raise \$100,000. Subscriptions to his monthly newsletter are \$3.50 each. Pastor Lang's salary is largely paid by these subscriptions. He must have a remarkably active thyroid in order to carry on his amazing series of activities. Every other year, he sponsors a creationist convention. For the 1974 meeting, twelve creationist scientists have been invited to present a wide variety of subjects, from "Magnetic Evidence for a Young Earth" (Thomas Barnes) to "Some DNA Marvels" (John Grebe). Numerous statewide creation seminars are also organized. He is very actively campaigning for equal treatment of both creation and evolution in high schools and colleges. In the summer, he conducts many field trips to study carefully evidence for a worldwide flood. Favorite locations visited are the Grand Canyon, Glacier National Park, Yellowstone, the Grand Tetons, and Hawaii. Geologist members of the Creation Research Society usually accompany those who go on these field trips.

Our Creation Research Society is definitely not connected with Pastor Lang's Association, but we do allow him to publish summaries of the articles from our quarterlies in his newsletter.

The Future Thrust

And now a word about the future. At the present time, creationism is becoming increasingly popular, resulting in many new organizations. One

of the most recent is the Lutheran Research Forum, founded by a young geologist, Walter G. Peters, who is also a member of C.R.S. He proposes to carry the message of Flood geology to colleges and universities and has set up his own research laboratory.

Our own society is growing rapidly, and we now have over 450 scientist voting members and 1600 sustaining members. Certainly it can no longer be said that "All scientists accept the 'fact' of evolution." Even *Science*, the official publication of the American Association for the Advancement of Science, published a very fair write-up of our activities and concepts last summer. It was written by Nicholas Wade, whom I met at a convention of the National Association of Biology Teachers in San Francisco, November, 1972. Incidentally, I was quite amused to hear Dr. Theodosius Dobzhansky refer to himself as a "creationist" at the beginning of his talk! He meant, of course, that evolution was God's way of creation, a strange twist indeed. This attempt to fit evolution into a creation image does show that evolution-minded scientists finally realize that creationism as a concept is far from dead—in fact, more alive than ever.

(Some of my colleagues may differ from me, but my belief is that we as creation-oriented scientists should continue patiently to do research and collect evidence to show that the marvelous design in nature could never have arisen by the gradual accumulation of mutations arising by chance. For evolutionists surely must admit that the occurrence of one mutation affecting a given characteristic of an organism in no way predisposes the next mutation to further modify the same characteristic. Furthermore, to make evolution plausible, a *whole series* of such mutations must be imagined to transform the fin of a fish into the leg of a mammal!)

As scientists and creationists, we must show the tremendous weight of evidence in favor of interpreting the stratified rocks as being the result of the Flood, which occurred during the life of Noah, followed by later catastrophes which, though not worldwide, were the cause of the great flows of lava and many relatively localized Cenozoic deposits.

Finally, we must show that we have for too long been bedeviled by talk of millions of years for the age of the earth. Indeed, we have forgotten how very long one thousand years really is! One of our main tasks in the Creation Research Society is to show how remarkable geologic changes can occur in one thousand years even without any major catastrophes. We solicit your interest and help by joining our society as sustaining members to carry forward this great work.

STALKING THE WILD HYPOTHESIS: THE GREAT PENGUIN EGG SEARCH

BOLTON DAVIDHEISER

In 1911 three men demonstrated the devotion scientists can have for the theory of evolution. They went on to what seemed to be almost certain death instead of turning back, in order to obtain some eggs of the emperor penguin, which it was hoped would provide evidence favorable to the recapitulation theory.

William Wilson, H. R. Bowers, and Apsley Cherry-Garrard left the base camp of Captain Robert Scott's Antarctic Expedition in the middle of the Antarctic winter and made what has been called the worst journey in the world. Dr. Wilson considered the emperor penguins to be the most primitive birds, and reasoned that their eggs would afford particularly pertinent evidence of the evolution of birds from reptiles.

Apsley Cherry-Garrard wrote later, "The horror of the nineteen days it took us to travel from Cape Evans to Cape Crozier would have to be re-experienced to be appreciated, and anyone would be a fool who went again. It is not possible to describe it."¹

Temperatures lower than seventy degrees below zero were encountered, but worst of all was the darkness, for at that time of the year the sun remained far below the horizon. Before they stopped for their first lunch, perspiration froze inside their clothing. Even on the coldest days they perspired, and the perspiration accumulated as ice. Some of it melted when they rested in the tent and saturated their garments and sleeping bags.

On the second day Cherry-Garrard got all his fingers frostbitten and developed large blisters. One day he raised his head to look around and the clothing around his neck froze so that he had to help pull the sledges with his head in this raised position for four hours.

On the fourth day they came to a region where the snow was so cold and granular that it was like sand. They were not able to pull their two sledges together over this kind of snow and had to leave one while pulling the other. Besides the problem of locating the one left behind in the darkness each time, this relaying forced them to walk three times as far as they would have walked if they could have pulled the sledges together.

1. Apsley Cherry-Garrard, *The Worst Journey in the World* (New York: Dial Press, 1930), p. 236.

There were many unforeseen difficulties which added to their agonies. Their feet lost feeling, and they did not know if they were frozen or not. Ordinarily one warms up with exercise, but they found it just the opposite. The longer they walked between their stops for camp, the colder they became. When they camped, it took them an increasingly longer time to get into their frozen sleeping bags. They had little consciousness of sleep. They knew that they did sleep for they had nightmares, and they could hear each other snore. They sometimes slept while walking, and woke up when they bumped into each other.

At times there was so much fog they could not tell which way to go.

When it was time to break camp, it was sometimes necessary to try five or six boxes of matches before finding a match which would strike to light a candle. Added to this was the difficulty of knowing when it was time to break camp.

They suffered from stomach cramps.

Cherry-Garrard had fits of teeth-chattering which he compared to lockjaw. The nerves of his teeth were killed and all his teeth cracked to pieces.

On one occasion the temperature rose to twenty-seven degrees below zero, and they were able to become thawed out and get some real sleep.

Crevasses are large gaping clefts in the ice, and some of them are thinly bridged with snow. They are bad enough in the daylight, when open ones can be seen and avoided, but they are a terror in the dark. The men were harnessed to the sledges so that when one fell into a crevasse, he would dangle at the end of his harness about fifteen feet down until the others pulled him up. On one occasion when they had hoped to take advantage of moonlight, the sky was overcast, and in the darkness they knew only that they were going downhill with the sledges nearly overtaking them. Suddenly the moon appeared in a patch of clear sky just in time to reveal a great crevasse three paces ahead of them. Except for this providential appearing of the moon they would all have gone over the edge with the sledges following, and this would have been the end.

For several days they were lost among pressure ridges, walls of ice piled fifty and sixty feet high. Trying a course to the right and then to the left, as in a labyrinth, they eventually came out and found that at last they had arrived at the site where they would make their headquarters while visiting the penguins, although they still had no assurance that the penguins would be there. Their sleeping bags were in such a state that it was almost impossible to get into them, and their clothing was so frozen that it seemed like lead. But they had arrived, and "Cherry" wrote in his diary, "It is wonderful how our cares have vanished."

For two days they labored to build a hut of rocks and ice, with canvas for a roof. With the hut completed they were ready to try to make contact

with the penguins. This presented more problems because of crevasses, pressure ridges, and two cliffs between them and the nesting site of the birds. At one time they came to a place where they could go no farther, but they could at last hear the penguins. As they returned to seek another route they were encouraged by knowing that the birds were there. Even when they were this close and after all the hardship they had endured, they still had no assurance that they would be able to reach the penguins. But they found a way, and at last they were among the birds, except Cherry-Garrard, who had to stay at the top of the smaller cliff to pull the other two up again.

The emperor penguin is a large bird, standing about four feet high in spite of its short legs. These penguins lay their eggs in the middle of the cold Antarctic winter. A bird holds its egg on its feet to keep it off the ice, and protects it with a flap of skin. The parental instinct is so strong that if a bird has no egg it will brood a piece of ice shaped like an egg.

The men hurried as they collected five eggs and killed a few birds to provide fuel for their blubber stove, because there was evidence of an approaching storm. Two eggs were broken as they made a hasty retreat to their hut.

While a blizzard raged outside they prepared a hot meal. The blubber stove exploded and shot boiling oil into Wilson's eye. He was in great pain and thought he had lost his eye, but later recovered.

The following night the storm was much worse, and their tent blew away. The loss of the tent meant almost certain death. After the shock was over and they had time to think, they talked of digging holes in the ice on the return trip and covering the holes with the floor covering of the tent, which was with them in the hut, but even as they spoke of it they knew they would not be able to do this.

Because of the gale the canvas roof of the hut began to flap. For twenty-four hours they lay in the hut with the expectation of the roof going. Then it happened. In a moment the canvas was torn to tiny shreds with a terrific roar. Rocks from the walls of the hut fell upon them, and drifting snow piled in. It was Wilson's birthday.

This seemed to be the end. They had been out for four weeks under conditions which no man had ever endured for more than a few days. They had managed to keep going by burning plenty of oil and eating hot fatty food. Now they were exhausted; they had left only one can of oil; the tent was gone; and the wind was still howling a hurricane.

They could not move the rocks which had fallen from the walls, and they lay for two days fitting themselves around the rocks. The drifting snow helped keep them from freezing. The blizzard ended, but another threatened as, bitterly cold, they began the inevitable but apparently hopeless search for the tent. It seemed that the impossible had happened when Bowers found it. Apparently encrusting ice had kept it heavy and

compact, and instead of blowing into the labyrinth of pressure ridges or out to sea, it had come to rest in a depression about a quarter of a mile away. They had hope again.

Bowers actually wanted to make another trip to the penguins. "Cherry" was willing. But Wilson said they must go back, which was the only sensible thing to do. The return trip had its own difficulties and miseries, but the men were so hardened that they were numb to suffering. Their load was lighter and they were on their way home. When they reached the home base, one of the worst journeys ever attempted was over, and they enjoyed food and rest in a way which can be understood only by those who have undergone great privation.

Of the three men who made this journey, only Cherry-Garrard got back to London. The other two perished some months later with Captain Scott on the return trip from the South Pole.

On his return to England, Cherry-Garrard wrote to the Natural History Museum that he would deliver the penguin eggs at a certain time. It might be expected that he would have been honored with a special welcome, but this was far from the case. Arriving at the museum he encountered a custodian who insulted him and threatened to call the police if he did not leave. When he reached the office of the head of the museum, he found this dignitary talking to another visitor. Cherry-Garrard waited but was ignored. At length the chief turned to him and said, "You needn't wait." "Cherry" answered politely, "I would like to have a receipt for the eggs, if you please." But he was ignored again, and returned to a position outside the door to wait. As time passed, various minor officials inquired his business, and to each his reply was, "I am waiting for a receipt for some penguin eggs." A receipt was finally handed to him and he left.

Later he visited the museum with Captain Scott's sister to inquire about the eggs, and they were told that no such eggs existed in the museum's collections. Action was forthcoming, however, when the captain's sister threatened to tell all of England the story of the eggs and the treatment of Cherry-Garrard unless something was done about investigating the evidence for evolution which they might reveal.

As a result Professor Cossar Ewart of Edinburgh University examined the embryos. In his official report he stated that although those who have devoted much time to the study of birds had assumed that feathers were developed by an evolutionary process from the scales of ancestral reptiles, a study of the embryonic development of feathers offered no evidence justifying this assumption. In the penguin embryos he found that feathers began to develop *before* scales started to form on the feet. If the feathers of birds evolved from the scales of reptiles, it would be expected, according to the recapitulation theory, that the penguin embryos would start to develop scales on their feet before feathers began to develop. But the actual

findings were just the opposite of what the theory called for, as the penguins started developing feathers before scales.

Professor Ewart anticipated the possible question: What if reptiles start to develop scales on their bodies before they start developing them on their feet, as the penguins develop feathers on their bodies before scales on their feet? This was investigated and found not to be the case.

Professor Ewart's report closed with a statement that if the conclusions reached are correct "the worst journey in the world in the interest of science was not made in vain."² Thus Professor Ewart, an evolutionist, said that, if the anti-evolutionary conclusions drawn from his examination of the eggs is correct, the heroic effort of these men was not in vain. But the valor which they displayed and the agonies which they suffered were not appreciated at that time, nor have they been at any time since. To date, the worst journey in the world in the interest of science seems to have been in vain. Perhaps this telling of the story in honor of the three brave men will accomplish something and their valor will not go unrecognized.*

2. *Ibid.*, not paged, but would be between pp. 300 and 301.

*Reprinted from Dr. Davidheiser's book, *Evolution and Christian Faith*, published by the Presbyterian and Reformed Publishing Co., Nutley, N. J., 1969, pp. 249-55. Reprinted by permission.

THE DOCTRINE OF CREATION AND CHRISTIAN APOLOGETICS

CORNELIUS VAN TIL

When the apostle Paul preached to the Athenians on Mars Hill, he challenged them to become Creator-worshippers, instead of creature-worshippers (Acts 17). It is this that all other believers, since the time of Paul, have also done. To realize why Paul did this, we must go back to Adam.

Adam disobeyed the command of God with respect to the tree of the knowledge of good and evil; he became a creature-worshipper instead of a Creator-worshipper. He declared his independence from God. He did not want God to tell him who he was and what he should do. Adam tried to shake off that which Satan had told him was an unwholesome and unbearable harness placed on him by "God." He wanted to be his own law-giver (autonomy).

To escape the punishment God had said would follow upon his disobedience to God, Adam sought to make himself believe that the world is not under God's control at all, that is, that God did not create the world and that therefore He cannot control it. Adam tried to make himself believe that Satan was right when he said that God was himself only a part or aspect of the world. If you are to be really free, that is, independent of God, Satan suggested to Adam, you must think of the whole world, including God, as having come into existence by chance. Then everybody has equal rights and an equal chance to make his own fortune.

The result of Adam's choice actually meant slavery and death, not only for himself, but also for all his descendants. All men, Paul tells us, have sinned in Adam (Rom. 5:12). All men are fallen (apostate) in and with him. All men in Adam have adopted Satan's hypothesis about man and his world. All men are, therefore, subject to the wrath of God.

All men know that they are created by God and that, therefore, Satan was wrong in what he told Adam (Rom. 1). All men are like the prodigal son in the parable of Jesus. The prodigal knew that he was the son of his father. He knew that the change he jingled in his pock had come from the father. But he had pasted a mask on his face which no one, not even he himself, was able to remove. He made himself and others believe that all his wealth came from his own gold mines. Where were those

gold mines? He did not know. The only thing he "knew" was that they *did not* belong to his father. The prodigal hated the father and the father's house. It was this hatred of his father that controlled his view of the world. Only God's grace could unpaste the mask, the mask which had only anti-father lenses cemented in the eye holes.

The Greeks as Followers of Satan

The Greeks to whom Paul preached exhibited the same attitude that Adam, after he listened to Satan, displayed. The Greeks did not prove; they could not prove; they just assumed that they were not image-bearers of God and that the universe about them was not created by God at all but was "just there."

The Greeks simply assumed: (a) that all things are at bottom One, (b) that infinite plurality of things they saw in the space-time world about them eternally ooze out of this One, and (c) that this same plurality is also from all eternity being reabsorbed into this One. Thales said that *All* is Water. Anaximander said that *All* is indefinite. Anaximanes said that *All* is Air. Parmenides said that *All* is static, and Heraclitus said that *All* is flux. The important point here is not the differences among them as to the nature of the *all* but the fact that all of them said that *all* reality is of one substance. They all assumed that God's being is not different from man's being and that man's being is not different from God's being. They all assumed that there has not been a creation out of nothing at the beginning of time. This is the philosophy of *monism*.

To say what Paul said, that God is the self-sufficient triune being and that man's existence is derivative because this God had created him "out of nothing," that is, by mere expression of His will, was nonsense to the Greeks.

Parmenides and Paul

Parmenides expressed that attitude of all of the Greeks in his classic phrase to the effect that "Being and Thought are Identical" because they *must* be identical. Only that which I can think without contradiction, said Parmenides, can exist; creation out-of-nothing is against the law of contradiction and therefore impossible. Man's autonomous mind is therefore the ultimate standard of reality.

We can imagine Paul and Parmenides having a quiet talk one evening. They would not have argued about details. Neither of them would have argued that his position is more "in accord with logic" and/or more "in accord with fact" than that of the other. Each would have claimed that only his position, rather than that of the other, was "thinkable" at all. Spinoza said in effect what Parmenides has said: "The order and con-

nection of things is identical with the order and connection of ideas." We may put the matter in more modern terms. Parmenides and Spinoza might have said that only on the presupposition that all reality *is*, in Parmenides' sense of the term, can anything intelligible be said about anything. Man's mind *must* conform to the reality that *is*, by definition—man's definition.

Creation and the Philosophy of History

To make this point clear, we must understand that for Paul the idea of creation was but the beginning of a philosophy of history. This philosophy includes such teaching as the resurrection of Christ and His return from heaven to judge the living, and judging according as they have or have not accepted Christ as their king before their death. Moreover, the notion of creation as an aspect of this view of reality as a whole is taken from the Scriptures of the Old and New Testaments as the Word of the Christ who identified himself as the way, the truth, and the life (John 14:6). Paul *proclaims* his philosophy of history to the Greeks, in the name of and by the absolute authority of Jesus, the Christ who had appeared to him from heaven on his way to Damascus, where he intended to destroy those who were of that *Way*, the Way of Jesus Christ. "Saul, Saul, why persecutest thou me?" Jesus had said to him. In other words, "Why have you repressed the Truth speaking to you in nature, in your conscience, and in the Scriptures?"

From this time forth, Paul preached Christ, whom before he had persecuted, as the only light and life of men. All men, he said, are spiritually dead; without the life-giving power of the Holy Spirit, who takes the things of Christ and gives them unto men, they keep going down the staircase that ends in eternal futility—intellectually, morally, and spiritually—until they join Satan in eternal separation from the God of love. "Hath not God made foolish the wisdom of the world, for after that the world by wisdom knew not God it pleased God through the foolishness of preaching to save those that believe" (I Cor. 1:20-21).

"Parmenides, my friend," Paul might have said, "you have assumed that you are not created but ultimate, and that your thought is not that of a creature but instead is creative or legislative in the way that God's thought is creative and legislative. We both have pre-interpreted 'fact' and 'logic' in terms of our comprehensive and mutually exclusive views. I once held to a view basically similar to yours. I now see that 'logic' and 'fact' must be what alone they can be according to the 'gospel' of creation and redemption in Christ. They *are* because they must be *what they are said to be* in the total configuration of history, from creation to judgment portrayed in Scripture, and what I now, in the name of Christ, declare them to be. Having seen this, I no longer do what I formerly did, that is, try

to penetrate exhaustively the relation of the triune Creator-Redeemer God to myself and the created; I merely seek to make as much order as I can relating the facts of the space-time cosmos to one another and to God, thus forming a 'system' of knowledge. I am always mindful that this 'system' of mine is true because it is based on God's revelation to me in Christ, but it nevertheless remains subject to further development because I am only a creature using the laws of the Creator. My thinking is not originally constructive but recreatively reconstructive of the revelation of God."

Plato and Paul

The principle of Parmenides has been called "the adequacy of thought to being." It affirms the capacity of man's mind to comprehend the universe. Plato used this principle in his philosophy. But in his later life, he realized that he could not think through the space-time world exhaustively by means of his power of conceptualization. In his later dialogues, Plato's *non-being* of his earlier dialogues changed into "*otherness of being*." In the *Timaeus* dialogue, this "otherness of being" appears as an anti-being—a restraining force to the effort of the demiurge to make a perfect world. How can the best of sculptors make a perfect statue if the marble he has to work with is marred? Plato's "creator" was not omnipotent. The "stuff" of existence—matter—endlessly resists the "efforts" of impersonal forms to shape it.

Paul's gospel of any original, perfect man, who had disobeyed the known will of God, and as such was subject to the wrath of God, could not be conjoined with the life and world view of Plato. Paul challenged the Greeks to reject their Satanically inspired impersonal form-matter scheme as being internally meaningless and hateful in the sight of their Creator to whom they owed allegiance.

Plotinus

Plotinus developed this form-matter scheme of the Greeks into his notion of the *scale of being*. In this scale of being, Plotinus has room for everything except for the Creator-Redeemer God of Scripture. In the philosophy of Plotinus, the Greek apostate, the spirit—the Greek *paideia*—challenges to a duel the biblical scheme of creation, fall, and redemption through Christ. The concept of some universal scale of being that fuses God's being to the creation's being is a monistic concept—the heritage of Adam's rebellion. God becomes merely one aspect of being in general: crucial, but not *that* crucial! This was the intellectual challenge of Plotinus, the Greek.

Augustine

Augustine accepted this challenge. As Paul had been changed by the grace of Christ from being a persecutor of Jesus to his greatest apostle,

so Augustine gradually emerged from the disfiguring detritus of Platonism and of Greek philosophy to the glorious vision of his creation and redemption by the triune God of the Scriptures. The Creator is also the Savior.

In his later writings, Augustine worked out the implications of the biblical teaching on creation by opposing the self-salvation idea in the Greek notion of man as innerently participant in God. This Greek notion had been insinuated into the Christian church by such men as Pelagius. For a brief time, Augustine won the day. But at an evil hour Pseudo-Dionysius and John Scotus Erigena brought back the Plotinian scale-of-being idea into the church. They did so by allegorizing the creation narrative. Before them Plato had already spoken of creation as a myth. If creation is mythical, God is mythical.

Thomas Aquinas

Following in this line of thinking the medieval theologians, and notably Thomas Aquinas, accommodated the biblical idea of creation to the Greek idea of slenderness of being. Man is free because he has being, but only a little being. Following the Greeks, and more particularly Aristotle, "the Philosopher," the Council of Trent rejected Protestant theology as heresy, since Protestantism is grounded on the idea of man's freedom as that of the creature of the triune God, accomplishing his task as a prophet, priest, and king unto God. The theology of the Reformation, based on the simple teaching of Paul about creation, sin, and redemption, was anathematized as heretical in the name of a Christianized Greek philosophy. (The attempt by Roman Catholic scholars such as Hans Küng and their Protestant counterparts to minimize the differences between the Council of Trent and Protestantism is grounded on a modernized, Kantian reinterpretation of Christian categories and language.)

Immanuel Kant

In modern times, Immanuel Kant developed the Satanic notion of human autonomy more consistently than anyone before him.

On the surface, Kant's position is quite diverse from that of Parmenides and Plato. Whereas for Parmenides reality—*true* reality—is exhaustively eternal, for Kant it is exhaustively temporal. Even so, as Parmenides needed the idea of ultimate contingency as a foil to his notion of utterly timeless being, so Kant needed the idea of timeless logic and being as being a foil to his notion of time or contingency.

All apostate philosophy is constituted by correlative interaction between rationalist-determinism and irrationalist-indeterminism. Such philosophies are based on the notion of human autonomy. What Herman Dooyeweerd calls the "freedom-nature" scheme of post-Kantian thought and what he calls the "form-matter" scheme of Greek thought are but two forms of

apostate thought, and both are *dialectical*.¹ Modern thought merely works out the implication of Greek thought to the effect that (a) all reality is at bottom One, (b) all temporal reality is working itself back into the One, that is, the notion that God and man develop together as aspects of one being. In the place of the biblical idea of God as Creator and man as His creature, all apostate thinking has equally ultimate forces of form and matter eternally striving against one another.

Recent Evolutionary Thinking

In recent times, evolutionary thinking has carried on the apostate man's notion that all being is one. Working along the lines of Kant, recent science, recent philosophy, and recent theology have taken for granted that there is not and cannot be any such thing as creation out of nothing.

When in 1859 Charles Darwin published his *Origin of Species*, he thought he was "proving" that man has come from an animal ancestry by self-existent cosmic forces. The evolution hypothesis in science involves the idea of cosmic evolution. Cosmic evolution, which Kant argued for a century before Darwin, necessarily preceded "scientific" evolution. There is no possibility of carrying to a conclusion an argument between those who believe in biological evolution and those who believe in creation, unless this argument be seen to be but an aspect of two mutually exclusive views of reality as a whole.

Modern biological evolution theory *assumes* that all reality is flux. It does this together with modern science in general.

It might appear that in modern evolutionary thinking, Heraclitus' idea that *all is flux* has won out over the Parmenidean idea that *all is static*. Yet no one can say anything about "all being as flux." How can a whitecap on a bottomless and shoreless ocean of chance say, "*Here I am*"? There is no possibility of man identifying either himself or any fact in his environment in a universe of *pure* chance. As long as he holds that all is flux, he cannot even get under way to ask a question about *anything*, let alone giving any answers to any questions he might ask.

Yet the modern scientist simply asserts or assumes that there cannot be any such thing as creation out of nothing, and he ignores the consequences of what his denial entails for the question of the philosophy of history. In other words, modern science stands on the surface of a bottomless ocean of chance as it announces that Christianity *cannot* be true. The Heraclitean idea of all reality as being *pure flux* needs the support of the Parmenidean idea of all reality as *purely static* in order to justify "autonomous" science's assumption that the creation cannot have taken place in the past and that there cannot be any such thing as a coming

1. Herman Dooyeweerd, *In the Twilight of Western Thought*, 1960, chap. 2.

judgment by Christ, in and by whom all things are and were created (Rev. 4:11).

When Darwin's theory of evolution was first presented, there was great rejoicing among those who were anxious to see the historic Christian faith discredited. At last it had been "proved" by the "facts" that man had not been created by the self-sufficient God of the Scriptures. By now it should be clear for all to see that the very idea of space-time fact is utterly unintelligible on the basis of reality as total flux. By now it should also be clear that a combination of the idea of pure irrationalist indeterminism and the idea of pure rationalist determinism is meaningless. A great philosopher of science, Morris Cohen, says that science needs the idea of a universe that is both *wholly* closed and *wholly* open. This idea of the *pure correlativity* of pure staticism and pure flux underlies all modern evolutionary science. No one could say anything intelligible on such a foundation.

Modern Philosophy

We have come from the philosophy of Kant, with its notion that *time* or chance is ultimate, to the idea of science built on chance. We must turn for a moment to a brief look at the philosophical positions developed by men who lived after biological evolution had been "discovered."

In his book on *The Limitations of Science*, J. W. N. Sullivan writes that "we shall never reach a set of concepts in terms of which all phenomena can be described. The entities used in science are abstractions from experience" (p. 105). In other words, according to Sullivan, the pure fluidity of chance must be frozen by the pure conceptual determinism of pure staticism. In order to have science at all, purely fluid sense-experience must be, yet cannot be, exhaustively expressed by an abstract, timeless conceptualization process. And when the "facts" are thus discovered and seen for what they really are, they are seen as never having been originated and as never possibly coming to be. Thus, a pure dualism between conceptualization and sensuous experience is turned into a monism of pure negation: no past or future is allowed.

A. N. Whitehead's philosophy is often called a process-philosophy. Whitehead rejects the older static view of science. He aims to develop a "higher concept" of science, a concept that will include the notion of human freedom as well as of impersonal necessity. "We must start," says Whitehead, "with the event as the ultimate unit of natural occurrence."² Taking the idea of the event "as a process whose outcome is a unit of experience" enables Whitehead, as he thinks, to enthrone freedom above all forms of necessity that one might find in reality.

2. *Science and the Modern World*, 1925, p. 103.

The idea of event as a "unit of experience" also enables Whitehead to avoid paying "metaphysical compliments" to God.³ As with Kant, Whitehead makes room for faith, that is, for *a faith other than the historic Christian faith*. The historic Christian faith would, argues Whitehead, be deterministic. True religion is, for Whitehead, "the vision of something which stands beyond, behind, and within, the passing flux of immediate things; something which is real, and yet waiting to be realised; something which is a remote possibility, and yet the greatest of present facts; something that gives meaning to all that passes, and yet eludes apprehension; something whose possession is the final good, and yet is beyond all reach; something which is the ultimate ideal, and the hopeless quest."⁴

Modern Theology

Modern theology as well as modern philosophy agrees with modern science in building its structure on the assumption that historic reality is not created by the self-sufficient, self-contained triune God of Scripture.

The prince of modern theologians is Karl Barth. His entire philosophy is built on the assumption that the Genesis account of the origin of man and his world must be allegorized. To be sure, Barth insists that theology needs the idea of creation. Creation is the foundation of the covenant, and the covenant is the essence of the relation of God to man. God *is* Christ, and Christ is His work of the saving of all men. There are *not* two natures, the divine and the human, that are genuinely united in Christ but without mixture. That was the Confession of Chalcedon. But we must "actualize Chalcedon." We must say that it is God's very nature to turn into the opposite of himself and then take all men back up into participation with His own self-existence. "In Jesus Christ it comes about that God takes time to Himself; that He himself becomes temporal; that he is present for us in the form of our own existence and our own world, not simply embracing our time and ruling it, but submitting Himself to it, and permitting created time to become and to be the form of His eternity."⁵

The Kingdom of Man

It is thus that modern process theology, building on modern process philosophy and modern process science, is leading men into the "dust of death." Senior demon Screwtape, in his second letter to his nephew Wormwood, points out that "One of our great allies at present is the Church itself." Not the invisible church, but the "sham Gothic" building and its ordinary looking members. He might also have included its "sham orthodoxy."

3. *Ibid.*, p. 179.

4. *Ibid.*, p. 191.

5. *Kirchliche Dogmatik* II, ii, p. 694, Eng. tr. p. 616.

Jesus said that the last days would be like those of the time of Noah. Long before Socrates came upon the scene, Lamech scorned the idea that he was guilty because he was breaking the ordinances of God, especially the ordinance of monogamous marriage. And the children of Seth had joined the children of Cain in rejecting the creation-ordinances of God.

So now, as Jesus predicted, leading theologians are led by leading philosophers and scientists in assuming that there cannot be any such thing as a clear and finished revelation of God to man in history. Leading theologians are saying, "Lo here is Christ, or there" (Matt. 24:23). Believers in Christ now see the modern equivalent of "the abomination of desolation, spoken of by Daniel the prophet, standing in the holy place" (Matt. 24:15).

The main target of attack on the part of the theologians of the kingdom of man is the traditional Protestant view of Scripture and its content. It is the "literalism" of and the "determinism" of the Reformers and their followers that the "free man" of modern apostate thinking cannot tolerate. Just as Dionysius the Areopagite and John Scotus Erigena allegorized the entire narrative of Scripture in terms of the flux theory of reality, so men like Paul Tillich have in our day demythologized the creation story and all that goes with it. To be sure, Tillich speaks of a final revelation in Jesus Christ. But, for Tillich, revelation is final only "if it has the power of negating itself without losing itself."⁶ His thought, like that of the Greeks, is dialectical.

In Tillich's view, "Adam" was quite right in following Satan's advice to seek for freedom independently of the creation-redemption ordinances of God. Orthodox literalism is absurd. We must seek for a "cosmic myth" behind the Genesis story. This myth probably has "Orphic roots. . . . It received a Christian form by Origen, a humanistic one by Kant, and is present in many other philosophies and theologies of the Christian Era. All have recognized that existence cannot be derived from within existence, that it cannot be derived from an individual event in time and space. They have recognized that existence has universal dimension."⁷

As for modern Roman Catholic theology, can one think of it as lagging behind in adopting the idea of biological and cosmic evolution? The great scientist-theologian Teilhard de Chardin tells the story of the emergence of Christ from the amoeba with great enthusiasm. How glorious the process of final victory of man over nature and over himself is now seen to be!⁸

As for Roman Catholic philosophy, we may take Jacques Maritan as an illustration. Maritan too speaks of the great freedom that man has in terms of the *Philosophia Perennis*. This philosophy is bound to be the

6. *Systematic Theology* I, 148.

7. *Ibid.*, II, 40, 41.

8. Cf. C. Van Til's study, *Pierre Teilhard de Chardin*.

philosophy of the future. It has taken into its bosom all the progress made by modern evolutionary scientific thought, while yet it holds to the permanence imbedded in Aristotle's thinking. The "Christian Aristotelianism of Albert the Great and particularly of St. Thomas Aquinas" offers us a truly "objective outlook on reality, and, at the same time looks upward in accordance with the theology of the church."⁹ Such theologians as Hans Küng and Yves Congar take a position similar to that of Maritain.

Vatican II has followed the lead of these and similar theologians of flux. Its notorious assertion to the effect that there is no salvation outside the church (*extra ecclesia nulla salus*) is no barrier to the idea of universal salvation. The "church" now includes all men of good will.

Thus we find that leading Protestant theologians and leading Roman Catholic theologians join hands in terms of modern evolutionary thinking. But the end is not yet. The Master Historian of World History, Arnold J. Toynbee (cf. vol. 27 of *Wisdom*) invites us to see that Christianity and all other higher religions "have addressed themselves to Humanity in general in an *élan* of love."¹⁰ In the course of biological cosmic evolution, creative personalities have sprung forth who have sought to transfigure their fellow-men into living in accord with the "law of love."¹¹

Jesus was one of these creative personalities; Buddha was another. Jesus exhibited the cosmic principle already expressed by Aeschylus, to the effect that all suffering sanctifies. Toynbee makes certain that no one who makes special redemptive claims for Jesus should be allowed citizenship in the universal kingdom of man. The historian "will be suspicious, *a priori*," says Toynbee, "of any presentation that goes on to assert that a *unique* and *final* revelation has been given by God to *my* people in *my* time on *my* satellite of *my* sun in *my* galaxy. In this self-centered application of the thesis that God reveals Himself to His creatures the historian will espy the Devil's cloven hoof."¹²

The Christian's Answer

This may suffice to indicate the fact that evolutionary philosophy is generally accepted by leading scholars in all fields of inquiry today. This may also suffice to indicate that the acceptance of the notion of evolution as a substitute for that of creation in the biblical meaning of the term is not something to which open-minded men were led by the evidence of fact and the probative force of logic. On the contrary, the evolution doctrine is accepted in spite of the fact that it is inherently destructive of the possibility of all meaningful human speech and action. The evo-

9. John S. Zybura, ed., *Present Day Thinking and the New Scholasticism*, 1926, p. 402.

10. *A Study of History* III, 232.

11. *Ibid.*, p. 236.

12. *An Historian's Approach to Religion*, p. 135.

lution hypothesis is a view of reality by which the natural man, following Adam, seeks freedom from the laws of his Creator-God, and is caught in the dialectical net of having to interpret himself and his world in terms of the interaction between pure impersonal rationalistic determinism and pure impersonal irrationalistic indeterminism. This philosophy shows men's hatred of the God who is understood, deep in the heart of each man, to be the Creator. This hatred makes men cling, in defiance to God's revelation, to a worse-than-meaningless view of themselves and the world.

What, then, are Christian believers to do in this situation? They are not to seek to answer evolutionary theory by means of a theology or philosophy that is itself based in part on the same false idea of "human freedom as autonomy" that underlies the evolution view. This excludes the use of Roman scholasticism or neo-scholasticism, for both are largely built upon the Aristotelian notion of the *analogy of being*, and this notion ultimately rests on the impossible correlativity of pure Parmedian staticism and pure Heraclitean flux.¹³ The analogy of being seeks to supply the "objectivity" that man needs for his thought by means of the notion of "being" inherent in the consciousness of man.

In the second place, it is equally impossible to reply successfully to evolutionary thinking by means of Protestantism's traditional Butler-analogy method of apologetics, with its supposedly logical proofs of God.¹⁴ Furthermore, there is no hope in the concept of objectivity offered by the evangelical thinker, C. S. Lewis—the notion of a universal *Tao* (way) taught by all higher religions.¹⁵ This *Tao* is itself a projection of the would-be-autonomous man as he emerges from his hypothetical animal life to his equally hypothetical divinity.

The only way in which evolutionary thinking can be answered is by following the method of the apostle Paul. Paul tells apostate man that all the facts of the entire world of space and time clearly manifest the creative, controlling, redeeming work of God. Paul tells apostate man that his attempt to interpret the world in terms of himself as "free" from God is clearly the effort of one who is involved in the fall of Adam, and represents the same sort of hostility to God that Adam manifested when he listened to Satan. Accordingly, apostate man's activity of thought and behavior is not only futile but God-insulting. Accordingly, the wrath of God rests and will rest forever upon the "children of disobedience" unless they repent and believe in Christ and His resurrection.

Paul tells apostate man that he himself is not in himself any wiser or better than they. He has been taken out of the depth of intellectual

13. Cf. C. Van Til, "Analogia Entis," in Edwin Palmer, ed., *The Encyclopedia of Christianity* I, 200-01.

14. Cf. C. Van Til, *The Defense of the Faith* (1963).

15. C. S. Lewis, *The Abolition of Man* (1947).

chaos and moral corruption by the substitutionary death for him by Christ on the cross and by the application of the significance of this death for him by the regenerating and enlightening work of the Holy Spirit.

Such being the case, says Paul, I now see that the facts and the laws of the created universe in relation to one another are what they are because of God's purpose in creating and redeeming a people for himself which should proclaim His praise. Only if man takes his interpretative efforts to be that of reinterpretation (as a redeemed creature) of God's original interpretation—given to him in Christ—as the way, the truth, and the life, will he have light and freedom.

If the Christian is deeply convinced that he himself was formerly caught in the clutches of the god of this world, he will speak with deep sympathy to those who are "outside" the freedom with which Christ has made them. "Your freedom," he will say to this friend, "is, in reality, nothing but slavery. Flee to Christ for true freedom. Pray to the Holy Spirit to enable you to repent and believe.

"Yes, to say this is apparently contradictory. But the only alternative to it is freedom in a vacuum and the wrath of God remaining upon you."

ON WORSHIPPING THE CREATURE RATHER THAN THE CREATOR

GREG L. BAHNSEN

Darwinism dawned and cast its glaring rays upon the life of the English novelist and poet, Thomas Hardy. Hardy discerned that the evolutionary theory was not a restricted biological hypothesis but a new worldview with profound theological consequences, as illustrated in *A Complaint to Man* (from God):

When you slowly emerged from the den of Time,
And gained percipience as you grew,
And fleshed you fair out of shapeless slime,
Wherefore, O Man, did there come to you
The unhappy need of creating me—
A form like your own—for praying to?
My virtue, power, utility,
Within my maker all abide,
Since none in myself can ever be . . .

.

And now . . . I dwindle day by day
Beneath the deicide eyes of seers
In a light that will not let me stay,
And to-morrow the whole of me disappears.

Evolutionary speculation was a direct assault upon the biblical doctrine of creation and thereby challenged the existence of the personal, transcendent, sovereign God of Christianity. If man emerged from some supposed primordial slime, the eventual implication could be nothing less than the death of biblical theism (and thereby the death of man as man, as Hardy realized by his stoical pessimism in the grim face of blind chance—very unlike his optimistic contemporaries). By impugning creation, the theory of evolution had significance extending beyond a narrow biological concern to anthropology, sociology, culture, philosophy, and science in general.

Of course Charles Darwin was well aware of this fact. In one of his early notebooks he records the prophetic statement that his theory of evolution would affect the whole of metaphysics.¹ About Darwin's *The*

1. See J. C. Greene, *The Death of Adam* (Iowa: Iowa State University Press, 1959), p. 307.

Origin of Species (1859) Josiah Royce commented: "With the one exception of Newton's 'Principia,' no single book of empirical science has ever been of more importance to philosophy than this work of Darwin."² Darwin called men away from the common presupposition of a fiat, mature creation of all things by a personal God; by replacing this presupposition with that of evolution, Darwin altered the entire direction and thrust of the next century's thinking. Will Durant observed about Darwin,

It may well be that for posterity his name will stand as a turning point in the intellectual development of our western civilization. . . . If he was right, men will have to date from 1859 the beginning of modern thought.³

Since the advent of Darwin, modern thought has definitively turned to the metaphysical model of process and alteration instead of substance and permanence, to becoming instead of being. Recent philosophy (and, trailing behind it, recent theology) appears to have returned to Heraclitus and taken a second step into his river of the metaphysic of constant flux. "The reaffirmation of change and the exploration of its structure is a salient feature of contemporary thought."⁴ Evolutionary and process speculation has become dominant, and the presuppositional paradigms have been altered so radically, that the doctrine of creation by a transcendent God is rejected at the outset.

Whereas in past centuries a theory of creation would be more expected than not, the present situation is dominated by an antimetaphysical bias, on the one hand, and by the antitranscendence bias of many of the leading metaphysicians, on the other. A theory of creation is now an anomaly.⁵

Darwin's prophecy has been fulfilled.

Why has evolutionary speculation been so widely endorsed? Why has Darwinism been successful in re-directing the whole field of metaphysics and theology? Two answers are readily suggested. First, it might be that evolution was a scientific outlook that had sterling credentials—a noteworthy and definitive analysis supported by compelling evidence at every crucial juncture. That is, perhaps the theory of evolution could not be ignored because it was backed by outstanding and empirically convincing argumentation. T. A. Goudge sets forth just such an explanation; noting that Darwin was a "British biologist whose theory of organic evolution

2. *The Spirit of Modern Philosophy*, 2nd ed. (New York: Braziller, 1955), p. 286.

3. *Great Men of Literature* (Garden City, N. Y.: Doubleday & Co., 1931), p. 22.

4. Milic Capek, "Change," *The Encyclopedia of Philosophy* (EP hereafter), ed. Paul Edwards (New York: Macmillan Publishing Co., 1967), II, 78.

5. Robert C. Neville, *God the Creator* (Chicago: University of Chicago Press, 1968), p. 7.

revolutionized science, philosophy, and theology," Goudge goes on to say:

Even if he had never written *The Origin of Species* (1859) and *The Descent of Man* (1871), he would still be regarded as one of the great biologists of the nineteenth century. Of course, it was these two books which made him the initiator of a revolution in thought more far-reaching than that ushered in by Copernicus. He established beyond reasonable doubt that all living things, including man, have developed from a few extremely simple forms, perhaps one form, by a gradual process of descent with modification. Furthermore, he formulated a theory (natural selection), supporting it with a large body of evidence, to account for this process. . . .⁶

That this answer to why evolution became so popular is devoid of credibility should soon be clear; Darwin was very far indeed from demonstrating his theory "beyond reasonable doubt."

A second explanation, however, is set forth by the Apostle Paul in Romans 1:18-25. He says that all men inescapably know God the Creator. The eternal power and divinity of the Creator are clearly revealed throughout the cosmic order of nature. Thus, man possesses definite knowledge concerning the origin of the world and himself. However, as a sinner deserving God's wrath, man in his unregenerate state constantly seeks to rid himself of his knowledge about the Creator; he wishes to avoid confrontation with his Maker. Thus, man suppresses the known truth, seeks an immanentistic interpretation of the world, and ends up worshipping the creation rather than the blessed Creator. Hence the unregenerate will seize upon any speculation that he feels will aid him in his flight from God the Creator; he will even engage blatantly foolish reasoning in order to avoid the known truth. And so, irrespective of the crucial flaws, inconsistencies, and nonsense involved in the theory of evolution, man endorses and promotes the hypothesis as a way of suppressing the clear truth. Cornelius Van Til writes,

The Bible requires men to believe that God exists apart from and above the world and that he by his plan controls whatever takes place in the world. Everything in the created universe therefore displays the fact that it is controlled by God, that it is what it is by virtue of the place it occupies in the plan of God. The objective evidence for the existence of God and of the comprehensive governance of the world by God is therefore so plain that he who runs may read. Men cannot get away from this evidence. They see it round about them. They see it within them. Their own constitution so clearly evinces the facts of God's creation of them and control over them that there is no man who can possibly escape observing it. If he is self-conscious at all he is also God-conscious. No matter how men may try they cannot hide from themselves the fact of their own createdness. Whether men engage in inductive study with respect to the facts of nature about them

6. "Darwin, Charles Robert," *EP*, II, 294.

or engage in analysis of their own self-consciousness they are always face to face with God their maker. Calvin stresses these matters greatly on the basis of Paul's teachings in Romans.⁷

Created reality is revelational of the living and true God, and thus scientists deal with that which inescapably communicates God (Psalm 19:1-3). Men are without excuse if they do not discover their Creator through the study of natural facts.

The apostle Paul speaks of the natural man as actually possessing the knowledge of God (Rom. 1:19-21). The greatness of his sin lies precisely in the fact that "when they knew God, they glorified him not as God." No man can escape knowing God. It is indelibly involved in his awareness of anything whatsoever. Man *ought*, therefore, as Calvin puts it, to recognize God. There is no excuse for him if he does not. The reason for his failure to recognize God lies exclusively in him. It is due to his willful transgression of the very law of his being. . . . Of course, when we thus stress Paul's teaching that all men do not have a mere capacity for but are in actual possession of the knowledge of God, we have at once to add Paul's further instruction to the effect that all men, due to the sin within them, always and in all relationships seek to "suppress" this knowledge of God (Rom. 1:18, *American Standard Version*). The natural man is such a one as constantly throws water on a fire he cannot quench.⁸

The unbeliever will make every attempt to interpret the world and his experience in exclusively immanentistic categories. Evolutionary speculation, from the philosophy of becoming through Darwinism to process thought, is just such an attempt. The real issue is whether man must think God's thought after Him in order to understand the world correctly or whether man's mind is the ultimate assigner of meaning to brute and orderless facts. Must we follow a transcendent interpretation of all things based on God's clear revelation or can we settle for an immanentistic interpretation involving a suppression of the theological truth which God has made clear to all men? By its attack on the scriptural teaching of creation, evolution endorses the latter alternative. Evolutionary thought is popular because it is a worldview which facilitates man's attempt to rid himself of all knowledge of the transcendent Creator and promises to secure man's autonomy (especially his ability to interpret the "facts" oblivious to God). Van Til correctly observes:

The total picture we obtain from both modern science and modern philosophy is a complete rejection of the biblical notion of creation. It matters not whether this rejection comes in the form of an outright negation in the form of agnosticism or in the form of substituting another meaning for the word creation. As orthodox Christians we

7. *The Defense of the Faith* (Philadelphia: Presbyterian and Reformed Publishing Co., 1955), p. 254.

8. *Ibid.*, p. 109.

have to face the fact that we are at this point, as along the whole line of thought, out of accord with modern thought. . . . The assumption of brute fact is itself the most basic denial of the creation doctrine. And the assumption that man can of himself interpret brute facts is itself the denial of God as creator. We need therefore to challenge the very idea of brute fact. We need to challenge man's ability to interpret any fact unless that fact be created by God and unless man himself is created by God.⁹

Therefore, evolutionary speculation is popularly followed, *not* due to any sterling scientific credentials, but because of the *personal* utility it offers in developing a desired philosophical-theological perspective. The doctrine of creation stands in diametric opposition to that perspective.

According to the Pauline analysis of unregenerate man's intellectual and moral flight from God, a progression into apostasy is discernible. In Romans 1 we read that man responds to the clear revelation of God by holding down the truth and refusing to glorify God; he willfully reverses reality in his thoughts and bars (hinders) God's truth from his worldview (vss. 18, 21). This leads man into intellectual arrogance even though he is forced to engage in foolish reasoning; he is willing to propagate preposterous schemes and arguments to defend his reversal of reality (vss. 21b, 22). And in the long run man is driven to fabricate a substitute god for the living and true God who was barred from thought; this manufactured god will be fashioned from the created order, so that unbelieving man ends up worshipping the creation rather than the Creator (vss. 23, 25). A short study of the rise of evolutionary speculation and its effects will educe the same pattern as drawn by Paul, thereby providing us with an understanding of its popularity and a light in which to view it.

Precursors to the Advent of Darwinism

Three years before Charles Darwin was born, Johann Gottlieb Fichte declared: "The assumption of a creation is the fundamental mistake of all false metaphysics and religious doctrine. . . ." ¹⁰ Christianity is in error at base, for it teaches that God created the world. To understand Fichte's prohibition of creation, it is helpful to remember the philosophic milieu in which he wrote.

The tenor of philosophy since Descartes has been to take *man* as the focal point of reason, and anything that transcends man's world as much as a creator of everything determinate is called unintelligible. Therefore, in a uniquely modern sense the problem of the relation between God and the world is an epistemological problem, the problem specifically of how man's reason can know something that transcends it.¹¹

9. "Christian-Theistic Evidences," an unpublished class syllabus (Westminster Seminary, 1961), p. 106.

10. *Von seligen Leben* (Berlin, 1806), p. 106.

11. Neville, *op. cit.*, p. 1.

Immanuel Kant, obviating the meaning of his given name, elaborated upon man's inability to know God due to His utter transcendence beyond sensory experience. In Kant's *Critique of Pure Reason* (1781), the division treating "Transcendental Dialectic" contains a section entitled "Critique of All Theology." Therein Kant explains why we are prevented any knowledge of a transcendent God:

All synthetic principles of reason allow only of an immanent employment; and in order to have knowledge of a supreme being we should have to put them to a transcendent use, for which our understanding is in no way fitted.¹²

Previously he had laid down the principle that

no objects can be represented through pure concepts of understanding, apart from the conditions of sensibility. For the conditions of the objective reality of the concepts are then absent, and nothing is to be found in them save the mere form of thought. If, however, they are applied to appearances, they can be exhibited *in concreto*, because in the appearances, they obtain the appropriate material for concepts of experience.¹³

In the preface to the second edition (1787) Kant provided a handy summary of the "Transcendental Analytic." This summary elucidates the previous quotes:

That space and time are only forms of sensible intuition, and so only conditions of the existence of things as appearances . . . and that we can therefore have no knowledge of any object as thing in itself, but only in so far as it is an object of sensible intuition, that is, an appearance—all this is proved in the analytical part of the Critique.¹⁴

Space and time are the forms of sensibility, and an object can be understood by us only if it meets the conditions of space and time; synthetic reason can deal only with appearances, that is, concrete concepts of experience. Since God is beyond space and time, He cannot be immanent to us, and thus He cannot be known through man's reason. The concepts of understanding (*viz.*, the categories) are only the subjective, ordering forms utilized by reason; of themselves they are empty and cannot give knowledge of an object for thought—much less a transcendent Object. Hence experience must supply concrete material for the ordering of understanding, but God is beyond spatio-temporal experience. Thus, Kant has erected a firm fortress against any knowledge of God the Creator.

We are wont to understand by the concept of God . . . a supreme being who through understanding and freedom is the Author of all things. . . . [However] through concepts alone, it is quite impossible to advance to the discovery of new objects and supernatural beings; and

12. Unabridged ed., trans. Norman Kemp Smith (New York: St. Martin's Press, 1965), B664, p. 528.

13. *Ibid.*, B595, p. 485.

14. *Ibid.*, Bxxv-xxvi, p. 25.

it is useless to appeal to experience, which in all cases yields only appearances.¹⁵

As a noumenal object, God cannot be immanently known by man in or through phenomenal objects and thought. A Creator God would transcend the spatio-temporal world; therefore, there can be no clear indication of His creative operation in the experienced world, and man's intellect cannot know Him as Creator. No unambiguous revelation of His divinity and creative power is possible. God cannot have contact with the phenomenal world.

The German pietist philosopher, C. A. Crusius, exercised an important formative influence upon Kant's thought, as recent research has uncovered. Crusius stressed the limits of human understanding and rejected all theoretical arguments for God's existence (two thrusts which are ironically contradictory); only moral evidence, according to him, could lead us to God, a notion which is beyond the power of man's reason to understand. In these things Kant agreed. Kant likely also learned from Crusius' teaching that God's existence is the necessary foundation for cosmology.¹⁶ When Kant, therefore, made God unknowable, he placed cosmology outside the limits of philosophical understanding as well. Kant laid heavy strictures against any pursuit of speculative cosmology in the *Critique of Pure Reason*, having abandoned his own youthful cosmological speculations, and subsequent to Kant the enterprise of cosmology more and more took on a new countenance—a scientific task based upon observational findings.¹⁷

Fichte, although early trained in a pastor's home, was more greatly influenced by Kant, Lessing, and Spinoza. Fichte travelled to Königsberg to meet and consult with Kant, and he dedicated his *Critique of All Revelation* to "The Philosopher" (intending by that appellation Immanuel Kant)—although the reading public mistook the book, which was published anonymously at first, to be by Kant himself. In light of Kant's rejection of any clear revelation of the Creator in the phenomenal world and his denial of reason's ability to understand the notion of a transcendent Creator, we can understand Fichte's assertion that the ground error of all false metaphysics and religion is the doctrine of creation. Post-Kantian German idealism learned well the lesson that God cannot have any contact with the world as a transcendent agent or object of human understanding.

Kant taught that time applied only to phenomena. "It has objective validity only in respect of appearances, these being things which we take as objects of our senses. . . . Time is therefore a purely subjective con-

15. *Ibid.*, B660, 667, pp. 526, 530.

16. Cf. Giorgio Tonelli, "Crusius, Christian August," *EP*, II, 269-270.

17. Milton K. Munitz, "Cosmology," *EP*, II, 237-238.

dition of our human intuition.”¹⁸ Fichte followed Kant in this conviction and concluded, “For pure reason everything is at once; time exists only in imagination.”¹⁹ Thus the Ego was, for Fichte, outside of time. The moral will has communion and union with the infinite Ego by achieving subject-object integration through action in accordance with duty; thus the unity of the primal Ego is restored. Since we attain essential oneness with this primal, infinite, timeless Ego, it is not surprising that Fichte should write, “Divinity itself enters again into thee, in its first and original form, as life, as thine own life that thou shouldst live and wilt live.”²⁰ From such a statement we can see the veracity of Tsanoff’s judgment, “The study of Lessing led Fichte to Spinoza, whose pantheism made a lasting impression upon his own systematic philosophical development.”²¹

Spinoza depicted the universe as an organic unity and denied a plurality of substances. Ultimate reality, as the one Substance, is all-inclusive; every determinate being lies within the one substantial being. This Substance is infinite and self-determining. Spinoza designated the organic whole of reality, the single substance, as God: “By God, I understand that which is in itself and is conceived through itself”²²—that is, a notion of substance synthesized from the medieval Aristotelian and Cartesian usages. *Natura naturans* is simply God *in se*. Finite substance would be a contradiction; substance is ultimate being, absolutely independent, self-caused and eternally self-sustaining. Substance is *in se*, and everything is in it. Nature does have a multidimensionality, however, so that *natura naturata* is “all that follows from the necessity of God’s nature . . . that is, all the modes of the attributes of God.”²³ God is both thinking and extended substance; mental events and physical objects are attributes of God. Since “God” is the name of the one unified substance whose other name is “Nature,” the contrast between God and the world is obliterated; so Spinoza spoke of “Deus sive Natura.” Nature exhibits the qualities attributed to God. Spinoza’s originality is seen primarily in his willingness to accept the consequences of the unity of God and nature.²⁴ By this immanentistic monism, in which God is equated with nature and all things are in God, the Creator/creature distinction completely evaporates; the creation is given divine status.

18. Kant, *op. cit.*, B51, pp. 77-78.

19. *Grundlage der Gesamten Wissenschaftslehre in Sammtliche Werke* (Berlin: 1845), p. 217.

20. *Die Anweisung zum seligen Leben, oder auch die Religionslehre*, cited in *EP*, III, 195.

21. Radoslav A. Tsanoff, “Fichte, Johan Gottlieb,” *ibid.*, p. 193.

22. Cf. John Wild, ed., *Spinoza Selections* (Boston: Scribners, 1930), p. 94.

23. *Ethics* (I, 29 schol.), trans. W. H. White and A. H. Stirling (London: Oxford University Press, 1927).

24. H. A. Wolfson, *The Philosophy of Spinoza* (New York: Meridian Books, 1960), pp. 331ff.

Kant's phenomenalism and Spinoza's pantheism were crucial influences on Fichte's thinking. In turn, Fichte's philosophy aroused the interest of Johann Wolfgang von Goethe, who was instrumental in landing a teaching position for Fichte at the University of Jena. While a student at Leipzig, Goethe took great interest in the occult and religious mysticism. In addition to occultism and Fichte, the other great influences upon him were the philosophies of Kant and Spinoza. Goethe became one of Germany's most renowned men of letters: a poet, novelist, and scientist. Part I of *Faust*, Goethe's masterpiece, appeared the year before Darwin was born. Like Spinoza, Goethe was a pantheist, describing the universe as "the living garment" of God. He said that the universe expresses a creative force; however, God should not be thought to cause or control the world: "What sort of God would it be, who only pushed from without?" (*Weltanschauliche Gedichte*, 1815). Instead, God was the indwelling spirit of the world, its all-embracing actuality. Thus, No. 807 in Goethe's *Maxims and Reflections* declares that "We are pantheists when we study nature. . . ." Arnulf Zweig comments that Goethe "held that God, being the inexorable order of nature, cannot have any personality or be in any sense outside the natural world."²⁵ Against Spinoza, and in agreement with Kant, Goethe maintained that reason cannot attain an adequate knowledge of God. Goethe concurred with the teaching of determinism in both Spinoza and Kant, considering the idea of miracles (i.e., the immanent intervention in the world process by a supernatural God) as a "blasphemy against the great God." Goethe's work in science is worth noting with its relevance for evolution. He felt he had uncovered the secret principles by which nature operates, postulating that there was a primal plant that was manifoldly transformed through the metamorphosis of organisms, which he explained in turn by the principle that the whole of existence is "an eternal parting and uniting." Nature was constantly driven in an upward ascent, according to Goethe. "This upward striving Goethe believed to be a universal characteristic of nature. It discloses itself . . . in the variations of similar organisms developing from a basic form."²⁶ Charles Darwin was evidently familiar with and favorably impressed by Goethe's thought, for Darwin later described him as a "pathmaker."

In connection with the pantheistic views noted in the discussion above, it would be appropriate to make mention of the rise of panentheism in the philosophy of Karl C. F. Krause, a former student of Fichte's at Jena. Absolute Being, said Krause, is one with the world but not exhausted by it. God is the primordial being, the unity of all that exists. Krause said that the world was part of God, whose life is expressed through the organisms of the world and humanity. Reason and nature were taken to be subordi-

25. "Goethe, Johann Wolfgang von," *EP*, III, 364.

26. *Ibid.*

nate beings within God which were supremely integrated in humanity. Individually, men have uncreated and eternal souls; collectively, men should strive to imitate the divine life in the development of their social organizations—culminating in history's goal: the actualization of cosmic union between nature, reason, humanity, and God in an ideal League of Humanity. This evolutionary history, said Krause, is recapitulated in the progressive development of individual persons (from embryo, to infancy, to youth, to maturity, etc.), both reflecting the laws of divine organic life. The transition by which humanity would come of age was effected by two things according to Krause: Spinoza's discovery of the nature of being, and then Krause's own development of that insight. Historically the evolution of the divine organic life progressed from polytheism to monotheism, and then (in Krause's day) to panentheism, the ultimate truth that everything exists *in* God. Krause viewed the world's existence as stemming from the inner development of God's actuality, and he viewed individual men as partial embodiments of the divine—scheduled to reach organic completeness as all men enter into a common life.²⁷ Such views would eventually be echoed in twentieth-century thought as well.

Georg W. F. Hegel accentuated the theme of becoming, progress, or developmentalism found in the philosophers previously surveyed. At Jena, Hegel completed his first major work, *The Phenomenology of Mind*, two years before Charles Darwin's birth. It begins to become quite evident that Darwin lived in an age saturated with process and evolutionary speculation. Hegel's universe was a unity of thought indwelt by universal Spirit, a rational whole with Absolute Spirit as its final reality. Reason is both the substance and the infinite energy of the universe.²⁸ The key to nature and history, said Hegel, was to see them as the rational dialectic of the Absolute Spirit as it moves to self-realization; that is, Absolute Spirit expresses a dialectic of being (from being to its antithesis, nothingness, and then to the synthesis of both in becoming) by objectivizing itself in nature and history. Thus, Hegel calls nature a temple of God filled by His presence.²⁹ In order to avoid abstraction, Absolute Spirit requires otherness, over against which it can come to self-realization. From that perspective Hegel formulates a theory of the *evolution* of Absolute Spirit.

God as an abstraction is not the true God: only as the living process of positing His other, the World (which conceived in divine terms is His Son), and first in the Union with His other, as Spirit, can He be subject.³⁰

27. Cf. Arnulf Zweig, "Krause, Karl Christian Friedrich," *EP*, IV, 363-365.

28. G. W. F. Hegel, *The Philosophy of History*, trans. J. Sibree (Dover Publications, 1956), p. 9.

29. G. W. F. Hegel, *The Philosophy of Nature* (Dover Publications, 1956), p. 47.

30. *Ibid.*, pp. 47-48.

Hegel borrowed the model of the Trinity from his days as a theological student at Tübingen and presented it as the cosmic triad; he universalized the Trinity to embrace the entirety of world process. To understand this one must remember that according to Hegel, not only does Absolute Spirit objectivize itself in nature and history, but it also subjectivizes itself in individual, personal subjects, thereby allowing for union with God. For Hegel this means that there is no separation between finite and Absolute Spirit; religion is God's consciousness of himself through man's consciousness of Him.³¹ Consequently, if Absolute Spirit is to attain its goal of self-realization in and through the finite spirit which it immanently operates, the transcendent God of Christianity must be eradicated. In light of the objectivizing and subjectivizing movements of Absolute Spirit, the Trinity can be cosmically reformulated. Eric C. Rust describes this well in terms of Hegel's doctrine of creation:

For him, the Christian doctrine of Creation points to the eternal production of objective nature and subjective spirit whereby the Spirit fulfills its movement to self-determination. The Spirit begets the World, and in so doing becomes the World. Hence for Hegel, the World is the Son. As the World in its centers as "subjective spirit" comes to know the Spirit in nature and in the historical expressions of "objective spirit," the Son comes to know the Father and so the Spirit turns to itself. The Biblical doctrine of the Son or Word as the creative principle through whom all things are created and sustained becomes universalized and conceived in pantheistic terms. The World is no order created out of nothing, but itself an expression of the divine Being. The abstract Essence which is Spirit and indeterminate seeks determination as Son. The World comes into being as Son, to whom the Father presents himself as object. Through the speculative knowledge of the subjective spirits in the world, the Spirit moves back to itself, full circle. Such knowledge is the Holy Spirit.³²

So creation for Hegel merely indicates that the world comes from God in the dialectical movement of God's own being. The doctrine of the incarnation, similarly, merely symbolizes "this essential unity of the divine nature with human nature."³³ Hegel was a diligent student of Spinoza in his youth; to Spinoza's pantheism Hegel added the theme of process or becoming, thus fabricating an *evolving God* objectivized in the world and history. Saying that for Hegel "All comes from God and all is in God," Schmidt correctly denominates Hegel's viewpoint as "dialectical Panentheism."³⁴ What is distinctive is not so much Hegel's antitranscendence

31. G. W. F. Hegel, *Lectures in the Philosophy of Religion*, trans. E. B. Speirs and J. B. Sanderson (London: Kegan Paul, Trench, Trubner & So., 1895), I, 33.

32. *Evolutionary Philosophies and Contemporary Theology* (Philadelphia: Westminster Press, 1969), pp. 52-53.

33. *Lectures in Philosophy of Religion*, III, 108.

34. Cited in G. F. Thomas, *Religious Philosophies of the West* (New York: Charles Scribner's Sons, 1965), p. 280.

and pantheistic thrusts, but his clear emphasis upon the dynamic category of historical process and becoming: God evolves through the unfolding of historical development.

In addition to the above line of thought (represented basically as German idealism), which was achieving widespread cultural influence in Darwin's century, there was also the thrust of materialism. It is a very short step from Hegel's view that the infinite is manifested in the finite to the view that it is a projection of the finite. Hegel's student, Ludwig A. Feuerbach, took that step in his materialistic interpretation of his former professor. In Feuerbach, process descended from the realm of self-determination by the Absolute Spirit to the level of determination by natural forces. His naturalistic humanism emphasizes the movement from being to becoming without Absolute Spirit and places man's temporal life at the center of the process. Feuerbach has a materialistic view of man: the ego was taken to be a real, sensible essence, and indeed the body was the totality of man's existence. Man is what he eats, to quote his 1850 statement. Turning Hegel upside-down, Feuerbach denied that sensibility was "an attribute of the idea" and proclaimed that "only a sensible being is a real, true, being." Thus in his famous work, *The Essence of Christianity*, Feuerbach conceded, "I am nothing but a natural philosopher in the domain of mind."³⁵ He retained an emphasis upon historical process, but he made it a function of the natural world. Man was placed at the culmination point of the natural process. "Man has his highest being, his God, in himself . . . in his essential nature, his species."³⁶ Feuerbach confessed, "I, on the contrary, while reducing theology to anthropology, exalt anthropology into theology."³⁷ God is simply a "wish-being," a projection of man's subjective longings. "Religion is the dream of the human mind."³⁸ And for Feuerbach, "The culminating point of the principle of subjectivity is creation out of nothing. . . . Thus the creation of the world expresses nothing else than subjectivity, assuring itself of its own reality and infinity through the consciousness that the world is created, is a product of will."³⁹ God and creation are together dissolved into human subjectivity; therefore, preparing the way for the defection of later theologians, Feuerbach decrees "Certainly the act of creation does not suffice to explain the existence of the world or matter (the two are not separable), but it is a total misconception to demand this of it."⁴⁰ Creation by an objective, transcendent God is disqualified as an answer to origins. God is nothing more than the projection into the void of humanistic man's

35. Trans. George Eliot (New York: Harper and Row, 1957), p. xxxiv.

36. *Ibid.*, p. 281.

37. *Ibid.*, p. xxxviii.

38. *Ibid.*, p. xxxix.

39. *Ibid.*, pp. 101, 109.

40. *Ibid.*, p. 110.

highest ideals for himself. A further insightful preparation for the destructive work of evolutionary speculation is found in Feuerbach's making "Anthropology the mystery of Christian Theology."⁴¹ With the undermining of biblical anthropology, then, evolutionary thought would critically affect the whole of Christian theology. *The Essence of Christianity* later appeared in English translation, being published in London five years prior to the publication of Darwin's *Origin of Species*.

Marx and Engels, following Feuerbach, transformed the dialectical process discussed by Hegel, regarding it as the movement of matter. Engels said that with one blow Feuerbach "placed materialism on the throne again."⁴² For Engels the dialectical movement in nature was seen "as an historical process";⁴³ thus, "the real unity of the world consists in its materiality, and this is proved not by a few juggling phrases but by a long and protracted development of philosophy and natural science."⁴⁴ Karl Marx received a doctorate from Jena in the year that Feuerbach's above-mentioned work appeared in German publication; his thesis had been written on the early materialistic atomists, Epicurus and Democritus. As an atheistic Hegelian, Marx viewed history as a dialectical process of development, and he took criticism of religion as foundational to all true thinking. In 1848 he produced, with Engels, the influential *Communist Manifesto*, an expression of dialectical materialism. Marx was living in London and studying at the British Museum when Darwin's *Origin of Species* appeared. Forthrightly acknowledging affinities between Darwin's biological evolutionism and his own dialectical materialism, Marx proposed that *Das Kapital* (1867) be dedicated to Darwin, an "honor" Darwin prudently declined.

During the eighteenth century, materialism came to exercise a significant philosophical influence. The French encyclopedist, Denis Diderot, adopted the Heraclitean theory of flux, viewing the universe as a single, dynamic, physical system obeying immutable laws. He denied that any solution was reached in accounting for material phenomena by postulating a supernatural Creator. Instead, the transformation of the universe from chaos to ordered complexity was to be explained by the interaction of elementary particles. The historical development of life, consciousness, and thought from inert matter "overthrows all the schools of theology," said Diderot. By 1754 Diderot had devised a theory of natural selection

41. *Ibid.*, p. 336.

42. Cited by Hayden V. White, "Feuerbach, Ludwig Andress," *EP*, III, 192. Cf. Gary North, *Marx's Religion of Revolution* (Nutley, N. J.: Craig Press, 1968), pp. 42-44.

43. Frederick Engels, *Feuerbach: The Roots of the Socialist Philosophy*, trans. A. Lewis (Charles H. Kerr & Co., 1919), p. 102.

44. Frederick Engels, *Anti-Dühring*, trans. Emile Burns (International Publishers, 1939), p. 54.

(in "Thoughts on the Interpretation of Nature"); he hypothesized the sensitivity of matter to adaption, denied inexplicable gulfs between the natural orders (inorganic, organic, plant, animal, man), discussed the importance of inheritance of acquired characteristics in organic evolution, and (in "D'Alembert's Dream," composed in 1769) asserted that d'Alembert differed from a cow in terms of his peculiar evolution from parental germs. This monistic, energized, mechanized materialism was a clear foreshadowing of Darwin.⁴⁵ "D'Alembert's Dream" was posthumously published one year before Darwin stepped on board H.M.S. *Beagle*, where he began his investigations as a naturalist, ultimately leading him to write *On the Origin of Species*. Along with Diderot, Julien de La Mettrie and Heinrich Dietrich d'Holbach both advanced the cause of mechanistic materialism during the 1700's. The former envisioned man as a self-moving machine (*L'Homme machine*, 1748) and advanced a theory of stimulus-response in organisms. The latter, writing *Système de la nature* (1770) with such a pronounced antireligious thrust that it had to be published under false name (for both author and city of publication), asserted that matter had been in eternal motion and that different worlds were developed, by uninterrupted causal determination in nature, through different distributions of matter and motion. Four years prior to Darwin's publication of *Origin of Species*, the German materialist, Ludwig Buchner, wrote his famous *Kraft and Stoff*, wherein he maintained that all theories of supernatural creation must be rejected, that natural law is inviolable, and that motion is the eternal, inseparable property of matter. His hard determinism forced him to reduce mind to brain and to advocate the release of criminals from punishment. Buchner viewed Darwin's later publication as a striking confirmation of his naturalistic monism and atheism; Darwin's system, he said, is

the most thoroughly naturalistic that can be imagined, and far more atheistic than that of his despised predecessor Lamarck, who admitted at least a general law of progress and development; whereas, according to Darwin, the whole development is due to the gradual summation of innumerable minute and accidental natural operations.⁴⁶

Buchner was so impressed with Darwinism that he changed the subtitle of his own work in the fifteenth edition to "Principles of the Natural Order in the Universe." Thus we observe that materialism (with its themes of antitranscendence, monism, and dynamic process), was exercising a pronounced sway before and during the period of Darwin.

As seen in the previous survey, ideas and aspects of organic evolution were gaining popularity prior to the time of Charles Darwin. Among the

45. Cf. Norman L. Torrey, "Diderot, Denis," *EP*, II, 397-403.

46. *Sechs Vorlesungen über die Darwin'sche Theorie*, 2nd ed. (Leipzig, 1868), p. 125.

immediate precursors to Darwin should be included the following. Comte de Buffon, who in the mid-eighteenth century challenged the classification method of Linnaeus, held that there was no radical discontinuity between species or between animal and vegetable kingdoms; he denied divine teleology in nature and in his main work, *Histoire Naturelle*, promoted the concept of a struggle for existence. Darwin designates Buffon "the first author who in modern times has treated [evolution] in a scientific spirit."⁴⁷ Near the end of the eighteenth century, Chevalier de Lamarck saw life as possessing an immanent evolutionary drive throughout the historical process, formulated a law of use and disuse, and hypothesized the inheritance of acquired characteristics. A contemporary of Lamarck, E. G. Saint-Hilaire, advanced the idea of inherited influence of the environment upon the sudden production of new species (anticipating the later mutation theory of development). Robert Chambers anonymously issued a two-volume study, *Vestiges of the Natural History of Creation*, between 1843 and 1846, in which he taught that a progressive complexity in living forms (as reflected in layers of sedimentary rock) pointed to the operation of organic creativity; he also maintained that cosmic evolution was a fact. The book became remarkably popular in amateur science circles, thereby drawing the wrath of the professionals. Herbert Spencer advocated a Lamarckian theory of evolution in his book *Social Statistics*, published nearly a decade before Charles Darwin went to print; survival of the fittest was a notion Spencer gave early endorsement. Another very relevant precursor to the theory set forth by Charles Darwin was the teaching of his grandfather, Erasmus Darwin. In *Zoönamia*, he contended that the whole of nature was a family having one parent, a "primal filament" which existed long ago; he said that "evolution" was carried on by means of hereditary, acquired characteristics.⁴⁸ The struggle for existence (depicted (depicted in his poem, "The Temple of Nature")) is resolved through the metamorphosis of organisms whose sensitivity is stimulated by environmental factors. The key ideas of his grandson's theory were already present. It is to the credit of the older Darwin that he recognized the nature and source of the evolutionary hypothesis: "This idea of the gradual formation and improvement of the animal world accords with the observations of some modern philosophers."⁴⁹

In an age where philosophers were expressing their antitranscendence in decrees against supernatural creation, where science was beginning to make an incursion into the field of cosmology, where a monistic elimination of the Creator/creature distinction was being carried out, where the

47. *The Origin of Species*, Everyman Library (London: J. M. Dent, 1956), p. 7.

48. (Boston: Thomas & Andrews, 1803), I, Preface, 572 (cf. chap. 39, "Of Generation").

49. Cited by T. A. Goudge, "Darwin, Erasmus," *EP*, II, 296.

parallel thrusts of materialism and dynamic historical process (developmentalism) were gaining prominence, one might think that theology was certainly averse to these anti-creationist forces. But that would not be entirely accurate. In 1830 Friedrich Schleiermacher was accusing the Mosaic account of creation of being a primitive, mythological notion and saying that the old record must not be treated as historical.⁵⁰ He asked whether "the many revolutions in the province of philosophy as well as of the natural sciences, do not necessitate other definitions; in which case we need have no scruples in completely abandoning the credal expression."⁵¹ This capitulation of the authority of the revealed Scriptures to autonomous thought is made explicit by Schleiermacher:

The further elaboration of the doctrine of Creation in Dogmatics comes down to us from times when material even for natural science was taken from the Scriptures and when the elements of all higher knowledge lay hidden in Theology. Hence the complete separation of these two involves our handing over this subject to natural science, which, carrying its researches backward into time, may lead us back to the forces and masses that formed the world, or even further still.⁵²

He concedes to naturalistic science the sole right to answer the question of origins, and if science tells us that the Bible and orthodox creeds are mistaken, then so be it. Science has the last word, not biblical revelation. And as if this stance were not misguided enough, Schleiermacher goes on to mention, similar to the speculations we have examined above, the "evolving of the complex from the simple and of the organic from the elementary"; he says that "living mobile being must have existed and undergone a continuous development."⁵³ As a further parallel between Schleiermacher—the father of theological liberalism—and the philosophical tradition surrounding him, we should note that

The theology of religious liberalism was a theology of divine immanence. Total divine immanence is pantheism and the leaven of pantheism has been found in Schleiermacher, the first great theologian of religious liberalism.⁵⁴

Therefore, on all sides—philosophy, science, and theology—the way had been paved for the arrival of Darwinism in 1859. It is more than evident that Darwin's ideas were not novel; he simply painted a common philosophical and antitheistic position with a superficial cosmetic of scientific respectability. Charles Hodge was already aware, just a little

50. *The Christian Faith*, ed. H. R. Mackintosh and J. S. Stewart, 2nd ed. (New York: Harper and Row, 1963), pp. 143, 151.

51. *Ibid.*, p. 145.

52. *Ibid.*, p. 150.

53. *Ibid.*, pp. 154, 155.

54. Bernard Ramm, *A Handbook of Contemporary Theology* (Grand Rapids: Wm. B. Eerdmans Publishing Co., 1966), p. 64.

over a decade after the appearance of Darwin's *Origin of Species*, that evolutionary speculation was surviving the critical attacks upon it because of its "essential harmony with the spirit of the age. . . ." ⁵⁵ The acceptance of the theory of evolution stemmed from the milieu created by philosophic opinion—speculation fostered by men like Spinoza, Kant, Fichte, Goethe, Krause, Hegel, Feuerbach, Engels, Diderot, La Mettrie, d'Holbach, Buchner, and Schleiermacher; Darwin's scientific surmises had been anticipated by men like Buffon, Lamarck, Saint-Hilaire, Chambers, Spencer, and his own grandfather. Men were living in the age of Darwinism *prior* to the publication of Darwin's book. And the philosophic developments which appeared subsequent to the acceptance of Darwin's theory of evolution had *already* been manifested by 1859.

Evolution as a Religious Presupposition

Charles Darwin had early in his life defected from the study of theology at Cambridge. Instead, he said in his autobiography, he had in him "a burning zeal to contribute to the noble structure of Natural Science."⁵⁶ From 1831 to 1836 he worked as a "naturalist, without pay," upon the H.M.S. *Beagle* as it voyaged through the Southern Hemisphere. During the extended trip, Darwin polemicized freely with the ship's devout captain on religious matters⁵⁷ and confirmed his doubts about the previous view of natural history, well illustrated by the assertion of John Ray (1627–1705), English naturalist and theologian, that "the number of true species in nature is fixed and limited . . . constant and unchangeable from the first creation to the present day."⁵⁸ Darwin formulated his fundamental theory of evolution within two years of the end of the *Beagle's* voyage. By that time he had also declared the doctrine of everlasting punishment to be "a damnable doctrine"⁵⁹ and rejected the veracity of the Gospels' miracle accounts. At the time of writing *Origin of Species*, Darwin was a rigorous opponent of any divine intervention in the course of nature; he called the doctrine of special creation "a curious illustration of the blindness of preconceived opinion"⁶⁰ and banished any thought of divine control and

55. *Systematic Theology* (Grand Rapids: Wm. B. Eerdmans Publishing Co., [1871–1873] 1968), II, 15.

56. Cf. Goudge, "Darwin, Charles Robert," *loc. cit.*

57. Cf. H. E. L. Melers, *FitzRoy of the Beagle* (Mason & Lipscomb 1974).

58. Cited by Green, *op. cit.*, p. 128; cf. C. E. Raven, *John Ray, Naturalist, His Life and Works* (Cambridge: University Press, 1942). Ray's other works are worth noting for their theological commitment: *The Wisdom of God Manifested in the Works of Creation*, 4th ed. (London, 1704); *Three Physico-Theological Discourses*, 3rd ed. (London, 1718).

59. Interestingly, T. R. Malthus, from whom Darwin derived the crucial theoretical model in which to explain evolution, also rejected the doctrine of hell (after a long devotion to the natural theologian and proto-utilitarian, William Paley).

60. *The Origin of Species by Means of Natural Selection, or the Preservation of Favored Races in the Struggle for Life*, 5th ed. (London, 1869), p. 571.

direction (teleology) of historical development (cf. "no shadow of reason can be assigned for the belief that variations . . . were intentionally and specially guided").⁶¹ At best Darwin was a deist (which is, even at best, a full repudiation of God's natural and special revelation), but he later abandoned even this weak theological position for sheer agnosticism, saying "the whole subject is beyond the scope of man's intellect. . . . The mystery of the beginning of all things is insoluble by us"⁶² (thus admitting that his rationalistic theory required an irrationalistic foundation). Interestingly, the man who formulated the theory of natural selection simultaneously with Darwin, Alfred R. Wallace, broke with Darwin and announced that natural selection does not apply to man or his mental powers and that a spiritual essence came into action at the appearance of man (thus holding to *theistic evolution*: "A superior intelligence has guided the development of man in a definite direction, and for a special purpose. . . ."). Darwin immediately, though quietly, decried this view as a failure of nerve and a disdainful hankering for miracles.⁶³ Nothing was to interfere with the determinism of natural law, and nothing was to break the continuity of man with the animal kingdom from which he evolved (i.e., man cannot be a unique being, a special creation—a view which repudiates the clear revelation of God internal to man as created in God's image). This outlook is just as essential to modern day evolutionism:

Teilhard points out that just as there is no absolute line of demarcation between the mega-molecule, the virus, and the living cell, so there is no absolute discontinuity between the animal's nervous system, the material support of its consciousness, and that of man.⁶⁴

It is clear, not only from Darwin's adherence to rigid uniformity (regarding both natural law and zoological taxonomy), but from his approach to biology as a neutral area of investigation, that his theory was a direct repudiation of Christian theism.

Darwin's wonderful image of the Tree of Life inspired biologists to see their subject as a *unified* field of study, while his example gave them the courage to think about it as a *neutral* field of study, untrammelled by extra-scientific conceptions.⁶⁵

61. *The Variations of Animals and Plants Under Domestication* (New York: 1868), II, 515-516.

62. Cited by Goudge, *op. cit.*, p. 295.

63. Morton O. Beckner, "Darwinism," *EP*, II, 300-301; cf. T. A. Goudge, "Wallace, Alfred Russell," *EP*, VIII, 276. Interestingly, Wallace was fascinated by and engaged in spiritualism and psychical research.

64. Michael M. Murray, *The Thought of Teilhard de Chardin* (New York: Seabury Press, 1966), p. 18.

65. W. T. Jones, *A History of Western Philosophy* (New York: Harcourt, Brace, and World, 1952), II, 924.

Darwin would keep nature untrammelled by God and His clear revelation. Scripture declares that God's omnipotence and divinity are clearly revealed in the natural world; He is its Creator and Sustainer as well as the One in whose image we are specially created. Darwin's outlook was an attempt to efface this influence and revelation by suppressing the truth in unrighteousness.

Quite obviously, then, evolution is a theory with far-reaching religious implications and commitments; its theological assumptions and effects cannot be overlooked. Evolutionists have understood the doctrine of creation as implying the death of all autonomous science,⁶⁶ and they affirm "It hardly needs saying that Darwinism is incompatible with any literal construction put upon either the Old Testament or the New Testament."⁶⁷ Biblical creationism is accurately pitted against scientific evolutionism in their outlook. The logical antithesis between the two⁶⁸ has always been recognized. In 1873 President Barnard of Columbia University explained, "If organic evolution were true, then the existence of God was impossible."⁶⁹ We saw above that the German materialist, Buchner, took Darwinism to establish that conclusion. Only a year after the publication of Darwin's *Origin of Species* Dr. Asa Gray wrote:

The proposition that things and events in nature were not designed to be so, if logically carried out, is doubtless tantamount to atheism. . . . If Mr. Darwin believes that the events which he supposes to have occurred and the results we behold were undirected and undesigned, or if the physicist believes that the natural forces to which he refers

66. Ronald Campbell Macfie, *Theology of Evolution* (London: University Press, 1933), p. 103.

67. Beckner, *op. cit.*, p. 304.

68. This antithesis admits of no synthesis as long as one refrains from reconstructing the antithetical members. Admittedly some have tried to synthesize evolution to creation as the mode of God's operation; however, this requires a reconstruction of the antithetical member under discussion (*viz.*, biblical creationism). Some creation ideas might be made evolutionary, but the biblical teaching could be made so only by a discriminating (rather than unconditional) subjection to the words of Christ or by a candid spurning and remodeling of orthodox hermeneutics. Robert L. Dabney's words should ever be kept in mind in this regard:

Other pretended theologians have been seen advancing, and then as easily retracting, novel schemes of exegesis, to suit new geologic hypotheses. The Bible has often had cause here to cry, "Save me from my friends." . . . As remarked in a previous lecture, unless the Bible has its own ascertainable and certain law of exposition, it cannot be a rule of faith; our religion is but rationalism. I repeat, if any part of the Bible must wait to have its real meaning imposed upon it by another, and a human science, that part is at least meaningless and worthless to our souls. It must expound itself independently; making other sciences ancillary, and not dominant over it [*Lectures in Systematic Theology* (Grand Rapids: Zondervan Publishing House, [1878] 1972), p. 257].

69. Cited in Loren Eiseley, *Darwin's Century* (New York: Doubleday & Co., 1958), p. 193.

phenomena are uncaused and undirected, no argument is needed to show that such belief is atheistic.⁷⁰

The Presbyterian theologian, Robert L. Dabney, made a similar observation, saying, "If you persist in recognizing nothing but natural forces . . . it will land you, if you are consistent, no where short of absolute atheism."⁷¹ Because Darwinism attempts to obliterate or ignore the revelation of God the Creator in nature and man, Charles Hodge said of it, "The system is thoroughly atheistic—as much as that of Epicurus and Comte."⁷² By opposing the biblical account of creation and denying the evidences for creation in the world, evolutionism was properly understood to be contrary to Christian theism. Darwinism is a religious doctrine (since it teaches something about theology and revelation) inclusive of biological speculation; it is in competition with the theological system of Scripture. T. H. Huxley, "Darwin's bulldog," was an avid follower of the unity-of-science thesis, materialistic determinism (identifying mental events as brain processes), and Spinoza's conception of god. Huxley fully realized that, by his endorsement of evolution, he had to take up arms against scriptural teaching; he had chosen certain assumptions and methods and proceeded upon a journey to explore the province of natural knowledge,

yet I found that, whatever route I took, before long I came to a tall formidable-looking fence. Confident as I might be in the existence of an ancient and indefeasible right of way, before me stood the thorny barrier with its comminatory notice board—"No thoroughfare—By order, Moses." . . . The only alternatives were to give up my journey—which I was not minded to do—or to break the fence down and go through it.⁷³

And so Huxley, preferring to stick to his autonomous presuppositions and aims, denounced the Mosaic teaching about the creation of the world by the transcendent, personal God.

Therefore, the popular reception of Darwinian evolution came about because Darwin was riding the crest of a wave that was already crashing forcefully upon the shores of nineteenth-century thought. There were two tides from which this wave surged. First, there was current philosophical speculation for which he, by concretely embodying it in a field of venerated interest, gained the respectability of purported scientific verification.

70. *Atlantic Monthly*, October, 1860, pp. 409, 416. That the protasis of Gray's conditional is satisfied can be seen not only from the quote at note 61 above, but also from Gray's own articles in *Atlantic Monthly* for July, August, and October, 1860; Huxley saw Darwin's book as the death blow of teleology: "Criticism on *The Origin of Species*" in *Lay Sermons & Addresses* (London, 1870), p. 330; cf. *EP*, II, 295, 304.

71. *Op. cit.*, p. 261.

72. *Op. cit.*, pp. 15, 16.

73. *Science and Christian Tradition*, cited in Jones, *loc. cit.*

As we have pointed out, in the nineteenth century the concept of development was in the air. Darwinism caught this interest and focused it on a specific biological problem; in doing so it brought to bear an immense amount of concrete evidence and so "proved" . . . what had earlier been only a philosophical hypothesis.⁷⁴

Secondly, there was the ground swell of an urge to find a way of eliminating Scripture's creationist teaching and to put out of mind the influence of God. Huxley admitted this freely:

We wanted not to pin our faith to that or any other speculation, but to get hold of clear and definite conceptions. . . . The *Origin* provided us with the working-hypothesis we sought. Moreover, it did us the immense service of freeing us forever from the dilemma—refuse to accept the Creation hypothesis and what have you to propose that can be accepted by any cautious reasoner?⁷⁵

Whether true or not, Darwin's theory revealed a way to avoid creationism; Huxley hailed *Origin of Species* as "a flash of light which, to a man who has lost himself in a dark night, suddenly reveals a road that, whether it takes him straight home or not, certainly goes his way."⁷⁶ Wilbert H. Rusch has correctly analyzed the situation in saying:

So it seems as if Darwin's prime claim to fame lies in this, that at the precise time when fear and dislike of God was on the increase he happened to synthesize the previous evolution theories into a single presentation, clothing it in a hypothesis that seemed adequate to explain the marvelous adaption of living things, by the mere action of natural forces, without the necessity of bringing in divine intervention.⁷⁷

Almost a century ago, Robert L. Dabney concluded that "'Darwinism' happens just now to be the current manifestation, which the fashion of the day gives to the permanent anti-theistic tendency in sinful man."⁷⁸ By comparing evolution's advantages to creationism, said George Bernard Shaw, "the world jumped at Darwin." Surely it did. The first edition of *Origin of Species*, consisting of 1250 copies, made its publication appearance on November 24, 1859—and sold out on the first day, much to the surprise of his publisher, John Murray, who had originally suggested that Darwin write a book about pigeons instead of evolution.

As bringing together the rising philosophy of antitranscendent world process and the popular desire to eradicate the teaching of Scripture, evolutionism was a religious position. As a new interpretive worldview,

74. Jones, *op. cit.*, p. 921.

75. Cited in W. C. Dampier, *A History of Science* (New York: Cambridge University Press, 1944), p. 299.

76. *Life and Letters of T. H. Huxley*, ed. Leonard Huxley, 2nd ed. (London: 1903), I, 245-246.

77. "Darwinism, Science, and the Bible," *Darwin, Evolution, and Creation*, ed. Paul Zimmerman (St. Louis: Concordia Publishing House, 1959), p. 22.

78. *Op. cit.*, p. 37.

evolutionism was a presupposition (rather than a scientifically established truth). Evolution was not suggested simply by an examination of the known facts; it arose, as Darwin disclosed, only after a speculative, postulated theory had provided him with the crucial plank for his own theory. In his autobiography he says that the supposition he needed for explaining specie origination came when, "In October 1838, I happened to read for amusement Malthus on Population." T. R. Malthus wrote two important essays on the principles of population wherein he expounded a supposed struggle for existence that promised population doom instead of the utopian vision seen by some (e.g., Rousseau, who was known by Malthus' father). Malthus was an alarmist who set forth a speculative thesis which, by myopic restriction of the factors playing upon population, has been demonstrated to be false in terms of biology and history.⁷⁹ Darwin says that in reading Malthus, "it at once struck me that under these circumstances favorable variations would tend to be preserved and unfavorable ones destroyed. The result of this would be a new species. Here then I had a theory by which to work."⁸⁰ (Significantly, A. R. Wallace, the co-discoverer of the theory of natural selection, had also come to this conclusion by reading Malthus, as he states in his autobiography, *My Life*). In *Origin of Species* he said, "It is the doctrine of Malthus applied with manifold force to the whole animal and vegetable kingdom."⁸¹ Thus it turns out that Darwin's biological insight stems from sociological guesswork (and a false guess at that). It comes as no surprise to learn, then, that when Darwin got around to elaborating his theory of natural selection (for which the speculation of Malthus gave the hint) he said, "In order to make it clear how, as I believe, natural selection acts, I must beg permission to give one or two *imaginary* illustrations."⁸² Darwin would not have had to beg his readers' permission if he would have had biological evidence as backing for his theory. The fact is that Darwinism, despite its boast of scientific proof, is a theory erected upon a speculative supposition and supported by imaginary evidence; it does not establish historical factuality but merely gives us a "way of looking" at the world. Darwin, knowing that he had no direct evidence for evolution, said that the theory was unsatisfactory unless its mechanism could be explained;⁸³ his explanation (in contrast to that of Lamarck, which he unkindly ridiculed) was natural selection. Darwin's comment is misleading, for a theory which merely

79. See Kenneth Smith, *The Malthusian Controversy* (London: Routledge & Kegan Paul, 1951) and R. J. Rushdoony, *The Myth of Overpopulation* (Nutley, N. J.: Craig Press, 1969), pp. 22ff.

80. Cited in Jones, *op. cit.*, p. 922.

81. 6th ed. (New York: A. L. Burt, n.d.), p. 60.

82. *Ibid.*, p. 83 (italics added).

83. W. R. Thompson, Introduction to Everyman edition, *The Origin of Species* (London: J. M. Dent, 1956); cf. Beckner, *op. cit.*, p. 297.

shows how something *might* have happened would still be quite unsatisfactory as grounds for holding that the process was historically operative and as a foundation for further research and scientific conclusions. But that logical flaw can be overlooked. In the face of Jenkin's refutation of natural selection as the explanation of specie origination⁸⁴ Darwin was forced to abandon even this possibility. Darwin wrote, "Fleeming Jenkin has given me much trouble," and he later had to admit to Wallace: "Jenkin argued in the *North British Review* against single variations ever being perpetuated, and has convinced me."⁸⁵ Not many people are aware that Darwin was forced to retreat to Lamarck's notion of inheritance of acquired characteristics and the pangenes (Darwin called them "gemmules") theory of Democritus (c. 400 B.C.). Democritus was refuted by Aristotle,⁸⁶ and Lamarck was refuted by Mendel's laws, August Weismann, and modern genetics.⁸⁷ It made little difference that Darwin had earlier laughed at Lamarck's suggested mechanism. Explaining a mechanism was the only way to support evolution and the theory of evolution had to be salvaged (even at the cost of possible embarrassment); it was not the facts but the "way of looking" which was important. Thus, Darwin ran from imagination (Malthus) to imagination (natural selection) to imagination (Lamarckianism), for men will rather be sent on a fool's errand than to obey and submit to the revelation of the living God.

The conflict between Darwinism and biblical Christianity was a conflict between presuppositions—between foolish imagination and God's clear revelation. Because the evolutionary commitment ran so deeply in people, they were ready to affirm Darwinism (i.e., anticreationism) no matter what the facts might be; the facts were (as always) interpreted in the light of one's presuppositions. Within seven months of the publication of *Origin of Species*, Darwin's book had been thoroughly refuted. In the June and July issues of *Frazer's Magazine* for 1860, William Hopkins unmasked Darwin's pseudo-scientific demonstration, pointing out that Darwin had not adduced a single fact in proof of his theory; Darwin's book was an instance of sheer *philosophical* speculation and not a treatise in serious science. In the July issue of the *American Journal* for 1860, the internationally renowned naturalist, Louis Agassiz, controverted the evolu-

84. Fleeming Jenkin, "Origin of Species," *North British Review* XLVI, 1867, pp. 149-171. An individual showing a variation more favorable than that of his neighbors would soon lose it by crossing.

85. Francis Darwin, ed., *Life and Letters of Charles Darwin* (London: John Murray, 1888), p. 379.

86. For example, if acquired characteristics are transferred to one's descendants by means of pangenes from the various parts of the body which enter the male semen, how could a child born to a man who lost a limb be born with both limbs?

87. Cf. H. G. Cannon, *Lamarck and Modern Genetics* (New York: 1960); Rusch, *op. cit.*, p. 24; Bolton Davidheiser, *Evolution and the Christian Faith* (Grand Rapids: Baker Book House, 1969), pp. 224ff.

tionary theory from the geological record, saying that there was no evidence of transmutation and uninterrupted blending of types but instead of definite specie classifications; he concluded:

Until the facts of nature are shown to have been mistaken by those who have collected them, and that they have a different meaning from that now generally assigned to them, I shall therefore consider the transmutation theory as a scientific mistake, untrue in its facts, unscientific in its method, and mischievous in its tendency [p. 154].

In the *Proceedings of the Literary and Philosophical Society of Liverpool during the Fiftieth Session* (1860–1861), Dr. Collingwood defends the criticism leveled by Agassiz against evolution in the *Annals and Magazine of Natural History*. And thus within a year an abundance of stringent rebuttals of Darwin's book were being published. And the evolutionists fully recognized their lack of scientific footing. In the fifth edition of *Origin of Species*, Darwin conceded that "the several difficulties" with his thesis (including the geological refutation) were "all undoubtedly of the most serious nature."⁸⁸ Huxley recognized the same:

In answer to the question "What does an impartial survey of the positively ascertained truths of paleontology testify in relation to the common doctrines of progressive modification?" I reply: *It negatives these doctrines*, for it either shows us no evidence of such modification or demonstrates such modification as has occurred to have been very slight.⁸⁹

And yet these men continued to hold and propagate evolutionary commitments. So firm was Huxley's presupposition of evolution that in one assertion he tells us that the utter lack of evidence for natural selection is surely no bias against Darwin's views!⁹⁰ In the course of a lecture before the British Association, Huxley demonstrated that spontaneous generation had never been proven; yet he said that, if he looked into the far past, he expected to find "the evolution of living protoplasm from not living matter."⁹¹ Lack of evidence was no hindrance to belief in evolution; this is evident.

But why shouldn't a lack of concrete evidence hinder a belief in evolution? It is instructive to note how Darwin answered objections to his theory. He granted that the difficulty with supposing mind to have evolved from matter was "insuperably great"⁹² and of supposing a complex organ like the eye to have developed through natural selection was "enough to stagger any one."⁹³ He responded to these and many other tenacious

88. *Op. cit.*, p. 383.

89. *Lay Sermons, Addresses, and Reviews* (New York: Appleton, 1879), p. 225 (italics added).

90. *Lay Sermons and Reviews*, p. 323.

91. *Athenaeum*, September 17, 1870, esp. pp. 376, 378.

92. *The Origin of Species*, 5th ed., p. 545.

93. *Ibid.*, p. 251.

defects by appealing to "supposition,"⁹⁴ saying that "there is no logical impossibility"⁹⁵ in his supposition, and then depending on the unlimited duration of "the long course of ages."⁹⁶ He says:

The chief cause of our natural unwillingness to admit that one species has given birth to other and distinct species, is that . . . the mind cannot possibly grasp the full meaning of the term of even ten million years; it cannot add up and perceive the full effects of many slight variations accumulated during an almost infinite number of generations.⁹⁷

That is, Darwin's only defense was to revert to the fundamental pre-suppositions of his thought: abstract formal logic correlated with historical contingency. His imagination postulated an anti-creationist theory; the theory meets the criteria of possibility (logic) and, given that chance is operative over an infinitely long period, *anything* can happen. Therefore, evolution is indefeasible. However, a great price has to be paid for this Pyrrhic victory. The principles of unity and identity involved in formal logic either cancel or they obviate any interaction with the principles of diversity and difference involved in contingency, and *vice versa*. Either the particularity of the world is illusory or its intelligibility is precluded. If evolution took place, then it cannot be understood rationally; if evolution can be understood, it cannot have taken place. By founding his speculation in a dialectic of abstract unity and unrelated diversity, of rationalism and irrationalism, the evolutionist impales himself on the horns of a relentless dilemma. He answers the difficulties with his theory by retreating to ever greater difficulties; whereas it seems that the evolutionist was not predicating things *truly* of man's origin, now the evolutionist *cannot predicate anything* at all. Not only was Darwin's theory a matter of philosophical speculation rather than scientific investigation, it was a philosophy founded upon self-vitiating presuppositions. Such is perennially the foolish price paid for suppressing the clearly revealed truth about God the Creator.

Thomas Kuhn explains that when a group of thinkers who endorse a particular model for their field (permitting coherence between the various facts, methodological procedures and standards, evaluative norms, etc.) are confronted with a disturbing anomaly which does not fit the pattern expected, novel thinking leads to the replacement of the previous model. The older theoretical model, which had been useful for organizing and disciplining (through methods and criteria) the field, is now replaced by a new paradigm which, while incompatible with the previous point of view, is not perplexed with the newly perceived anomaly, simply because the

94. *Ibid.*, p. 550.

95. *Ibid.*, p. 251.

96. *Ibid.*, p. 564.

97. *Ibid.*, p. 570.

fundamentals of the field of inquiry have been reconstructed in order to deal with the anomaly. As the title of Kuhn's book indicates, this is *The Structure of Scientific Revolutions*.⁹⁸

The British physicist, John Tyndall, was a naturalistic agnostic influenced by the philosophy of Fichte; he is well known from two famous speeches he delivered: "The Scientific Uses of Imagination" (1870) and the Presidential Address to the British Association for the Advancement of Science (1874). He maintained that although there is no evidence for spontaneous generation, one who believes in the continuity of nature must "cross the boundary of the experimental evidence" and affirm that life and mind were *latent in matter*; in this way evolution can replace the creation doctrine. (This would seem to require that "simple" matter was actually fantastically complex, thus negating the "simple to the complex" theory of development.) However,

the process must be slow which commends the hypothesis of natural evolution to the public mind. For what are the core and essence of this hypothesis? Strip it bare, and you stand face to face with the notion . . . that the human mind itself—emotion, intellect, will, and all their phenomena—were once latent in a fiery cloud. Surely the mere statement of such a notion is more than a refutation. . . . Surely these notions represent an absurdity too monstrous to be entertained by any sane mind. . . . These evolution notions are absurd, monstrous. . . .⁹⁹

Despite this fact, Tyndall promoted evolutionary commitment with zeal. The acceptance of evolution would require a radical readjustment of our patterns of thought in order to escape its appearance of absurdity. We must drop, said Tyndall, the distinction between mind and matter and "consider them, in fact, as two opposite faces of the same great mystery . . . the Eternal Fact of the Universe." This suggestion certainly flies in the face of a most obvious difference between the attributes of mental processes and the attributes of material processes, and the difference between the informal logic of mind-discourse and that of matter-discourse, but the replacement of the previous paradigm with a new model is justified by the great need the naturalist has to affirm evolution. Tyndall tells us that men were ready to alter their presuppositions in order to secure the evolutionary theory: "Without this total *revolution* of the notions now prevalent, the evolution hypothesis must stand condemned; but in many profoundly thoughtful minds such a revolution has already occurred."¹⁰⁰ Along with this, we should add the observation that even T. A. Goudge concedes that Darwinism was opposed at first because new modes of explanation, new conceptions, new procedures, and new standards of proof were used to buttress the

98. 2nd ed. (Chicago: University of Chicago Press, 1970).

99. *Athenaeum*, September 24, 1870, p. 409.

100. *Ibid.*, (*italics added*).

argument for evolution (i.e., it required a new paradigm of thought for science); by 1880, however, says Goudge, the older model had been supplanted by the evolutionary one.¹⁰¹ M. O. Beckner concurs that the advent of Darwinism was accompanied by "differences between the climate of opinion—the ordinary presuppositions, ideas about the proper pattern of argument, assumptions as to proper method, in short, the world view" which separates pre-Darwinian science from that of today.¹⁰² The acceptance of evolutionary speculation was not grounded on any sterling scientific credentials which the theory could present; it required nothing less than a "scientific revolution." In this way, evolutionary speculation came to exercise an influence upon philosophy—encouraging it in its progressive obsession with an orientation toward process. Eric Rust points out:

From being a useful concept for the understanding of biological development, "evolution" came to be regarded as a model in the light of which the universe might be comprehended. The ambitious attempt of Herbert Spencer to construct a philosophical system in this way stands as an indication of how soon the "model" caught fire in philosophical circles.¹⁰³

Therefore, we must conclude that the theory of evolution was taken to be a *presupposition* in terms of which the scientific evidence *had to be interpreted*, rather than a scientific proposal subject to the restraint of the evidence. Kaminsky correctly observes: "It is fairly clear that the theory of evolution had the same logical status for Spencer as the dialectic had for Hegel: no evidence was to be allowed to repudiate the doctrine."¹⁰⁴ This was undeniably the case in Darwin's own day, and it is still the case today. Evolutionism has not surmounted the strong arguments that were initially brought against it. It still cannot explain the mechanism of evolution, the taxonomic gaps of the fossil record, avoid contradictions with known genetic principles, explain the appearance or (in light of entropy) eternality of matter, the emergence of life, the emergence of self-conscious intelligence, or the emergence of morality.¹⁰⁵ The modern evolutionist is just as gratuitous in his commitments as the evolutionist of last century. For example, Theodosius Dobzhansky claims to be able to explain evolution "if the assumption is made that life arose from matter only once."¹⁰⁶ Dr. Thompson says in his Introduction to a current edition of *Origin of*

101. *Op. cit.*, pp. 294-295.

102. *Op. cit.*, p. 302.

103. *Op. cit.*, p. 67.

104. Jack Kaminsky, "Spencer, Herbert," *EP*, VII, 527.

105. Enough literature is available on these persistent problems in any theory of evolution that there is little need for rehearsal of them here. Generally reliable titles are available from Presbyterian and Reformed Publishing Co., Concordia Publishing House, and the Creation Research Society.

106. "Species After Darwin," *A Century of Darwin* (London: 1958), p. 22.

Species: "Personal convictions . . . are presented as if they were proofs."¹⁰⁷ Scientists still recognize the inalienable flaws of the theory; for example, Paul Westmeyer declares: "Evolution is useful but it is a myth."¹⁰⁸ Yet evolution continues to be propagated, as Paul Lemoine complains:

The theories of evolution with which our studious youth have been deceived, constitute actually a dogma that all the world continues to teach; but each in his speciality, the zoologist or the botanists ascertains that none of the explanations furnished are adequate. . . . It results from this summary that the theory of evolution is impossible. . . . But evolution is a sort of dogma which the priests do not believe, but maintain for their people.¹⁰⁹

The presuppositional status of the evolutionary theory is perhaps nowhere quite as obvious as in Pierre Teilhard de Chardin. He says that even if all the specific content of the evolutionary explanation of life were to be demolished, evolution would still have to be taken as our fundamental vision; defenders of evolution "must never let themselves be deflected into *secondary* discussions of the scientific 'hows' and the metaphysical 'whys.'"¹¹⁰ Evolution has become the unassailable, authoritative, logically primitive standard of truth: "Evolution has long since ceased to be a hypothesis and become a *general epistemological condition* . . . which must henceforth be satisfied by *every* hypothesis."¹¹¹ Instead of Jehovah's revelation, evolution has become the light in which men shall see light, for Teilhard confesses his faith in evolution as "a light illuminating all facts, a curve that all lines must follow."¹¹²

We had occasion above to indicate the religious character of this evolutionary presupposition. Jones noticed that scientists had "elevated Darwinism to the level of a religious dogma,"¹¹³ and Thompson concurs that "the concept of organic evolution was an object of genuinely religious devotion."¹¹⁴ The central thrust of the religion of evolution is to bar God's revelation from the universe, and from man's thought.

There is neither need nor excuse for postulation of non-material intervention in the origin of life, the rise of man, or any other part of the long history of the material cosmos. Yet the origin of that cosmos and

107. *Loc. cit.*

108. "Twentieth Century Mythology," *Chemistry*, January, 1965, p. 17.

109. *Encyclopedie Francaise* (Paris: Librairie Larousse, 1937), V, 82-83.

110. *The Vision of the Past*, trans. J. M. Cohen (New York: Harper and Row, 1967), p. 123 (*italics added*).

111. *Oeuvres*, II (1956), p. 298, cited in Piet F. Smulders, *The Design of Teilhard de Chardin*, trans. Arthur Gibson (The Newman Press, 1967), p. 30 (*italics original*).

112. *The Phenomenon of Man*, trans. Bernard Wall (New York: Harper and Row, 1959), p. 241.

113. *Op. cit.*, p. 925.

114. *Science and Common Sense* (New York: Longmans, Green & Co., 1937), p. 229.

the causal principles of its history remain unexplained and inaccessible to science.¹¹⁵

It would be better, according to evolutionary standards, to leave the question of origins unanswered than to confess the existence of the Creator God. A classic example of just this sort of religious apriorism is Karl Marx's attitude. In the early manuscript, "Private Property and Communism," part of the *Economic and Philosophical Manuscripts of 1844*, he denied the legitimacy of the question, "Who begot the first man, and nature as a whole? I can only answer you: Your question is a product of abstraction." These kinds of questions are dangerous to consistent religious evolutionists. Evolutionary speculation, just as much as Kant's immanentistic phenomenalism, is the natural man's ploy to keep the Creator's clear revelation suppressed and unacknowledged. Darwin gave illustration of this fact, maintaining openly in his second book, *The Descent of Man*, that man did not have any instinctive belief in God and denying that man's moral sense was God-given."¹¹⁶

Defection, Process, and Pantheism

One of the saddest chapters in the history of the rise of evolutionary philosophy and theology is the defection of so many major theologians in the face of Darwinism's driving onslaught. The attitude of Arthur Conan Doyle, that "Christianity must change or perish,"¹¹⁷ was assimilated into the theological thinking of many men. By 1925 a symposium of clergymen declared unflinchingly that when science changes, so must orthodoxy.¹¹⁸ Another "Babylonian Captivity" for the people of God had begun. Theologians declared that the question of origins had to be settled by biology and anthropology, not scriptural exegesis.¹¹⁹ The church was warned against resisting Darwinism: "To call himself reasonably well educated and informed, a Christian can hardly afford not to believe in evolution. . . . And to announce that you do not believe in evolution is as irrational as to announce that you do not believe in electricity."¹²⁰ Christian philosophers of religion like John Hick now proclaim that creationism "can no longer be regarded as a reasonable belief."¹²¹

115. George Gaylord Simpson, *The Meaning of Evolution* (New York: New American Library, 1951), p. 135.

116. *The Descent of Man and Selection in Relation to Sex* (Chicago: Encyclopedia Britannica, [1871] 1952), p. 593.

117. A. Conan Doyle, *The New Revelation* (London, 1918), p. 70.

118. *Evolution in the Light of Modern Knowledge: A Symposium by a Group of British Philosophers and Clergymen* (London: Blackie & Son, 1925), p. 486.

119. For example, Lapparent, "Prehistory," in A. Robert and A. Triscott, *Guide to the Bible* (Paris: Desclee & Co., 1955), II, 42.

120. Stanley Beck, "Science and Christian Understanding," *Dialog*, Autumn, 1963, pp. 316, 317.

121. *Philosophy of Religion* (New Jersey: Prentice-Hall, 1963), p. 37.

Emil Brunner grants science a privileged position of safety, saying, "We have to stress the fact that modern science (and this means the theory of Evolution) ought not to be opposed in the name of religion."¹²² Paul Tillich turns God's revelation away from the objective realm of the world altogether:

Knowledge of revelation does not increase our knowledge about the structures of nature, history, and man. . . . For the physicist the revelatory knowledge of creation neither adds to nor subtracts from his scientific description of the natural structure of things. . . . If revealed knowledge did interfere with ordinary knowledge, it would destroy scientific honesty and methodological humility. It would exhibit demonic possession, not divine revelation.¹²³

Although Karl Barth wrote four volumes on the doctrine of creation, he decried any connection between his exposition and the conclusions of science (*Church Dogmatics*, III/1, vii-viii)! Thieliicke explains this outlook, saying, "Faith and science do not contradict each other at all—simply because the assertions they make lie upon completely different levels."¹²⁴ What then are we to make of the biblical creation accounts? Their "truthfulness" has been salvaged and made immune from attack, not by a presuppositional apologetic which forces their claims home to the heart of man as the *necessary condition* of all knowledge and understanding, and as resting in the unavoidable and perspicuous revelation of God in nature and Scripture, but by holding that they are not historical accounts at all.¹²⁵ Indeed, Ronald Hepburn says, "It is of only secondary interest whether the world had a literal beginning, a first moment."¹²⁶ Supposedly the first text of God's inspired word is irrelevant to what follows! The real meaning of Genesis is not to be found in cosmology any longer but strictly in subjective theological feeling, as Langdon Gilkey teaches in *Maker of Heaven and Earth*:

The Christian doctrine of creation, therefore, expresses in theoretical language those positive religious affirmations which biblical faith in God makes in response to the mystery of the meaning and destiny of our creaturely finitude. . . . This is what the Christian means when he says, "I believe in God the Father Almighty, Maker of heaven and earth." This is what the idea of *creatio ex nihilo* is essentially "about."¹²⁷

According to Barth, the internal meaning of creation is the covenant of

122. *Christian Doctrine of Creation and Redemption (Dogmatics II)*, (London, 1952), pp. 39, 41.

123. *Systematic Theology* (London: Nisbet & Co., Ltd., 1951), I, 143.

124. *How the World Began* (Philadelphia: Muhlenberg Press, 1961), p. 64.

125. Tillich, *op. cit.*, p. 280.

126. "Creation, Religious Doctrine of," *EP*, II, 252.

127. Cited by Ramm, *op. cit.*, p. 29.

grace in Christ,¹²⁸ which is simply another example of his severe Christomonism. This evaporation of historical declaration in Genesis and subjectivizing of its teaching is one form of the theologians' utter deference to the forces of evolutionary speculation.

The other form of abject subjection to autonomous science which post-Darwinian theology took was the reinterpretation of Christianity in evolutionary categories. This kind of response to Darwinism began very early and later finds very striking parallels to the thought of Teilhard. In 1876 M. J. Savage penned *The Religion of Evolution* in order to teach that the God who is working in evolutionary process is both the beginning and the end thereof.¹²⁹ Two Scottish-born theologians, James McCosh and Henry Drummond,¹³⁰ taught that the work of spirit was the last and highest operation in a series of advances, that the whole system of nature is moving toward decreased quantity but increased quality, and that evolution elevates man to the position of the final goal of life. Lyman Abbott made an attempt to synthesize Christianity with evolution by saying that both evolution and theology aim to explain "God's way of doing things," which is really only one way of doing things at base. "His way may be described in one word as the way of growth, or development, or evolution. . . ." The price of this bewitching compromise, the destination toward which this path of a golden mean leads—the cash-value of this bargain—was the enslavement of theology: "In so far as the theologian and evolutionist differ in their interpretation of the history of life . . . I agree with the evolutionist."¹³¹ This shall always be the outcome when a theologian abandons his firm presuppositional foundation and attempts to come to terms with his opponents on (allegedly) neutral ground; in actuality the compromise is constantly enacted on the *opponent's* grounds, and the theologian has lost his sure footing. This is something the present-day advocates of theistic evolution should reflect upon with all due seriousness. They have everything to lose and nothing to gain by accommodating the theory of evolution, for at base it is nothing less than a totally anti-biblical religious presupposition. It is hard to know what legitimate grounds or motive Claus Westerman, for instance, could have in saying, "The concept of evolution is included in the course of creation."¹³² The proposals

128. *Dogmatics in Outline* (New York: Harper and Row, 1959), pp. 50-64.

129. (Boston: Lockwood, Brooks & Co., 1876).

130. Cf. McCosh, *The Religious Aspect of Evolution* (New York: Charles Scribner's Sons, 1890); Drummond, *Natural Law in the Spiritual World* (New York: James Pott & Co., 1904), and *The Ascent of Man* (New York: James Pott & Co., 1894).

131. *The Theology of an Evolutionist* (Boston: Houghton Mifflin Co., 1897), pp. 9-10.

132. *The Genesis Accounts of Creation* (Philadelphia: Fortress Press, 1964), p. 17.

for theistic evolution by men like L. Harold De Wolf¹³³ and Jan Lever¹³⁴ are accompanied by the infection of heterodox exegesis and theological aberration, which certainly cannot bring health to the church and its dogma as hoped. R. A. Quebedeaux mentions that a group of younger evangelicals in this day are evidencing an "increasing friendliness to modern science" through "mounting acceptance of theistic evolution in some form."¹³⁵ The surrender of biblical epistemology to an internally incongruous, centaur-like concept like theistic evolution manifests a lamentable theological shortsightedness. In light of the cultural aftermath of evolutionary thinking (for example, relativism,¹³⁶ decreased scientific integrity,¹³⁷ pragmatism,¹³⁸ the suppression of the individual in the interests of race,¹³⁹ and secularization¹⁴⁰), it is highly ironic to find such a compromise in a group of men desirous of bringing the effects of Christianity to bear upon the world. Genuine Christian reconstruction in all areas of life cannot begin to be accomplished without genuinely biblical building materials.

The *former* methods of theological defection from the epistemistic lordship of Christ, and from the responsibility to maintain the faith once delivered unto the saints, were (1) *abandoning* the world, and (2) *subjectivizing* exegesis. The *latter* methods of defection were: (1) becoming *absorbed in* the world, and (2) *compromising* exegesis. But by far the greatest capitulation to evolutionary speculation is expressed in the contemporary move to draw God into the developmental process. Canon Charles Kingsley maintained that Darwin allowed theologians to get "rid of an interfering God—a master-magician, as I call it," in favor of an "immanent, ever-working God." Beckner correctly commented:

The final step in this direction was to give God an even more intimate metaphysical connection with natural process. This step had been taken by previous philosophers—Spinoza and Hegel, for example; but it was repeated under the aegis of Darwinism by Bergson, Whitehead, and a number of Protestant thinkers.¹⁴¹

The development of *process thought* in this century and its absorption by

133. *A Theology of the Living Church* (New York: Harper & Bros., 1953).

134. *Creation and Evolution* (Grand Rapids: Internation Publications, 1958).

135. *The Young Evangelicals* (New York: Harper and Row, 1974).

136. Cf. Jones, *op. cit.*, p. 925; Edwar Caird, *The Evolution of Religion* (Glasgow: 1893), I, ix-x.

137. Thompson, *loc. cit.*

138. Philip P. Weiner, *Evolution and the Founders of Pragmatism* (Cambridge: Harvard University Press, 1949); John Dewey, *The Influence of Darwin on Philosophy* (New York: Henry Holt & Co., 1910).

139. Jacques Barzun, *Darwin, Marx, Wagner* (London, 1942), p. 106.

140. Dietrich Bonhoeffer, "The Non-religious Interpretation of Biblical Concepts," *A Reader in Contemporary Theology*, ed. J. Bowden and J. Richmond (Philadelphia: Westminster Press, 1967), esp. pp. 111-112.

141. *Op. cit.*, p. 304.

recent theologians brings the anti-creationist theory of evolution and its philosophic roots to full fruition in nothing less than pantheism.

Benedetto Croce, the Italian neo-idealist, maintained that the historical process of becoming (taught by Hegel) was the sole reality. His immanentism made man the focal manifestation of thinking spirit, since individual minds were Spirit thinking, history becomes philosophy, and philosophy removes from religion all reason for existing. Religion is submerged in the process of history. The concept of *emergence* was introduced by C. Lloyd Morgan and Samuel Alexander.¹⁴² Morgan had studied under T. H. Huxley and felt that a philosophic metaphysic should be explicitly formulated to be placed behind evolution. Both he and Alexander took evolution for their controlling metaphysical model and held that life and mind emerged from space-time matter. At a certain point of complexity, the evolving matter takes on a novel, qualitative attribute; thus, Alexander says that ascent takes place through complexity, but at each change of quality the complexity gathers itself into a new simplicity. The two greatest intellectual influences upon Alexander were Einstein and Spinoza (he said he would be content if "Erravit cum Spinoza" were written on his funeral urn). Spinoza's pantheism came to expression in Alexander's view that deity is "the next highest emergent quality which the universe is engaged in bringing to birth." "As actual, God does not possess the quality of deity but is the universe as tending to that quality."¹⁴³ Thus, Alexander formulated the idea of the universe as "God's body" and believed in an evolving deity.

Henri Bergson was born the year that Darwin's *Origin of Species* was published, and he was influenced greatly by Spencer early in his life. He had interests similar to those of Wallace, for he was once the president of the Society for Psychical Research. Ultimate reality is characterized by change, just as Heraclitus held, said Bergson; however, ultimate becoming is not cyclic (as with the ancient Greek philosophers) but a directed process in time. Bergson postulated an immanent "élan vital" (life-force) throughout the historical process. In contrast to Morgan and Alexander, Bergson said that the direction of emergence was from the life-dynamic to matter (rather than from matter to life and mind). In *Creative Evolution*,¹⁴⁴ however, Bergson revealed that his differences with the other two thinkers was only a family squabble, for he affirmed a pantheism just as they did. Drawing inspiration from Plotinus, Bergson identified God with the élan vital, a *current of consciousness* which penetrates matter and gives

142. See C. Lloyd Morgan, *Emergent Evolution* (London, 1923) and Samuel Alexander, *Space, Time, and Deity*, 2 vols. (London: Macmillan & Co., 1920).

143. *Ibid.*, p. 361.

144. Trans. Arthur Mitchell (New York, 1911).

rise to living bodies as well as determining the course of their evolution, the central purpose of which is man.

In connection with emergentism, it is noteworthy that its view that some events and changes are abruptly discontinuous with the past is inherently at odds with the key assumption of organic evolution. (It was the element of discontinuity—the mind of man—in Wallace's theory that so alienated Darwin.) This inconsistency has been unmasked by Wolfgang Kohler; however, Kohler realizes that in order to account for those factors which inspired the formulation of the emergentistic theory (especially mental qualities and events), he needs to hold to a form of pan-psychism.¹⁴⁵ In light of this resolution to the problem of accounting for mentality on the assumptions of materialism and the continuity of natural development, the comment made by Charles Hodge a century ago was both astute and prophetic. In response to the absurdity that mind should evolve from inorganic matter, Hodge said:

If you only spiritualize matter until it becomes mind, the absurdity disappears. And so do materialism, and spontaneous generation, and the whole array of scientific doctrines. If matter becomes mind, mind is God, and God is everything. Thus the monster Pantheism swallows up science and its votaries.

In terms of the history of thought Hodge was exactly right. Materialism and evolutionism, in order to account for mental qualities in reality, have been pressed to either emergentism (and ensuing pantheism) or to pan-psychism (which is functionally equivalent to pantheism). Evolutionary materialism *evolves into* pantheism!

Alfred North Whitehead was one of the most significant logicians, mathematicians, philosophers, and scientists of this century; he was born only two years after the appearance of Darwin's first book. According to his metaphysic, the universe is an organism of events (rather than a collection of material things spatio-temporally and externally related—as in the “fallacy of misplaced concreteness”). He thought that evolutionary philosophy repudiated materialism in favor of a process view of reality, wherein the “actual entities” or ultimate facts of nature are events, grouped into an interconnected network of prehensions. Mind pervades everything, and every event has a feeling for everything else; here, then, is panpsychism again. Eternal objects, for Whitehead, are dynamic essences which “ingress” in actual entities and give them their differentiated natures by supplying a subjective aim for the event and integrating its feelings into a “concrescence.” Whitehead takes *creativity* to be ultimate reality, and so each actual event is self-creative. God is a unique actual event, the first emergent of creativity, the principle of concretion (the arranger of the

145. “The Mind-Body Problem,” *Dimensions of Mind, A Symposium*, ed. Sidney Hook (New York: Collier Books, 1961), p. 32.

eternal objects). There is a physical pole in God, His experiencing of the actuality of historical events; by this He acquires realization of His consequent nature. This sounds somewhat like Hegel's Absolute Spirit which moves from abstract being through dialectic to self-determination. Also like Hegel, Whitehead says that "the world lives by its incarnation of God in itself."¹⁴⁶ This might also be likened to a dynamic version of Spinoza's Substance: "God and the World are the contrasted opposites in terms of which Creativity achieves its supreme task of transforming disjoined multiplicity . . . into concrescent unity."¹⁴⁷ Whitehead has developed a pantheism of creativity wherein God and the world are mutually necessary (the former as the arranger of eternal objects, the latter as the consequent nature corresponding to God's primordial being). God is an evolving event, the "great companion—the fellow sufferer who understands."¹⁴⁸ "Religion is the vision of something which stands beyond, behind, and within, the passing flux of immediate things."¹⁴⁹

Process philosophy, then, has a heavy element of religious dogmatizing in it. Whitehead claimed to have fused religion and science, emotional and conceptual experience, in his one-substance ontology. His metaphysic was based on descriptive generalization; he formulated his system to satisfy rational demands, to challenge (as a scientist) the assumptions of traditional physics, to make human feeling the root metaphor of a universally extended worldview. His theology was based on religious and moral intuition, asserting that a dipolar and finite god was involved in reciprocal interactions with world process. Whitehead seemed to hold out something for every school of thought. Later in the twentieth century, a theological cult would develop around Whitehead's thought, and even though it had abandoned biblical epistemology and metaphysics, it would present itself as salvaging Christian thought. Whitehead was in the same tradition as Alexander, Lloyd Morgan, and Bergson; his reputation ranked with Russell and Carnap. He was not anti-metaphysical; he did not fault God-talk. However, Whitehead's renowned philosophy could restore religion only by replacing the living God with a no-god, a "nothing," a "wind and confusion," which "made not the heavens" and thus cannot save (Isa. 41:24, 29; 45:20; Jer. 10:11). Long before process philosophy was made the source of a new theological tradition in America, C. Van Til had discerningly warned that Whitehead's philosophy could have no beneficial influence on theology (no more than idolatry could revive Old Testament Israel). In

146. *Religion in the Making* (London: Cambridge University Press, 1927), p. 140.

147. *Process and Reality* (London: Cambridge University Press, 1929), pp. 492-493.

148. *Ibid.*, p. 497.

149. *Science and the Modern World* (London: Cambridge University Press, 1932), p. 238.

The Princeton Theological Review XXV, 2, for April, 1927, Van Til concludes his review of Whitehead's *Religion in the Making* by saying:

For Theism it is important that God be not thus conceived as a universal realizing Himself in historic particulars; Theism's God is the self-sufficient creator of the "epochal occasions," or historic particulars. Our conclusion is that Dr. Whitehead's thought underneath its scintillating and even cryptical expression, conceals a strongly antitheistic tendency. When he made time and change a necessary aspect of all reality he gave possibility an independent metaphysical status; God could be no more than an aspect, an "element" or a "function" in reality as a whole. Theism makes God the source of possibility; only thus can the transcendence as well as the immanence of God be maintained; only thus is God qualitatively distinct from man; only thus is He personal; only thus is He God (p. 338).

In a previous portion of this study we noted that the philosophic *precursors* of Darwinism had associated with them a strong movement toward eradicating the distinction between Creator and creature and, in some cases, explicit pantheism. It is now evident that the philosophic *successors* to Darwinism embody this pantheistic theme as well. Evolutionism is a syndrome of beliefs and assumptions, a syndrome inclusive of (or tending toward) reducing God to the level of immanent world process or elevating the created order to the status of divinity. It is only to be expected that when twentieth-century theologians explicitly endorse evolution or process philosophy as their central model, the pantheistic (and panentheistic) motif should clearly stand out and command our attention.

Pierre Teilhard de Chardin was a trained scientist, a Jesuit paleontologist, and speculative theologian. By the time of his ordination, he was an avid reader of Bergson and later had association with the Bergsonian scholar, E. Le Roy. He held that matter at all levels has a psychic as well as physical aspect, by which he means (similar to Whitehead) that consciousness pervades all reality:

We are logically forced to assume the existence in rudimentary form (in a microscopic, i.e., an infinitely diffuse state) of some sort of psyche in every corpuscle, even in those (the mega-molecules and below) whose complexity is of such a low or modest order as to render it (the psyche) imperceptible.¹⁵⁰

Everything in the universe has a conscious inner force and a material external face ("coextensive with their Without, there is a Within to things"); the inner power is intangible and does not halt materialistic mechanism.¹⁵¹ Energy is the most primitive stuff of the universe and is responsible for the forward movement, the evolution, the increased complexity of all things.¹⁵² This complexification is accompanied by an

150. Teilhard, *Phenomenon of Man*, *op. cit.*

151. *Ibid.*, pp. 56, 62.

152. *Ibid.*, pp. 42, 64, 65.

involution of consciousness (greater internal unity and concentration) and thereby by qualitative jumps in development.¹⁵³ The process of human history is understood in these evolutionary categories. They also indicate the future of man. The noosphere (the thinking layer of evolutionary development where man now is) shall become involuted (through social interiorization) and converge upon a hyperpersonal unity of all things in God: the "omega point."¹⁵⁴ Man's "grand option" is to confront his destiny and take responsibility for spearheading evolution to a higher synthesis, a universalized and collectivized unity of mankind (beyond outdated individualism and nationalism) created through the energy of love which shall "superpersonalize" men.¹⁵⁵ Omega is this involuted point of total integration, "a superior form of pantheism."¹⁵⁶ The universe's evolution is climaxed in the Universal Christ:¹⁵⁷

Instead of the vague centre of convergence envisaged as the ultimate end of this process of evolution, the personal and defined reality of the Word Incarnate, in which everything acquires substance, appears and takes its place.¹⁵⁸

Christ is the inner principle of this process, the omega point reflected into the process and directing it by His spirit (that is, love). Thus, the universe is moving toward incorporation in Christ: Christogenesis. All men live in "the divine milieu"; that is, we are all surrounded by "an omnipresence which acts upon us by assimilating us in it, in the unity of the Body of Christ."¹⁵⁹ The world is in process, moving toward synthesis at the divine omega point; correspondingly Christ is completing himself in this process: "everything has continued to move because Christ has not yet completed His own forming. . . . The mystical Christ has not yet attained His full growth."¹⁶⁰ The goal of evolutionary history is nothing but the union of God and mankind in a suprapersonal, Christocentric pantheism. Of course, in actuality, Teilhard has achieved neither a Christian nor a unified outlook; by avoiding Scripture's testimony, assuming that the scientific enterprise is intelligible apart from God's revelation, and including all things in the process of incarnation, Teilhard has committed himself to a dialecticism as severe as that previously found in Darwin's thinking. Pure contingency and pure staticism are juxtaposed, nature

153. *Ibid.*, pp. 75, 301; cf. *Man's Place in Nature*, trans. Rene Hague (New York: Harper and Row, 1966), pp. 17-36.

154. *Phenomenon of Man*, pp. 322, 259.

155. *The Future of Man*, trans. Norman Denney (New York: Harper and Row, 1964), pp. 40, 54, 119; *Phenomenon of Man*, p. 222; *Man's Place in Nature*, p. 100.

156. *Phenomenon*, pp. 259, 322.

157. "How I Believe" (Peiping: H. Vetch, 1936).

158. *Future of Man*, p. 154.

159. *The Divine Milieu* (New York: Harper and Row, 1960), p. 101.

160. *Future of Man*, p. 305.

(man's past) and freedom (man's present) stand over against each other; naturalism and idealism confront one another. Teilhard attempts to synthesize these contrary poles, but he can do so only by introducing another dialecticism: evolutionary pantheism.

Since he insists that, as a scientist, he starts from the bottom, he can only project an absolute. And a projected absolute is no absolute. Teilhard knows that he needs a platform above human experience from which to view experience and relate its various aspects intelligently to one another. He tries to project such a platform but when he tries this his platform disintegrates into pure indeterminacy. . . . So far then as with his activism Teilhard leaves the necessitarianism of Thomas behind he does so by falling into pure irrationalism and indeterminism. And so far as he does not want pure irrationalism he can save himself from it only by the reintroduction of some of the Thomistic rationalism and determinism. . . . The final issue then is between /those who hold and those who do not hold/ that God has identified himself discernibly in history in Palestine as the creator and the redeemer of men. . . . It goes without saying that the final question therefore is whether the approach adopted by neo-orthodox Protestant and Roman Catholic thinkers is in any wise intelligible. . . . If man's intellect itself is derived, not from the creative fiat of God but from the cauldron of Chance, then what is the difference between right and wrong and how is intellectual contradiction possible? Predication of any sort is then out of the question. . . . And all would end in a mystery that is meaningless unless with Luther and with Calvin we presuppose the God who has really created and who does really control all things . . . and who has revealed himself directly in the I-it as well as in the I-thou dimension as the Saviour of both. . . . The true primacy of God and of his Christ cannot be found in the way that Pierre Teilhard de Chardin seeks for it. His Christ is but a vague ideal of the would-be autonomous man.¹⁶¹

Van Til has here insightfully taught that Teilhard's system of evolutionary speculation is neither good science, good philosophy, nor good theology. Apart from the presupposition of God's work as Creator of the world and Governor of history, a presupposition rooted in His revelation in the space-time realm (nature, Scripture, Christ), one cannot rationally order the *facts* or trust that man's intellect is competent to *understand* anything at all. Metaphysical chaos and epistemological darkness are thus central to Teilhard's evolutionary thought, and thereby the saving Christ of history is lost altogether. By not starting with the God who creates, Teilhard is prevented from knowing the God who redeems (from intellectual futility as well as spiritual death). Evolutionary theology, by its dichotomy between nature and grace, and then its contrived mystical-temporal synthesis, proceeds to destroy *both* nature and grace.

161. C. Van Til, *Pierre Teilhard de Chardin: Evolution and Christ* (Nutley, N. J.: Presbyterian and Reformed Publishing Co., n.d.), pp. 36, 41, 42, 43, 44.

Modern *process theology* is also in diametric opposition to biblical orthodoxy. Process theology completely deprives God of any transcendence whatever. Somewhat parallel to the demiurge of Plato's *Timaeus*, the god set forth by E. S. Brightman is charged with the task of subduing inchaotic matter. Here you do not have strict pantheism; however, you do have a god which is completely immanent in the historical process.¹⁶² This is kind of a half-way house to process theology which, reflecting the speculation of Krause (discussed above) affirms panentheism. The thrust of this outlook is summed up in the title of E. Baltazar's book, *God Within Process*. Not only is God within process, but "God literally contains the universe."¹⁶³ Thus, both God and the world (internal to Him) are subjected to time; H. N. Wieman declares that God is *purely temporal*.¹⁶⁴ As such He is subject to becoming, and the world He contains is a dynamic, changing process—as taught by Whitehead. God evolves. According to Hartshorne, the universe, even at the physical level, is fundamentally psychic; everything has a mental pole. H. W. Robinson had maintained that "'Matter' must be ultimately spiritual, however much lower its level of reality than 'Mind,'"¹⁶⁵ and various thinkers who have attempted a reconciliation between science and religion in recent years have been encouraged by the prospects of a panpsychic position.¹⁶⁶ Undergirding these proposals is the rejection of dualism and affirmation of an organic monism. Hartshorne writes that "All in some fashion respond to their environment. . . . The whole gamut of levels from atoms to man is for science basically one system."¹⁶⁷ Organisms, which all reflect a kind of internal social structuring, at the various levels of complexity have different capacities for adaptation and response to their environment; at the highest level one finds God, who is supremely adaptive to situations. His absoluteness is not a static quality but resides in His utter relativity—hence the title of Hartshorne's book, *The Divine Relativity*.¹⁶⁸ And if God enters into relations with the world, then He cannot be transcendent to it; rather, He is finite and limited. For Hartshorne, there cannot be a "purely timeless or immutable existent."¹⁶⁹ God is a dipolar uniting of being and becoming:

162. For example, E. S. Brightman, "A Temporalist View of God," *Journal of Religion* 11 (1932).

163. Charles Hartshorne, *The Divine Relativity* (New Haven: Yale University Press, 1964), p. 90.

164. *The Source of Human Good* (Chicago: University of Chicago Press, 1946).

165. Henry Wheeler Robinson, *The Christian Experience of the Holy Spirit* (London: James Nisbet & Co., 1930), p. 84.

166. For example, Karl Heim, *Christian Faith and Natural Science*, trans. Neville H. Smith (London: SCM Press, 1953); *The Transformation of the Scientific World View*, trans. W. A. Whitehouse (London: SCM Press, 1953); H. H. Farmer, *The World and God* (London: James Nisbet & Co., 1935).

167. *The Logic of Perfection* (New York: Open Court, 1962), p. 213.

168. *Op. cit.*, p. x.

169. *Reality as Social Process* (Free Press, 1953), p. 134.

the world process constitutes the life of *God*, and God is the all-embracing memory of the *world*. "If the past once for all 'has been what it has been,' then *something* does preserve, and as it were remember, all that happens."¹⁷⁰ This certainly precludes any Chalcedonian Christology; instead, the deity includes within itself all the contraries of human experience (every aspect or attribute of reality along with its contrary is correlativized in God).¹⁷¹ Yet God is not restricted to the aggregate of cosmic psychical-objects. While He is constantly surpassing himself in His advancing experience (world history), He yet has an abstract internal essence expressing superior social unity (symbolized by the Trinity)—which is just the difference between himself and man, the former maximally realizing a purposive unity which is only partially realized in the latter.¹⁷² However, God's purpose does not mold the historical process; He grants freedom to the world, allowing it to be partly self-made. His omnipotence is simply His supreme relativity.¹⁷³ Therefore, in Hartshorne's panentheistic vision, God is enriched by the experience of the creature and in this way grows in His own experience—which is symbolized in the incarnation.

John B. Cobb, Jr., has recently become very popular in the circles of process theology. Like Hartshorne, Cobb thinks of God in social terms as a cumulative temporal succession of experiences.¹⁷⁴ Basically, in process thought the creation has been drawn up into the being of God and robs Him of transcendent distinctness. It differs from naturalism, not by asserting God's transcendence, but by holding that He is the universe's "ground" (like the germinating and nourishing condition for a seed); natural evolution could no more be self-sufficient than a foetus could be its own womb. God is the enveloping context which brings out the potentialities of the universe.¹⁷⁵ As the panentheist, W. E. Hocking, argued, nature stands over against me and my desires, forcing me to relate and adjust to its character; in this sort of opposition to me nature takes on the aspect of "Other Mind" (God).¹⁷⁶ Thus, nature and historical process are taken to be aspects of God, the context out of which the universe develops. Such a concept assumes man's freedom and nature's autonomy, for although God is the originating and directing ground of natural process, "neither human free will nor the normal processes of nature are subjected

170. Charles Hartshorne, William L. Reese, *Philosophers Speak of God* (Chicago: University of Chicago Press, 1953), p. 509.

171. *Ibid.*, pp. 2-4.

172. *Divine Relativity*, p. x; *Man's Vision of God* (Willett, Clark, & Co., 1964), pp. 36-37, 234, 237.

173. *Divine Relativity*, p. 136; *Reality as Social Progress*, p. 136.

174. Cf. *A Christian Natural Theology* (Philadelphia: Westminster Press, 1965).

175. E. R. Baltazar, "Teilhard de Chardin: A Philosophy of Procession," *Continuum* (Spring, 1964).

176. *The Meaning of God in Human Experience* (New Haven: Yale University Press, 1944), esp. p. 265.

to, or interrupted by, divine compulsion."¹⁷⁷ And hereby God is stripped of *any* significant, special attribute altogether. Process thought had already deprived Him of any transcendent *being*, identifying Him with immanent historical development (plus His abstract unified purpose added to a permanent memory of the world); now He is stripped of any transcendent *power* which we might have thought to reside in that pole of God which spreads beyond the cosmic aggregate of organisms (viz., His abstract purpose and permanent memory). He contains the world within himself, but it is yet open-ended and completely contingent with respect to its development.¹⁷⁸

God has been depersonalized and deposed of sovereign, directive power. As Van Til warned with respect to Whitehead, in process thought God disappears. The result is that the world, which has had divinity conferred upon it, is left in tension over a nature/freedom dichotomy. Simone Weil, whose conception of nature as an agent of my personal growth (through the risks it poses) has affinities to that of Hocking, says that only a false god could be capable of wielding all power; the true God does not rule the universe but "leaves two other forces to rule in his place. On the one hand there is blind necessity attaching to matter, including the psychic matter of the soule, and on the other the autonomy essential to thinking person."¹⁷⁹ The same dialectical motif was found in Teilhard. It is equally destructive of intelligibility, natural order, and the good news of Christian theology when it appears in process speculation. The process theologian says God can be known only by analogy to the natural order, not by direct revelation (as though He were sovereignly able to present clear, absolute truth about himself to us in the midst of historical process and relativity); and thus God must of necessity reflect the attributes and limitations of man and his world rather than being a self-contained personality with incommunicable attributes (as though He were a transcendent, sovereign Creator of this world which is not indispensable to Him). God cannot unconditionally and clearly reveal himself to man, and yet the process theologian alleges to know God well enough to completely immanentize Him within temporal process, and to identify the universe as an aspect of Him. Such a self-vitiating procedure is inherent in every system

177. Peter Hamilton, *The Living God and the Modern World* (London: Hodder & Stoughton, 1967), p. 226.

178. Hartshorne, *Divine Relativity*, pp. 88-90.

179. *Waiting on God* (London: Collins, Fontana Books, 1959), p. 114. Weil's corresponding conception of creation conforms to the pattern traced by Hardy's poem with which this article began; she says, "On God's part creation is not an act of self-expansion but of restraint and renunciation" (p. 101). Assuming man's naturalistic and evolutionary origin, the contact of God with the world and His influence upon it are increasingly doubted—until God's recession from sovereignty becomes itself identified with the concept of creation! This same odd logic might as well eventually identify God's disappearance with His presence.

which begins by denying the unavoidable revelation of God about himself. The metaphysical dialecticism and the epistemological dialecticism of process theology require each other.

Critical Appraisal

In considering the question of origins and the controversy which has developed around it, the Christian should not overlook the teaching of Romans 1. In the introduction to this essay two competing explanations for the popularity of evolutionary thought were proposed. Having surveyed and analyzed the rise of evolutionary speculation, we can now see that evolution has not been accepted because of its sterling scientific credentials, but because (in accordance with Paul's teaching) men seek to suppress the clear revelation of God the Creator and will latch onto any theory, however foolish, which offers to aid them in this task. Evolution is a religious presupposition substituted for man's knowledge of his Maker. The syndrome which Paul associates with unbelieving thought was noted to embrace three things: repudiation (suppression) of God's revelation at the outset, retreat to foolish reasoning, and refabrication of a god out of the created order. Evolutionary philosophy evidences this syndrome. Post-Kantian philosophy *ex hypothesi* precludes a clear revelation of God in the realm of space and time; Fichte condemned creationism as the ground error of all false metaphysics, and Huxley clearly indicates that men desired some theory (like evolution) which would relieve them of the truth about creation. Philosophy was characterized by preposterous speculations, and a scientific revolution was the only thing that could salvage the imaginary thesis men personally needed. The immanentistic developmentalism (Hegel) prior to Darwin was accompanied by an obliteration (as in Spinoza) of the distinction between Creator and creation; pantheism (Goethe) and panentheism (Krause), with an emphasis upon the material order (Feuerbach). Darwinism simply lent scientific overtones to the antitranscendent process speculation prior to him. In turn, this new "scientific respectability" (despite refutations) fostered the incorporation of the concept of God into materialistic process speculation (Alexander), panpsychic vitalism (Bergson), and creative pantheism (Whitehead). Not only did theologians retreat from defending biblical cosmogeny (Barth, *et al.*), and synthesize Christianity to evolutionism (Savage, Westermann, etc.), but they even supplanted Christian theology with evolutionary pantheism (Teilhard) and process panentheism (Hartshorne). The creation ended up being worshipped rather than the blessed Creator. The pattern drawn by Paul has certainly been followed: flight from God's clear revelation to foolishness and an exaltation of the creature above God.

The biblical teaching on creation and evolutionary speculation stand in stark antithesis to each other. Contrary to God's word, evolution and

evolutionary theology postulate a god who is not independent and free, not immutable, not personal, not sovereign, not transcendent, and not supernatural. According to evolutionary thought the world was not *ex nihilo* created as good, but eternal matter developed through a wasteful process of trial and error to bring man to where he is now; cosmological randomness (chance) is asserted to deny divine providence, and then natural determinism is correlated to it in order to deny supernatural intervention (miracles). Man is not unique but is continuous with the animal and inorganic world; hence, not being the specially created image of God, man's ethics must be guided by naturalism and utilitarianism rather than the revealed law of God. For evolution, the fall of man is ontological rather than ethical and historical; if anything, man ascends in history rather than lapses. Christ is a mystical ideal, and Jesus is part of the development of nature—not supernaturally incarnate. Man's salvation, in evolutionary motifs, does not involve eternal life and reconciliation with God but elevation (either in being or in natural development) and socialization; it is accomplished not by grace but by forces resident in nature. In terms of eschatology, evolutionary theology teaches that man is to become co-creator with God, learning to control nature and thus to determine the future course of evolution; the state of glory is attained not at a historical consummation but in the collectivized society directed by elite men. At each point, evolutionary speculation falsifies biblical teaching. To undermine the scriptural doctrine of creation is to undermine Christianity *in toto*, and this is because (as we saw above) evolution is not a restricted biological theory but a pervasive and religious worldview having a presuppositional status with its adherents.

The evolution of evolutionary speculation, from Kant to Darwin, was an obvious necessity, given the intellectual imperatives of cosmological evolutionism. It is not surprising that very early in his academic career, at age 31, Kant published a book on cosmology—a distinctly evolutionary cosmology—*Universal Natural History and Theory of the Heavens* (1755). The study, according to one recent commentator, “has won for itself an assured place as a milestone in the history of astronomy and cosmology.”¹⁸⁰ Yet the book was forgotten for a century. Published anonymously, the printer immediately went bankrupt, and the copies were never sold to the general public.¹⁸¹ Understandably, “It had to wait for more than a century for its true greatness to be appreciated.”¹⁸² Precisely: it had to wait for the Darwinian revolution to accomplish its task—a task set forth by Kant in the very first chapter of the *Universal History*. It was quite

180. Milton K. Munitz, “Introduction,” *Universal Natural History and Theory of the Heavens*, by Immanuel Kant (Ann Arbor: University of Michigan Ann Arbor Paperback, 1969), p. v.

181. *Ibid.*, p. vii.

182. *Ibid.*, p. viii.

legitimate, he argued, to construct a natural history (which in the context of eighteenth-century thought meant a hypothetical history—a “history without facts”¹⁸³) of the universe. Newton’s laws are best applied in the vast reaches of the heavens. “It seems to me,” he wrote, “that we can here say with intelligent certainty and without audacity: ‘*Give me matter, and I will construct a world out of it!*’ i.e. give me matter and I will show you how a world shall arise out of it.”¹⁸⁴ All it takes, he tried to prove in his study, is millions and millions of centuries—the creative hand of immeasurable time. He then set forth the great task for all evolutionistic biological scientists, one which was understood in the mid-eighteenth century to be mandatory if evolution were to be scientifically demonstrated:

But can we boast of the same progress even regarding the lowest plant or an insect? Are we in a position to say: “*Give me matter, and I will show you how a caterpillar can be produced?*”? Are we not arrested here at the first step, from ignorance of the real inner conditions of the object and the complication of the manifold constituents existing in it? It should not therefore cause astonishment if I presume to say that the formation of all the heavenly bodies, the cause of their movements, and, in short, the origin of the whole present constitution of the universe, will become intelligible before the production of a single herb or a caterpillar by mechanical causes, will become distinctly and completely understood.¹⁸⁵

The Darwinian bandwagon was filled with men who wanted desperately to believe in a god of their own creation. That god must be, preferably, an impersonal god, a god who in no way interferes with the activities of the external universe, but at all costs, a god infinitely remote in time. Even the impotent god of Kant’s *Universal History*, who was reduced merely to the incessant creation of matter—an autonomously evolving matter—was too powerful for Kant in his post-critical years.¹⁸⁶ Nevertheless, the evolutionary impulse of Kant’s early speculations stayed with him; that impulse was basic to the revolt against Christianity from the mid-eighteenth century to Darwin. It was Darwin’s gift of hope, rather than the quality of his evidence, that captivated the minds of his readers. Though his *Origin* had to be revised and reworked again and again, in order to deflect (he hoped) the sharp and overpowering criticisms lodged against his theory (driving him back into Lamarckianism at the end), nevertheless the hope remained. “*Give me matter, and I will show you how a caterpillar can be produced.*” Men wanted to believe that the combination of limitless eons of time, autonomous impersonal matter, and totally random

183. Robert A. Nisbet, *Social Change and History: Aspects of the Western Theory of Development* (New York: Oxford University Press, 1969), chap. 4.

184. Kant, *Universal Natural History*, p. 29.

185. *Ibid.*

186. *Ibid.*, p. 151.

forces might forever banish God from His creation—and, most importantly, from the day of judgment. Darwin offered them hope; he offered them the scientific answer that would at last reduce biological processes to mere mechanism. Machines, in the final analysis, are not subject to judgment, for they are not bounded by any ethical law greater than survival. Even the violation of this command—the law of survival—at most leads to the void of nonexistence, not the eternal reality of personal judgment by a personal God. The Darwinian revolution was the capstone to a century-long quest; the holy grail of evolutionary speculation had at last been found by a peculiar hypochondriac who once devoted eight consecutive years of his intellectual life to an exhaustive study of barnacles.

When biblical faith comes into conflict with the autonomous outlook of a scientific or philosophic theory, the Christian can respond by: (1) maintaining a double-truth perspective (e.g., the Averroists), (2) drawing dichotomies (e.g., Aquinas' nature/grace; Kant's phenomena/noumena), (3) holding that one truth is being seen in two ways (e.g., Eric Rust),¹⁸⁷ (4) adjusting his faith according to the dictates of science (e.g., theistic evolution), or (5) by declaring that, as Scripture teaches, God's revelation and truth are the necessary epistemological and metaphysical presuppositions of all science and philosophy. The last response is the proper one.

When God's word is contradicted, as is particularly evident in the area of creation, two worldviews are (at base) what stand in conflict. One of them requires speculative and self-defeating assumptions; this is seen in the case of evolution (e.g., Darwin's rationalistic explanation requires an irrationalistic foundation; Huxley professed to be "agnostic" about ultimate origins but certain that the Bible was wrong; Goudge holds, as cosmological tenets, both that nature is uniformitarian—always and everywhere operating by the same laws—and that change is a fundamental feature of nature—including nature's laws). The other worldview gives a basis for an orderly world that can be explored and subdued to God's glory, a basis for rational understanding and application, and a basis for bringing the facts and reason into fruitful, meaningful, non-arbitrary relation. The former worldview moves from foolish speculation to a worship of the creation in some form. The latter brings one to bow before the transcendent and immanent Creator and Redeemer of the world.

Men assuredly *know* that the latter worldview and procedure is the one that is true and ought to be followed. With respect to origins, the question is beyond scientific speculation and a matter of divine revelation and religious faith.¹⁸⁸ The natural world communicates the truth to all men from

187. *Science and Faith* (New York: Oxford University Press, 1967), pp. 286-287.

188. See my article, "Revelation, Speculation and Science," *The Presbyterian Guardian* 40 (December, 1970), no. 1. Max Planck correctly states that "Science

God (Rom. 1:19-20). As a result of man's epistemic and moral condition, faith (indeed, *saving* faith) is the basic requirement for a proper acknowledgment of the answer to origins: "Now faith is . . . a conviction of things not seen. . . . By faith we understand that the worlds have been framed by the word of God, so that what is seen hath not been made out of things which appear" (Heb. 11:1, 3). There is no lack of explicit, special revelation about creation; Scripture mentions it over seventy-five times. Thus, men have the answer to origins but (aside from regeneration) suppress it. The Christian who encounters speculative theories (like evolution) which are fabricated to help suppress the clear truth about the Creator must presuppositionally challenge those theories rather than cooperating in such suppression and thereby accommodating to them; he must appeal to man's better knowledge, demonstrate the foolishness of trying to avoid God's revelatory truth, and work toward the opponent's conversion (inclusive of "change of mind") and faith (trusting the Lord more than sight and in order to understand). The man who opposes God's word needs to be saved from intellectual and spiritual futility, from vain imagination and creature-worship; and this can be accomplished only by dealing with him at the *root* of the problem (namely, his espousal of a worldview which, though destructive of rationality, factuality, morality, and humanity, protects and encourages his flight from God). The origin of his difficulties is (or includes) his misdirected view of origins. Thus, he must be forcefully confronted with the presuppositional and revelational worldview of creationism.

The biblical doctrine of creation *ex nihilo* requires a proper distinction between Creator and creature, and denies the eternity of matter; it refutes both pantheism and materialism. It teaches that the world is derivative, contingent, and glorious only as reflecting its Creator's glory; thus the world cannot be exalted to a place of idolatrous worship. On the other hand, it prevents disrespect for the natural world (exploitation), cruelty to the animal kingdom, and disdain from the human body. Creation *ex nihilo* assures us that things have a beginning (rather than moving

cannot solve the ultimate mystery of nature," in *Where Is Science Going?* (London, 1933), p. 217. A. C. B. Lovell said in *The Individual and the Universe* (London, 1959) that when we discuss the ultimate origin of matter we "cross the boundaries of physics into the realm of philosophy and theology." The analysis given by Charles Hodge is noteworthy:

From the nature of the case, what concerns the origin of things cannot be known except by a supernatural revelation. All else must be speculation and conjecture. And no man under the guidance of reason will renounce the teachings of a well-authenticated revelation, in obedience to human speculation, however ingenious. . . . Science as soon as she gets past the actual and the extant, is in the region of speculation, and is merged into philosophy, and is subject to its hallucinations [*op. cit.*, p. 22].

Biblical revelation is as well-authenticated as anything could be, being authenticated by God himself (cf. Westminster Confession of Faith, I.4).

through eternal return cycles) and that time is not illusory; genuine importance can attach to events, and history can be characterized by real progress. Nature is also taught to be orderly, intelligible, and profitable to man's end of glorifying God; thus, nature is worthy of study in order that it be subdued to kingdom purposes. Creation *ex nihilo* grounds man's authentic freedom within the sovereignty of God, substantiates the perspective of morality in the world, and undergirds man's aesthetic creativity. Creation *ex nihilo* proclaims the sovereignty, freedom, transcendence, goodness, and immanence of God; all things being in His wise control, meaningless mystery does not surround everything, and man can (by thinking God's thoughts after Him) attain knowledge. Further, God is not repulsed by the material world or neglectful of it; He can care for our needs, attend to our prayers, enter our world in His incarnate Son, send His Spirit into our hearts, and promise effectual results for His kingdom in history. These are but a few of the main doctrinal tenets which creationism sets forth. It is a worldview able to lay siege effectively to all apostate competitors at every point.

However, men can arrive at the perspective of the creationist position only by submitting unconditionally to God's revelation. The truth is clear from nature (leaving all men without excuse) but can be acknowledged only through the work of grace, leading men to trust the Savior and yield to the truth of His word. Men must believe the inspired and infallible truth of Scripture. This is offensive to the modern mentality and even to modern theologians. Nels Ferré, Emil Brunner, and Reinhold Niebuhr are among those who explicitly charge that we who make the Bible an authoritative teacher in social, historical, and scientific matters are guilty of "bibliolatry."¹⁸⁹ And thus the battle lines are clearly drawn. We have seen in this study that those who suppress the revelation of God and deny creation *ex nihilo* as a literal, historical truth are led into foolishness and an idolatrous erasure of the distinction between Creator and creation. On the other hand, those who refuse to submit to God's word in the area of origins regard those who do as guilty of bibliolatry. It appears, then, that two religious positions stand over against each other: the religion of humanistic autonomy and the religion of biblical Christianity. Each accuses the other of idolatry. The Christian must see the situation clearly. The choice between evolution and creation is at base religious. Nothing less is at stake than the charge of worshipping the creature rather than the Creator. An answer to origins weighs idolatry in the balance. "The gods that have not made the heavens and the earth, these shall perish. . . . They are vanity, a work of delusion" (Jer. 10:11, 15).

189. Cf. Ramm, *op. cit.*, pp. 23-24.

CREATION AND MATHEMATICS; or WHAT DOES GOD HAVE TO DO WITH NUMBERS?

VERN S. POYTRESS

1. *The Bible and Mathematics*

What does the Bible say about mathematics? The superficial answer, given by too many Christians, is that the Bible and mathematics are unrelated. Mathematics and religion are two separate spheres; neither has need of or connection with the other. However, such an answer has not really reckoned with the biblical teaching on creation, fall, and redemption.

According to Genesis 1, God created everything, and ordained man to a special place in creation. Now God sustains everything that he has created: "In him we live and move and have our being" (Acts 17:28). Does this mean that he has also created mathematics? We would be inclined to answer "yes," except that mathematics is not a "thing" like a man, an animal, or a plant. It is therefore more correct to say that God says what shall be true for his creation (Eph. 1:11; Lamen. 3:37-38), and mathematical truth is part of this truth. Moreover, God teaches men whatever they know of this truth (Ps. 94:10-11).

But the teaching of Genesis carefully distinguishes man the creature from God the Creator. This implies that God is the originator of mathematical truth, while man is only a recipient. God knows all mathematical truth and never errs, while man knows in part and does err.

Next, we learn from Colossians 1:16 together with Genesis that creation is a Trinitarian activity. The Father, the Son, and the Holy Spirit each has his own role with respect to it. Creation is by the Father (I Cor. 8:6), through and in the Son (Col. 1:16; John 1:3), with the movement of the Holy Spirit within it (Gen. 1:2; Ps. 104:30). What does it mean that creation is in the Son, in Christ? We get at least a partial answer to this in Colossians 1:17: "He is before all things, and in him all things hold together." He is before all things, both chronologically and in pre-eminence and honor. This is the significance of "first-born" (vs. 15). He infuses life into creation as he does into the church (vs. 18).

Second, "in him all things hold together." The word *sunestēken*, "hold together," can be used transitively to mean "set or band together, establish." Intransitively it means "to cohere." The universe is banded together

or coheres in Christ. Hebrews 1:3 says also, "He reflects the glory of God and bears the very stamp of his nature, upholding the universe by his word of power." This idea can be applied also to mathematical truth concerning creation. The relations of mathematics both within itself and to other truths, we must say, are due to the sustenance of Christ. Mathematics "coheres" in Christ.

Finally, creation has a purpose: it is "for him" (Col. 1:16). In Eph. 1:10, Paul announces that the plan of God is to unite all things in Christ. Mathematical truth also, therefore, will serve his glory.

If these things are so, it cannot be surprising that all creation, and hence mathematical truth concerning creation, *reveals* God. Theologians call it general revelation. Romans 1:20 says, "His invisible attributes, his eternal power and deity, have been visible since the creation of the world, being discerned in the things he has made." But the reaction to this true revelation on man's part is universally negative (Rom. 1:18). The revelation only serves to condemn men for their foolishness (vs. 21), rather than lead them to God. This inverted response is, of course, due to the fall. The creation has been put out of joint (Rom. 8:20), by the abdication and rebellion of its proper master, man.

The Reformational expression "total depravity" of man is used to say that no area of man's nature and no area of his involvement with the world is left untouched or undefiled by man's rebellion (Rom. 3). For an exposition of this, one could not do better than turn to the second book of Calvin's *Institutes*: "The whole man, from the crown of the head to the sole of the foot, is so deluged, as it were, that no part remains exempt from sin, and therefore, everything which proceeds from him is imputed as sin."¹ Therefore, we now expect mathematical truth also to be misunderstood and perverted by fallen man.

How does the perversion take place? We may start with Romans 1: 18-21. Mathematical truth clearly exhibits God's eternal power and deity, in that it testifies to its origin in God. Men receive the gift of mathematical knowledge from God, but refuse to acknowledge the giver (Rom. 1:21). They are blind to the revelation of the glory of God (II Cor. 4:3; Eph. 4:17). General revelation is shut out by man's sinful blindness.

This is the reason for special revelation, the revelation of Scripture. Accordingly, Calvin likens the Scripture to a kind of spectacles through which proper vision of the creation can be restored.² God's covenant with his people is the means of enlightening them through Scripture. Because of this enlightenment, the psalmist can see God in the manifold works of nature (Ps. 19; 104; 147; 148, etc.).

1. John Calvin, *Institutes of the Christian Religion* (Grand Rapids: Eerdmans, 1964), II, ch. 1, 9.

2. *Ibid.*, I, ch. 6, 1.

Psalm 8 is a good illustration of the restoration of man. "Yet thou hast made him [man] a little less than God, and dost crown him with glory and honor. Thou hast given him *dominion*. . . ." The spectacles here have restored the proper picture of man and creation, the picture of Genesis 1. God has given man dominion. However, in Hebrews 2 we find Psalm 8 applied to Christ. Why is this? Hebrews 2 itself points out that man has forfeited proper relation to creation at the fall; hence Psalm 8 is no longer strictly true of man in general but only of Christ. The picture of Psalm 8 has not only to be *seen*, but to be *retrieved* or *restored*. Christ by his perfect obedience and death retrieved what man could not. Only in Christ is a man's relation restored, and only in Christ does he regain the dominion of Psalm 8 and Genesis 1.

It is with such attitudes that we should approach the concrete subject matter of mathematics and the concrete problems raised by philosophers of mathematics. In summary, we have these theses:

- 1. Mathematical truth is part of what God says in creating and sustaining the world (Ps. 33:6).
- 2. Mathematics "holds together" in Christ.
- 3. We therefore expect mathematics to reveal his glory.
- 4. However, after the fall we "see" the revelation only with the eyes of faith, enlightened by the Spirit speaking in Scripture.

Questions: (1) What is to be the relation between Scripture and experiment in obtaining knowledge about the world? (2) Why does Scripture say much about an area like ethics or anthropology, but leave us, we feel, more "on our own" in mathematics? Can we speak of some areas being less centrally related to the needs of salvation?

2. $2+2 = 4$

In this section we deal with the philosophical context and presuppositions of mathematics.

Needless to say, those philosophers who are not Christians would take issue with the interpretation of mathematics in section 1. But are the disagreements important? Can't a person do mathematics and come out with the right conclusion without *any* philosophy? Isn't the substance of mathematics philosophically and religiously neutral?

Yes, non-Christians can do mathematics, but only because God enables them to do so. Only because the Christian God exists and sustains them and teaches them are they able to do mathematics, and to act as if God didn't exist.

We can see this by considering the statement " $2+2 = 4$." Everyone agrees to this, right? Isn't this real and true knowledge, independent of a person's religious presuppositions? Not quite. A radical monist might dispute the truth of $2+2 = 4$. Moreover, we have just made statements

that depend weightily on a world view, on presuppositions about this world. $2+2=4$ is true. What is truth? What is the "everyone" that "agrees" to this truth? (What is man?)

Furthermore, in order for someone to be a mathematician or even to write down or to think " $2+2=4$," he must have a confidence in his memory and in the reality of time. And there are more questions. What, after all, does " $2+2=4$ " mean? A man with another language or another set of symbols would not understand it.

Well, you may say, put two apples in an empty bag, add two more, and then count that there are four. At the very least, this involves someone remembering that he has already added the first two apples, and knowing how to count. It involves believing that time is not, e.g., circular. (Otherwise, adding the last two apples might be the very same event as adding the first two apples.) It also involves assumptions about the identifiability, stability, and constancy of apples in time. And so on. Furthermore, if we are involved in any kind of mathematical or even physical reasoning, we have to cope with an explanation or interpretation of logic.

Now, all this may seem quite obvious. However, the point is that even the most elementary mathematical content involves an intrinsic commitment to a certain vaguely defined philosophy or world view. Every mathematician must have it to get off the ground. This vague world view assumes, among other things, that the world "makes sense" or that it "hangs together." Reality is not a complete flux, and man's mind is not a complete flux. What happens is not completely random and without sense. Man's mind, logic, and external reality *cohere*.

Note that we have run across the word coherence before. We have seen that the Scriptures attribute the coherence of the world to the creative and sustaining activity of God, who has created man with a capacity for understanding the world, and who governs the world in an orderly way (for example, Ps. 104:20-23 speaks of the orderliness of day and night). Specifically, all things cohere in Christ (Col. 1:17). That is why it is possible to count, to remember, to communicate by language, to know truth. God bears witness to himself (Rom. 1:18) even in $2+2=4$.

We must say that mathematicians receive this witness, since they act on the basis of belief in coherence. They act as if $2+2=4$ has real meaning, meaning that it can receive only as a truth related in manifold ways to the creation of God and to the other truths that he ordains. But this truth is *suppressed*, because it is denied that God is the Author of $2+2=4$. Today, one of the methods of suppression is secularized philosophy of mathematics, at which we will look next.

Questions: (1) The above analysis of $2+2=4$ makes it plain that $2+2=4$ is not something that we know *a priori* (prior to *all* experience)

in the strictest sense. Is there some reason why philosophers have always wanted to assign mathematical and logical truths to the category of *a priori* truths? Is there indeed something special about them? (2) Why cannot a truth like $2+2=4$ be used as "common ground" with an unbeliever in an apologetic argument?

3. *The Relation of Mathematics to Sciences*

Now we would like to trace how true and false philosophies work out in views of the relation of mathematics to sciences. How is mathematics related on the one hand to logic, and on the other hand to physics and to experiment? In modern times this question has been further elaborated by the various schools of mathematical philosophy, so that we can ask, "How is mathematics related on the one hand to physics and on the other hand to (1) logic in the sense of a standard for our reasoning, (2) language, both in thought and written, and (3) mental mathematical constructions, and the larger area of imagination?"

The Christian says that the bond, or coherence, of these areas is the creative and sustaining activity of God in Christ. God has created the world a plurality, as we can see from Genesis 1. Nevertheless, it is a plurality that is structured, related. And hence truths of various kinds are related.

Thus we can use physical pictures in mathematics (e.g., geometry), we can apply mathematics to the world of motion of objects (physics), we can apply logic to mathematics (in proofs), and so on. We are assured that things await to be discovered about the relations of these fields because of Christ the Order of creation. For the same reason we are not surprised to find close relations between different areas of mathematics: for example, set theory, group theory, complex variable theory, and topology.

This is pluralism. Each of these areas has its proper meaning and significance; none is reduced to another. But it is pluralism with a unity due to the plan of God. Non-Christian philosophies of mathematics, as one might expect, do not have the same resources. Hence, generally speaking, they adopt either an ultimate plurality or an ultimate unity, without ever getting the two together. They cannot, because they refuse to acknowledge the true God and his act of creation.

First, let us take a brief look at non-Christian pluralism. This type of philosophy acknowledges the distinctiveness of mathematics in comparison with physics or logic. Kant is a good representative. For him, there is such a thing as mathematical intuition. It is not identified with pure logic (which he calls "*analytic a priori*"), or with the faculty of concept formation ("*understanding*"), or with language, or with physics.

How are these things related? What constitutes the unity? Non-Christian pluralism is problematic, because if plurality is *foundational*,

there remains no way to introduce relations afterward. In effect, there is no bond between (say) mathematics and physics. One would expect, under this view, that neither mathematics nor logic would have any application to physics. Kant's answer is that the mathematical forms of space and time are universal forms for *all* experience. Consequently, mathematics *must* hold for that experience. But this amounts to little better than saying that man's mind *imposes* mathematics on a world that, in itself, may very well be nonmathematical. Hence the mathematical and the non-mathematical are not really brought together.

Now let us look at a non-Christian philosophy of mathematics that emphasizes unity. Unity can be obtained (or so it is supposed) by claiming that mathematics is "merely" logic, or formal language, or physics. Mathematics is seen as unified with, rather than distinct from, some other area.

As an example of this unifying direction, or monism, let us take logicism, which includes mathematics under logic. The chief representatives of this school are Bertrand Russell, Carl Hempel, and Rudolf Carnap (though Carnap shows tendencies toward "formalism," which includes mathematics under formal languages). Hempel says, "Mathematics is a branch of logic. It can be derived from logic in the following sense:

a. All the concepts of mathematics, i.e., of arithmetic, algebra, and analysis, can be defined in terms of four concepts of pure logic.

b. All the theorems of mathematics can be deduced from those definitions by means of the principles of logic."³ Thus for Hempel all is unified under the heading "logic."

What Hempel does not say here is that this "reduction" of mathematics to logic has been achieved only by expanding the term "logic" to include axioms and concepts that were formerly not called "logical."⁴ Hence one may still ask why the "old" logic (e.g., propositional logic) and mathematics (like $2+2=4$) harmonize. As long as one attempts to explain everything in terms of *one* principle, *any* remaining diversity is a thorn in the side.

Thus non-Christian philosophies do not really succeed in explaining the unity and diversity in the relation of mathematical truth to other truth. By contrast, the Christian's ultimate reference-point is the God of truth who is both one God and Lord (unity of truth) and three persons (implying, among other things, diversity of truth).

Questions: (1) How does one criticize the other "monistic" phi-

3. Paul Benacerraf and Hilary Putnam, eds., "On the Nature of Mathematical Truth," *Philosophy of Mathematics: Selected Readings* (Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1964), p. 378.

4. For example, the relation of membership in a set, and the axioms of infinity and reducibility, would not be considered as "purely logical" by many people.

losophies of mathematics—formalism (reducing mathematics to formal languages) and empiricism (reducing mathematics to physics or to “experience”)? (2) What kinds of effect have these non-Christian philosophies had on the more practical, day-to-day work of mathematicians? Can we detect some influence on mathematical textbooks? (3) What useful insights can these philosophies give to the Christian who knows the truth?

4. *Views of Knowledge of Mathematics*

Non-Christian philosophers have tried to give an account of how we know that $2+2=4$. Do we know it simply by pure reflection (*a priori*, independent of experience)? or by observing the world (*a posteriori*, derived from experience)? Do we gain the knowledge by remembering what we once knew but have forgotten (Plato)? by logical argument (Russell)? Or do we gain it by repeated experience of (say) two apples and two apples (John S. Mill)? Or some combination of these? Or is “ $2+2=4$ ” not real “knowledge” at all, but simply a linguistic convention about how we use “2” and “4” (A. J. Ayer)?⁵

Non-Christians have tried all of these answers. But, as we shall see, without the biblical doctrine of creation they cannot adequately account for mathematical knowledge.

Let us first look at the “*a priori*” answer. This answer says that we know $2+2=4$ independent of experience of the world around us. In a sense, there are as many versions of this answer as there are philosophers, but I will oversimplify and consider them as all one answer.

According to this view, then, “ $2+2=4$ ” is some kind of universal, eternal truth. But why, in that case, should two apples plus two apples usually, in experience, make four apples? The apriorist separates $2+2=4$ radically from all experience and all contingency. But his problem is then to explain what it can mean for $2+2=4$ to apply to a world of apples, baseballs, houses, and the like. If the truth $2+2=4$ is made too *diverse* from the world of “contingency,” then it can never be *unified* with the world. Once again, the problem of unity and diversity that we considered in section 3 appears.

Let us continue to press the questions. We grant that $2+2=4$. But why should an admittedly contingent world offer us repeated instances of this truth, many more instances than we could expect by chance? If

5. “When we say that analytic propositions [among which Ayer includes mathematical propositions] are devoid of factual content; and consequently that they say nothing, we are not suggesting that they are senseless in the way that metaphysical utterances are senseless. For, although they give us no information about any empirical situation, they do enlighten us by illustrating the way in which we use *certain symbols*” (italics mine; from Alfred Jules Ayer, “The *A Priori*,” *Philosophy of Mathematics*, p. 295). This same article contains some discussion of Mill’s and Russell’s views of mathematical knowledge.

the external world is *purely* a chance matter, if *anything* can happen in the broadest possible sense, if the sun may not rise tomorrow, if, as a matter of fact, there may be no sun, or only a sputnik, when tomorrow comes, if there may be no tomorrow, etc., can there be any assured statement at all about apples? Why, for instance, don't apples disappear and appear randomly while we are counting them?

If, on the other hand, the external world has some degree of regularity mixed in with its chance elements, why expect that regularity to coincide, in even the remotest way, with the *a priori* mathematical expectations of human minds? Such questions can be multiplied without limit. Once one has made the Cartesian separation of mind and matter, of *a priori* and *a posteriori*, one can never get them back together again.

A strict *a priori* view is also open to more practical objections. If mathematics is known *a priori*, why have paradoxes sometimes arisen within mathematics? In the past actual contradictions have sometimes arisen from starting assumptions that appeared to be *a priori* true. The contradictions obtainable from conditionally convergent sums and integrals, and Russell's paradox concerning the set of all sets that do not contain themselves, are cases of this kind. Mathematical theory has also produced various counter-intuitive results, like the space-filling curves of Peano and everywhere-continuous nowhere-differentiable functions.

The paradoxes seem less threatening today, partly because mathematicians adopt a more conventionalist attitude toward them. Whatever axioms may be "convenient" are adopted, and the results are simply conventions of language. (See below on this.) Partly the paradoxes have been disposed of by modifying the axioms (to avoid contradictions) or modifying one's intuitions (to square with the theories). Nevertheless, the history of the paradoxes illustrates that supposedly *a priori* mathematical convictions are not always reliable.

It is understandable that these difficulties on the *a priori* side have led people to cast about for an *a posteriori* solution. In this case one emphasizes the supposed inductive character of mathematical knowledge. Mathematical knowledge is viewed as a generalization from experience in the world. One comes to believe that $2+2=4$ from repeated experience of two objects plus two objects making four objects.

So far so good. But no one has repeated experience of 2,123,955 objects plus 644,101 objects making 2,768,056 objects. So why do people believe that $2,123,955+644,101=2,768,056$? The consistent reply would be, "People generalize on the basis of their previous experience with small numbers." Unfortunately, in the word "generalize" are concealed all the problems that we began with. We may ask, "Why does a person 'generalize' in one way rather than another?" Why, after observing that $3+2=5$, $4+2=6$, . . . , $12+2=14$, does a person conclude (gen-

eralize?) that $13+2 = 15$ rather than $13+2 = 16$ or even $13+2 = 13$? Doubtless this seems natural to any educated person nowadays, partly because he was taught such things. But how did he come to know it at the beginning?

In terms of a consistently *a posteriori* viewpoint, the answer can only be that a person generalizes this way because of previous experience with other generalizations. He has had experience before with detecting patterns. In other words, the step to $13+2 = 15$ is based on generalization from previous experience, previous experience of other generalizations. But why has he generalized in *this* particular way from those other generalizations? Because he has generalized from previous experience of generalizing from previous generalizations. Etc. Apparently, one can escape this regress only by saying at this point, "Because that's the way the human mind operates." And then one is confronted with an *a priori* knowledge, or at least *a priori* heuristics, that is, ways of arriving at knowledge.

The *a posteriori* solution is also open to more practical, prosaic objections. What about the constantly growing quantity of abstract, non-visualizable mathematical entities? To claim that transfinite numbers, topological spaces, and abstract algebras are somehow impressed on us from sense experience takes some stretch of the imagination.

A third attempted solution to the problem of mathematical knowledge deserves mention, if only because of its wide-spread popularity among mathematicians themselves. This is the view that mathematics is, in some sense, a mere convention of our language, and thus not "knowledge" at all. $2+2 = 4$ because we have agreed in our language to use words "two" and "four" in just that way.⁶ Or, to put it another way, in saying " $2+2 = 4$ " we are just saying "A is A" in a roundabout way (A. J. Ayer).⁷ Or, " $2+2 = 4$ because it follows from our (coventionally determined) postulates" (formalists).

All these "conventionalist" answers are really so many variations of the *a priori* solution, inasmuch as one can still ask the same unanswerable questions about why mathematics should prove so useful in dealing with the external world. If it is *pure* convention, why should this be? Or if one says that the conventions are chosen *because* they are useful, one moves into the *a posteriori* camp, where he is confronted with the same unanswerable questions about the role of generalization.⁸

6. Cf. Ludwig Wittgenstein, *Bemerkungen über die Grundlagen der Mathematik* (Oxford: Basil Blackwell, 1967), pp. 4, 6.

7. "The *A Priori*," p. 300.

8. Cf., for example, Ernest Nagel, "The choice between alternative systems of regulative principles [in logic and mathematics] will then not be arbitrary and will have an objective basis; the choice will not, however, be grounded on the allegedly greater inherent necessity of one system of logic over another, but on the relatively

The fact that the conventionalist answer can be used either in an *a priori* or an *a posteriori* direction points up another factor: that the conventionalist "answer" may not really be an answer at all, but simply a shifting of the question from the area of mathematics to the area of language. The same *a priori-a posteriori* problems reappear when we ask why mathematical *language* functions adequately.

Because of the above difficulties, non-Christian philosophy of mathematics is condemned to oscillate, much as we have done in our argument, between the poles of *a priori* explanation and *a posteriori* explanation of mathematical knowledge. Why? It will not acknowledge the true God, wise Creator of *both* the human mind with its mathematical intuition and insight *and* the external world with its mathematical properties. In the next section we shall see how the biblical view furnishes us with a satisfying answer to the problem of "knowing" that $2+2 = 4$.

Questions: (1) In what ways does one's explanation of *how* he knows mathematical truth affect *what* he knows? (2) Can a study of how children learn mathematics help us to obtain insight into the *a priori-a posteriori* problems?

5. *The Biblical View of Knowledge*

To understand how men come to know $2+2 = 4$, we must appreciate the biblical view of man. We have already seen in section 1 that man was appointed to a special role in the created world. More specifically, Scripture says that man is the image of God (Gen. 1:26; cf. Gen. 2:7; I Cor. 11:7). As such, his work is to imitate receptively, on a finite level, the works (naming, Gen. 2:19; 1:4; governing, Gen. 1:28; Ps. 22:28; improving, Gen. 2:15; 1:31), and rest (Gen. 2:2; Ex. 20:11) of God. Man is created with the potential, then, of understanding God and his works (though not exhaustively). He has the capability of understanding the mathematical aspects of God's truth and God's rule, since he himself is a ruler like God. Thus he can generalize with confidence from $2+2 = 4$, etc., to $2,123,955 + 644,101 = 2,768,056$.

Here we have the first step in a Christian answer to the problem of mathematical knowledge. The *a priori* capabilities of man's created nature, and his potential for mathematical insight, really correspond to the *a posteriori* of what is "out there." This is because man is in the image of the One who ordained what is "out there." At the same time, man's mathematical reasoning is not always right, and his intuitive expectations are not always fulfilled, because man is the image of *God* the infinite One.

Next, we should ask how a man comes to know mathematical truths that he hasn't known before. This, one might say, is part of the *a posteriori*

greater adequacy of one of them as an instrument for achieving a certain systematization of knowledge" ("Logic Without Ontology," *Philosophy of Mathematics*, p. 317).

side of mathematics. The Bible answers that God reveals to men whatever they know: "He who teaches men knowledge, the Lord, knows the thoughts of man, that they are but a breath. Blessed is the man whom thou dost chasten, O Lord, and whom thou dost teach out of thy law" (Ps. 94:10b-12). "But it is the spirit in a man, the breath of the Almighty, that makes him understand. It is not the old that are wise, nor the aged that understand what is right" (Job 32:8-9; cf. Prov. 8). The Lord's instruction sometimes comes, of course, by way of "natural" revelation (Ps. 19; Isa. 40:26; 51:6; Prov. 30:24-28). Thus we can do justice to the real novelty that is sometimes found in a new mathematical theorem.

6. *Public Science*

The existence of a science of mathematics depends upon the ability of men to communicate with one another, and on the availability of a medium of communication. Both of these factors go back to creation. Men have one racial origin (Acts 17:26). They share a common nature (the image of God, Gen. 1:26-27; 5:1-3), and they have been given the gift of language as part of their equipment to fulfill the cultural mandate of Genesis 1:28-30 (see Gen. 2:19-23). This furnishes us adequate grounds for believing today that others understand us, and that our language is adequate to the cultural task that God has given us.

This also helps to explain why mathematicians can have much agreement in spite of religious differences. Men cannot cease to be in the image of God, even if they rebel against him (Gen. 3:5, 22). They either imitate God in obedience or "imitate" him by trying to become their own lord. Neither can they escape the impulse to fulfill, in some fashion, the cultural mandate of Genesis 1:28-30. Thus, in spite of themselves, they acknowledge God in some fashion (cf. Rom. 1:18-22; James 2:19).

Hence non-Christians, in the image of God, can and do make significant contributions to mathematics. They can know many mathematical truths. As we have seen in section 1, in knowing mathematical truth they know God (though not exhaustively, and at places mistakenly). Nevertheless, their "knowledge" is not more beneficial to them than the knowledge that demons have (James 2:19). Hence, Christian and atheist, indeed all kinds of religious people, share mathematical truths, but for all non-Christians it is only *in spite of* their religion. It is *because* Christianity is true, *because* God is who he is, *because* man is the image of God, that the non-Christian knows anything.⁹ The supposed "common ground" of shared mathematical truth proves the very opposite of what non-Christians suppose it to prove.

9. Cornelius Van Til, *The Defense of the Faith* (3rd, rev. ed.; Philadelphia: Presbyterian and Reformed Publishing Co., 1967), pp. 154, 159.

Questions: (1) What *limitations* does the necessity of communication place on human mathematics? (2) How should the involvement of communication with mathematics be appreciated in the classroom?

7. *Ethics of Mathematics*

Finally, we give a brief sketch of how biblical ethics applies to work in mathematics. A Christian recognizes that he lives under the Lordship of God, in the light of God's present commands and God's coming judgment. He sees that, as in the case of Abraham and the nation of Israel, his whole life—marital, political, economic, social, spatial—ought to be structured and determined by his covenantal relation to God. All of life should be a response of service to God (I Cor. 10:31).

Thus, work in mathematics can have relevance to the Christian only insofar as it is motivated by the love of God, commanded by the law of God, and directed to the glory of God and the consummation of his kingdom. These are the motive, the standard, and the goal of work in mathematics.¹⁰

To be more specific, we must take into account the fact that men have a diversity of callings (I Cor. 7:17-24). Not all men are called to be specialists in mathematics. For the one who does so specialize, using the gifts that God has given him (Luke 19:11-26), how does Christian ethics come to bear? How should the biblical motive, standard, and goal affect him?

(a) The mathematician should be motivated by the love of God to understand the mathematical truths that God has ordained for this world (and so understand something of God himself, section 1); love of neighbor should also motivate him to apply mathematics to physics, economics, etc.

(b) The mathematician should find his standard in the command of God, the program that God has given man to fulfill (Gen. 1:28). Part of this program is that man should understand God's works (Gen. 2:18-23).

(c) The mathematician should work for the glory of God. He should praise God for the beauty and usefulness that he finds in mathematics, for the incomprehensible nature of God that it displays, for the human mind that God has enabled to understand mathematics (Ps. 145, 148). And he should endeavor to exhibit ever more fully and clearly to others that "from him and through him and to him are all things. To him be glory for ever. Amen" (Rom. 11:36).

We intend, by the above description, to delineate not only what a mathematician's inward attitudes should be, but also what his work, his words, and his writings should express overtly and covertly. A man's words

10. For an extended discussion of motive, standard, and goal in Christian versus non-Christian ethics, cf. Cornelius Van Til, *Christian Theistic Ethics, In Defense of Biblical Christianity*, vol. III (Philadelphia: den Dulk Christian Foundation, 1971).

normally express what he is: "For out of the abundance of the heart the mouth speaks. The good man out of his good treasure brings forth good, and the evil man out of his evil treasure brings forth evil. I tell you, on the day of judgment men will render account for every careless word they utter; for by your *words* you will be justified, and by your *words* you will be condemned" (Matt. 12:34b-37). If a man is working for the glory of God, he won't be a "secret" believer; he will say so as he talks mathematics. How far this is from a "neutral" stance! The man who ignores God as he does his mathematical task is not "neutral," but rebellious and ungrateful toward the Giver of all his knowledge.

II. CHRISTIAN RECONSTRUCTION

CONTEMPORARY ISSUES: Rousas John Rushdoony

Images, Ikons, and Pin-ups

The word "image" is an old one, but, since the 1950's, it has become especially popular in advertising and political circles. The appeal of President D. D. Eisenhower was said to be that of a "father image," the appeal of President J. F. Kennedy and his wife was that of "the youth image," and so on. In culture at large, people began to pattern themselves after a dream image, and many movements, including the hippies, resulted.

It is time, perhaps, to examine the meaning of images from a historical and theological perspective, however briefly. Man, created in the image of God, is also a fallen creature who seeks to disown that image for one of his own making. Man creates images, which are a projection of himself or some aspect of his being, and then bows down before them. In this he says that ultimacy rests where he is and where his mind functions. The images man creates represent his ideas of power and ultimacy, and, because he makes them, they also represent his power and control over them.

Historically, therefore, every tyrant and every totalitarian regime has been fearful of an image it does not create or control. The meaning of the iconoclastic controversy in Byzantium was not that the emperors objected to ikons as such, in the manner of Charlemagne, and later Protestants, but because they objected to the church's ikons. It was held that the emperor's ikons best expressed God's image on earth, that the state rather than the church was God's "first-born" and chosen instrument for His reign and rule. It is not our concern to discuss this past history but the present state of images.

With the Renaissance and the Enlightenment, the emphasis in art became humanistic, and the new images were thus increasingly of a radically different character. *First*, the image of the ruler became increasingly the expression of divinity, authority, power, and ultimacy. An examination of Italian paintings of the condottiere, of rulers like Louis XIV, conquerors like Napoleon and Wellington, reveals echoes of Jupiter and Mars. Here is the man-god, serene and confident in his world-rule, arrogant in his assurance, and seeing nothing but what he deigns to see. Art had shifted its attention from things theological to things humanistic.

Second, the image of sex became dominant also, and queens, noblewomen, mistresses, and models were depicted as "the apotheosis of Venus," and some of the paintings were so titled. Man saw his image in terms of power and sex, and his paintings celebrated both facts in countless details. A court painter became commonplace, always on hand to picture the glory of man in the person of the king, or to capture the image of sex in the face or body of a woman. Some of the nudes from the reign of Louis XVI not only celebrate sex but show it as almost a sacrament of power, and the sacrament of sex became especially widespread in the 19th century, but at the same time weaker and sentimental, in that it was transferred to the common man and began to become commonplace. The apotheosis or deification of man was beginning to wear thin.

In the 20th century, photography made easy the wide circulation of images. Hitler, Stalin, and Mussolini were not alone in the use of their portraits as ikons. In many countries, political or military leaders were revered, and people referred to places of national and patriotic importance as "national shrines" without realizing what a shrine is religiously. During the depression of the 1930's, many a simple American home gave an honored place to a picture of President F. D. Roosevelt as the common man's "savior" from distress. Roosevelt's picture even appeared in the homes of southern Italian peasants, next to the madonna's image, Carlo Levi informs us. By the mid 1960's, such adulation of political figures had largely declined, except among the supposedly radical but really wildly reactionary college revolutionaries, who idolized various figures such as Marcuse, Eugene McCarthy, Castro, Angela Davis, and others. In the political realm, only a shattered image of power remains, and disillusionment is widespread. The *fact* of power is very real; the *distrust* of it grows steadily, but no other faith yet replaces it.

With respect to the other aspect of the humanistic image, sex, the 20th century has seen the most powerful spread of this cult in the entire history of idolatry. Its form has been the pin-up, the picture of the deliberately sexually provocative girl in various stages of exposure.

The roots of the pin-up in ancient fertility cults are tenuous but real. The worship of sex is an ancient practice. There is, however, a difference. Rubens, a very great painter of the apotheosis of man (the Duke of Buckingham, James I, etc.), and of sex, gives us a dramatic example of the latter in his painting of "Marie de Medici's arriving at Marseilles" (1622-25). For Rubens the images of his every Venus are real images and yet unattainable, designed to inspire awe from a distance. The pin-up is radically different. As women's liberation writers have often rightly insisted (and we cannot agree with them on most other things) the pin-up is the packaging of rape: its function is to further fantasies of rape. The power image and the sexual image have been combined in an ugly syn-

thesis. The pin-up is designed to promote fantasies of total power over a woman who is reduced to a sexual object. The emphasis in the pin-up is essentially and primarily on giving the illusion of sexual usability rather than beauty; it is not the body beautiful but the body usable which stands out most clearly. Some women have insisted that the same emotions present in rape are those aroused by pin-ups and by pornography.

Thus, the modern ikon, the pin-up, has received, by means of photography and "men's magazines," the maximum popularization. It has brought together the two strands in the humanistic apotheosis, *power and sex*, in a dangerous and potentially lawless combination. In the process, it has also debased the old humanistic ideal and is an example of its coming collapse.

While the pin-up (i.e., the sexual image) is a popular ikon, the leaders of humanism have abandoned it. No great painter of recent years has given us a great painting of a power figure, and the nude no longer gains a classic depiction in serious painting. The so-called erotic pictures of Picasso are hardly erotic: they are more emetic. The modern artist finds the nude boring, unless he can play cubistic, surrealist, anti-realistic games with it, all designed to put down sex and exalt the artist himself as the prophetic figure of power and fertility. Modern art is anti-popular and hence anti-humanistic. It is empty of any faith and has one major motive, to be avant garde and anti-popular, anti-man. Man the god has become man the enemy to the modern self-appointed elite. The pin-up thus is the last and popular debasement of the old faith, humanism. It is a debased ikon, not an ikon of authority and respect but an ikon of anarchy.

The ikons of modern man are thus collapsing. In a totally humanistic television program recently, the idea of the goodness and innocence of man, once an article of faith, was ridiculed. Man is cynical about man.

But cynicism frees no man. Cicero did not believe in the gods of Rome, but he still promoted them, having no faith and nothing else to replace them. The dying religion of humanism is thus still solemnly affirmed by men who have nothing to offer in its place. In intellectual circles, there is much discussion of "images" because there is an absence of any commanding image. Like the latter days of Rome, these are dangerous and crisis days, but also an opportune time for us, who alone have the answer, *the image of power*, namely, Jesus Christ, God the Son, who is heir and Lord over all things, "Who being the brightness of his [God's] glory, and *the express image* of his person, and upholding all things by the word of his power" (Heb. 1:3), rules with the sceptre of righteousness and is bringing His purposes to pass in the events of our time. Even as He shattered the image of Dagon (I Sam. 5:3), so He shatters all other images in every age. The things which are, are being shaken, so that only those things which cannot be shaken may remain (Heb. 12:27).

Modern man has tried to replace Jesus Christ, the express image of God, with a new image of his own making. The philosophers have sought to replace not only Christ, but humanism's images of the ruler and of sex with a new image, scientifically conceived and ostensibly the truth. This scientific image of man has been materialistic and sometimes mechanistic. Man has been reduced to his chemistry, or, at best, his biology. He has been seen as a fortuitous concourse of atoms, or an advanced animal, still governed by animal drives. This new image has greatly influenced the thinking of modern man, and it has in recent years especially strengthened the sexual image. Man, seeing himself as an animal, has interpreted himself in terms of "animal" pleasures as he visualizes them—sex, food, and play.

Scientists like B. F. Skinner, who have advanced this scientific image to its logical conclusion, now plan a future for this higher animal, a future, to cite the title of Skinner's 1971 book, which is *Beyond Freedom and Dignity*. Man is to be the new beast of burden, the laboratory animal and salivating dog, of the planners of tomorrow. The scientific image of man has de-humanized man, and modern man is witnessing his degradation from a creature of God, made in the image of God, to a thing in whom electrodes should be planted to make him respond properly.

The modern era is thus in trouble and is deathly sick. Its inability to create a tenable image for man to live by, to understand himself, and to find a purpose for living, is very much in evidence. Only as man sees himself as a *sinner*, one made in the image of God but in rebellion against his Maker, and then returns to the Lord whose image he bears, can man find a meaning to life, a purpose for living, and, in Christ, the true image of power, truth, and life.

ECONOMIC COMMENTARY: Gary North

Economics: Magical or Creationist

In 1973, Hillsdale College in Michigan staged a debate between Prof. Gardner Ackley, one of the leading economic advisors during President Johnson's Great Society, and Enoch Powell, the conservative Member of Parliament from Britain. Powell, who is undoubtedly the most eloquent conservative politician in the English-speaking world, skewered Ackley as if he had been a piece of lamb for a shish-ke-bab banquet. Finally, Ackley announced to his audience the essence of the Keynesian system which is entrenched on every campus in America's university network: "With the New Economics, you can have your cake and eat it, too!"

Years ago, Prof. Ludwig von Mises characterized the New Economics of John Maynard Keynes as a philosophy of "stones into bread."¹ Though a humanist, Mises knew enough biblical history to be familiar with the temptation of Christ by the devil in the wilderness. Turn the stones into bread, the devil taunted Christ. Christ's answer was straightforward: "It is written, That man shall not live by bread alone, but by every word of God" (Luke 4:4). In other words, Christ reaffirmed the power of God's word as the foundation of our faith and actions. Though he was able to circumvent the natural laws of economics (by feeding thousands on two separate occasions with a small quantity of food), Christ nevertheless reminded Satan of the limitations under which all created beings must operate. God's word, not magic tricks, is the foundation of all existence.

Yet in today's world, the most rigidly humanistic and anti-superstitious of all the social scientists, the economists, are strikingly similar to the occultists of the Renaissance. Their guild mentality, their commitment to seemingly arcane formulas, their faith in the power of men to manipulate external events in order to produce personal and national wealth, their disdain for "mere" citizens to judge their activities—citizens like Enoch Powell, for example—all point to a sociology of magic. Prof. Joseph Schumpeter, whose writing was always quite clear and forceful, nevertheless was representative of the bulk of writing economists when he stated in 1950 that "Economists in particular, much to the detriment of their

1. Ludwig von Mises, "Stones Into Bread, The Keynesian Miracle" (1948), in Henry Hazlitt (ed.), *The Critics of Keynesian Economics* (Princeton: Van Nostrand, 1960), pp. 305-15.

field, have attached unreasonable importance to being understood by the general public, and the public even now displays equally unreasonable resentment toward any attempt to adopt a more rational practice.”² Since 1950, the economics journals have become virtually unreadable—so bad, in fact, that some editors of these journals cannot understand the submitted articles, and they have to employ professional mathematicians to decipher them before they can make a proper evaluation.³

With the terrible price paid in terms of lost communications, should we not at least expect an increase in accuracy? Should we not expect fewer economic dislocations, more preparation for forthcoming economic problems, less confusion at the top? Yet since 1965, economic affairs have become vastly more chaotic. One scholarly study of short-term economic forecasting in the United States concluded that such professional forecasts are not significantly better than they would have been had the forecasters simply assumed that the following year would not produce anything different than the previous year.⁴ This study was published in 1967—*before* the forecasts really collapsed!

The success of the New Economics in stimulating the economy from 1961–65 without “too much” price inflation lured Walter Heller into a now laughably overstated assessment of the powers of economic manipulation at the federal level.⁵ Yet even as he was writing his little tract, Alvin Hansen, the man who was converted to Keynesianism in the mid-1930’s and who taught economics to Paul Samuelson, Keynes’s primary acolyte in the United States, was frantically trying to escape all responsibility for the price rises that were beginning to become a problem for all the Keynesian magicians. There was not enough central planning in the American economy as of 1966, he asserted; too many private firms were reaping excessive profits, and the President had to be given unilateral discretionary authority to intervene and sop up these excessive profits. No one should blame the New Economics for price inflation, he pleaded, for there is not enough centralized economic power yet. But when such power is created, he promised, we will be all right once again. “When we use fiscal policy, we know what we are doing.”⁶ Since 1966, little has taken place to add much weight to Prof. Hansen’s statement of faith.

2. Joseph Schumpeter, *History of Economic Analysis* (New York: Oxford University Press, 1954), p. 10.

3. John Kenneth Galbraith blew the whistle on this bit of academic hypocrisy: *Economics, Peace, and Laughter* (New York: New American Library, 1972), p. 44n.

4. Victor Zarnowitz, *An Appraisal of Short-Term Economic Forecasts* (New York: National Bureau of Economic Research, distributed by Columbia University Press, 1967), p. 31.

5. Walter Heller, *New Directions of Political Economy* (New York: Norton, 1967).

6. Alvin H. Hansen, “Inflation and the New Economics,” *Challenge*, XV (Nov.-Dec., 1966), p. 6.

Faith plus centralized economic power equals stones into bread. Have your cake and eat it, too. The state can create wealth. The state is competent, expertise will not fail, public comprehension is not a valid primary goal. This is the sociology of magic.

I have in my files a series of clippings from various economic journals dealing with forecasts concerning price inflation. They were made between early 1972 and mid-1973. Almost without exception, the professional forecasters at both the government level and the private level—banks, businesses, foundations—predicted a mild inflation for 1973.⁷ Yet commodity prices skyrocketed faster than they had in peacetime ever before, and this phenomenon was international. Every nation was pursuing the same policies of deficit finance and expansionary fiscal stimulation. At last, the New Economics had become acceptable on an international basis, and for the first time all nations were pursuing the same goals. No longer would the monetary inflation (and higher prices) of one nation be offset by monetary restraint in another country. The economic commentators of late 1973 all pointed to this unique “random” event, and they could blame it for the worldwide price inflation. But the event was not random; it was the culmination of two generations of Keynesian teaching in the major universities of the world. What was

7. For example: “Inertia will be a major factor retarding price increases in 1973, say some economists, primarily because the rate of inflation has been dropping over the past several quarters.” *Business Week* (Nov. 18, 1972), p. 76. “Perhaps the best reason to hope that inflation may not soon become dangerously rapid again is simply that U.S. policy makers appear increasingly aware of the potential problem.” Alfred L. Malabre, “The Outlook,” *Wall Street Journal* (Dec. 4, 1972), front page. In early 1972, Secretary of Agriculture Earl Butz predicted a 4% to 4.5% increase in farm prices for 1973; they rose over 20%—*U. S. News & World Report* (Aug. 27, 1973), p. 27. My favorite appeared in the *Monthly Economic Letter* of the First National City Bank of New York (June, 1972). After admitting in the introductory remarks of an essay on inflation that “Inflation is the rock on which most forecasts of the U.S. economy have foundered,” the article goes on to conclude that price inflation is coming to an end in this country. It first admits that most forecasts had underestimated price inflation, 1969–72, but it nevertheless asserts that “These forecasts have been based on reasoning soundly backed by both theory and experience.” Undaunted by the recent failures, the author concludes: “Because the old rules do seem to be valid still, the Administration’s target rate of inflation—2-3%—is a reasonable expectation, although it may not be achieved quite as soon as the Administration would like. . . . This forecast may also seem to fly in the face of accelerated rates of advance shown in the price indexes for the first quarter of the year. But special, short-lived forces were operating in this period” (p. 9). Apparently, “the old rules”—the old rules of the New Economics which the bankers, no less than the economics professors, fervently believe in—do *not* seem to be “valid still,” and the price increases of early 1972 were anything but “special, short-lived forces.” But the Keynesians are still Keynesians; the old laws must be assumed to be valid still, or else a lifetime of study and propaganda on the part of the Keynesian magicians would have been spent in vain. This, obviously, none of them is willing to admit. The economy is wrong, the politicians are wrong, the public is wrong, but “the old rules” are eternal!

“inevitable” in retrospect in the columns of the experts had not been foreseen a year earlier by any of them.

When I went on the lecture circuit in early February of 1973 to speak on the coming inflation, I quoted from the *Economic Report of the President, 1973*, which estimated price increases at a 2.5 percent to 3 percent level. I said then that it would be 6 percent and possibly 8 percent. Even with price and wage controls distorting price indexes, the final figures for the consumer price index for 1973 reported an 8.8 percent increase. How did I come close when the professionals were all talking 2.5 percent to (at most) 4 percent? I had no computers, no team of assistants, no macroeconomic or econometric model of the economy. What I had was an understanding of Genesis 3:15-17; there are limits on man's efforts. There are no free lunches. Monetary inflation (10 percent in 1972) will lead to price inflation. People who expect further inflation will buy goods now and thereby increase the price inflation. People who have lost faith in the ability of governments to tell the truth or operate efficiently will not believe in the published promises of 2.5 percent price inflation. People who act in their own self interest by purchasing goods and services now, knowing that they will cost more in a year, will not easily be convinced that they are in some way hurting the American way of life. Thus, when even Milton Friedman—the great opponent of price controls—could argue that they might help if they convinced Americans that a cooling off of the economy was in the books, I did not believe him. The American people, in their unsophisticated way, understood what the professionals did not: there was not going to be any lessening in price increases in 1972 or 1973. The only ones fooled by the rhetoric of the economists were the economists.

God imposed restraints on the productivity of the earth as a punishment, but also as a means of grace, in response to Adam's rebellion. Men would now be forced to cooperate in voluntary economic production if the economic benefits of the division of labor and specialized production were to be realized. Men would have to care for each other and for the earth itself if they were to promote their own economic ends. This is the great fact of economic life: there are restraints on production. This is a world of scarcity.

The medieval and Renaissance alchemists—and this meant virtually all those who called themselves scientists—were searching for the “philosopher's stone” which would turn lead into gold. But the meaning of the philosopher's stone was not simply its ability to produce wealth; it was an Archimedian point, a device which would unlock the secrets of the universe, including the secret of utopian paradise. It was a philosopher's stone, not a goldsmith's stone. It was a sort of talisman. Its secret was the secret of manipulation. It would transcend the limits of created reality;

it would help man to transcend his own limitations and become a new creature. In short, it was a religious quest.

The economics of Marx, Keynes, Social Credit, socialism, and all other forms of state interventionism are representative of this ancient quest. Science-magic will unlock the secrets of creation. Some new formula will make it possible for men—elitist, guild experts—to unchain productivity from its bondage and unchain mankind from all economic limits. To see these schemes as purely scientific or merely rationalistic is to miss their thrust. They are signs of the old Adam, desperately searching for the entrance back into paradise—not through God's grace and humble obedience to His law, but by magical manipulation. The result of such a quest is also predictable: destruction (Deut. 8; 28).

CONTEMPORARY CULTURE: Dennis E. Johnson

Evolution and Modern Literature

The evolutionary view of the origin of the world has had a strange effect on European literature of the last two centuries. Evolutionary ideas— notions of inevitable naturalistic ascent from lower forms to higher— appeared in the writings of the English Romantic poets, decades before the publication of Darwin's *Origin of Species*. These early expressions were full of optimism, for they presented evolution as a secular eschatology. But as the implications of this naturalistic worldview (which attempted to substitute evolutionary process for creation and providence) were worked out with greater and greater consistency, the Romantics' vision of a naturalistic New Jerusalem gradually gave way to the despair and ennui of twentieth-century existentialists and "absurdist." A survey of this decline reveals not only the impact of evolutionism on men of sensitivity and imagination, but it also illustrates the foundational importance of the biblical teachings of creation and providence for the production of a literature which reflects purpose in time and history.

In his essay, "The Funeral of a Great Myth," C. S. Lewis observed that imaginative statements of an evolutionary view of origins anticipated by many years any serious attempt at a scientific defense of the theory. This fact, suggested Lewis, indicates that the popular conception of "evolution" or infinite cosmic "development" is essentially mythical rather than scientific in origin.

If popular Evolutionism were (as it imagines itself to be) not a Myth but the intellectually legitimate result of the scientific theorem on the public mind, it would arise after that theorem had become widely known. . . . In fact, however, we find something quite different. The clearest and finest poetical expressions of the Myth come before the *Origin of Species* was published (1859) and long before it had established itself as scientific orthodoxy.¹

One illustration of this strange phenomenon offered by Lewis is John Keats' poem *Hyperion* (1818), in which Oceanus, one of the "old gods," observes the superiority of heaven and earth to the primeval chaos which preceded them, as well as the superiority of the "old gods" to the heaven and earth, and then concludes:

1. C. S. Lewis, *Christian Reflections* (Grand Rapids: Eerdmans, 1967), p. 83.

So on our heels a fresh perfection treads,
 A power more strong in beauty, born of us
 And fated to excel us, as we pass
 In glory that old Darkness.²

Keats was expressing a new secular eschatology, a conviction that history was being driven by impersonal necessity toward inevitable progress and perfection. Keats was not alone among the English Romantics. William Blake (1757-1827), a mystic who rebelled against Christian orthodoxy and Deism alike, saw the American War for Independence and the French Revolution as the birth pangs of a new millennium, the victory of Will and Energy over the primitive repressive forces of religion, law and reason.³ Percy Bysshe Shelley's (1792-1822) *Queen Mab* offers a similar millennial hope:

She declares that Necessity rules the world and will gradually usher in a happier time. Kings, priests, religion and commerce are pernicious and must perish. Women will be emancipated; love will be tender and true; man will become vegetarian and hence healthy and gentle; and earth will shift its position.⁴

In *Prometheus Unbound*, Shelley declared that the day of perfect love decreed by this inexorable impersonal process was already dawning.⁵

Seeking an alternative to the stagnant intellectuality of the Neoclassical writers and the sterile rationalism of English Deism, the Romantics turned to the emotional and volitional aspects of man as grounds for a new dynamism in history. They sought to infuse their poetic vision with an eschatology, a sense of movement and direction in history. But their eschatology was a secular one, cut off from the only adequate ground and source for cosmic purpose, the Sovereign Lord and Creator revealed in the Bible. In His place, they substituted impersonal concepts such as necessity, will, energy, or love. The appeal of this imaginative vision is understandable. A positive eschatology provides hope, and hope is not only a comfort in oppression but also a motive to action. The Romantic eschatology of infinite evolutionary ascent seemed to offer the security of inevitability. And its millennium was to be brought in by the exciting heroics of revolution. It seemed to be the perfect eschatology for the man freed from the bonds of religious taboo. It said our source was not the Creator but the primeval chaos; that the direction and wholeness of our history is guaranteed not by the Sovereign God but by the unquestionable, inevitable

2. *Ibid.*, p. 84. *Hyperion* may be found in its entirety in David Perkins, ed., *English Romantic Writers* (New York: Harcourt, Brace and World, 1967), pp. 1161-1171. Lewis' quote is from Book II, lines 206-215.

3. Perkins, *op. cit.*, pp. 76 ff.

4. *Ibid.*, pp. 951 f.

5. See, for example, the speech of the "Spirit of the Hour" at the close of the third act; Perkins, *op. cit.*, pp. 1009 f.

process of "natural law"; that our obligation is not the plodding faithfulness of the steward but the daring exploits of the revolutionary; and that before us stands not a Last Judgment but a cosmic and universal harmony.

Thus the Romantic poets had done the spadework for Darwin by the time the *Origin of Species* was published in 1859. Pictures of evolutionary progress compelled by impersonal necessity had already been planted in the popular imagination. Even the popularizers of Darwin's theory recognized that the success of the theory in the face of strong theological and scientific opposition (especially the latter) was due in part to the readiness of the public to believe and accept the evolutionary picture of reality. John Tyndall, one such popularizer of Darwin, observed in "The Belfast Address": "His success has been great; and this implies not only the solidity of his work, but the preparedness of the public mind for such a revelation."⁶ Contrary to Tyndall's belief, this "preparedness" was not so much a symptom of men's having "come of age" as it was a result of the imaginative world-scape painted by the Romantic poets.

The distressing thing for the men of imagination and sensitivity was that the scientific theory of evolution, when it did come to full expression and as its implications were uncovered, did not meet the expectations of the mythical picture of "Evolution." It soon became apparent that the scientists saw "progress" not as the product of some inevitable necessity but as a combination of accidental mutations and "Nature's" ruthless practice of exterminating mistakes. Thus Alfred, Lord Tennyson, spoke as early as 1850 of the leap of faith needed for a man to believe that God is love "Though Nature, red in tooth and claw/With ravine, shrieked against his creed."⁷ The created world which was originally given as a revelation of God and the sphere of man's rule under God had become for the later Victorians a stumblingblock to faith and a threat to man's existence, because it was now viewed through Darwin's eyes. The world was no longer seen as an originally good creation subjected to death and frustration through the fall of man. Rather, it was a battlefield in which every victory of complexity or intelligence over "lower forms" had been won through the savage law of survival of the fittest.

Moreover, as the scientific theory of evolution was formulated more consistently, it began to drain the teleology—the sense of dynamic direction—out of the popular Evolutionism. The myth called for change in a specific direction; change was always development, progress, ascent to higher and more complex and hence better forms. The scientific theory could only speak of change—perhaps toward greater complexity in some cases, but neither toward "higher" nor toward "lower" forms, neither for

6. M. H. Abrams, gen. ed., *The Norton Anthology of English Literature, Revised* (New York: W. W. Norton and Co., 1968), vol. 2, p. 1340.

7. "In Memoriam A. H. H.," section 56, lines 13-16; in Abrams, *op. cit.*, p. 873.

better nor for worse. The myth had in fact been operating on borrowed capital, surreptitiously trading on a sense of cosmic purpose that still lingered in the public consciousness as a result of the profound impact of biblical Christianity on the Western mind. Without a solid intellectual foundation of its own, the myth had been imaginatively spinning an illusion of eschatology out of impersonal forces and abstract ideals. The scientific theory (together with the outworkings of history) called the myth's bluff. Drained of the illusion of cosmic purpose or direction, the evolutionary worldview presented little more than an endless flux of change. Disillusionment plunged many major literary artists of the late nineteenth and twentieth centuries first into uncertainty and then into despair.

In "Locksley Hall Sixty Years After" (1886), Lord Tennyson attempted to reflect the disillusionment and uncertainty of the late nineteenth century in lines like these:

Gone the cry of "Forward, Forward," lost within a growing gloom;
Lost, or only heard in silence from the silence of the tomb.

Is there evil but on earth? or pain in every peopled sphere?
Well, be grateful for the sounding watchword "Evolution" here,
Evolution ever climbing after some ideal good,
And Reversion ever dragging Evolution in the mud.

There among the glooming alleys Progress halts on palsied feet,
Crime and hunger cast our maidens by the thousands on the street.⁸

The social evolution of the human race had failed to make England over into the Eden foreseen by Shelley or the New Jerusalem prophesied by Blake. Rather, the darkness only deepened around the cities, the centers of progress: Could men survive industrial and technological progress? Tennyson's attempt to speak the spirit of the age was not imitated by the poets of the late Victorian period. Attempting to protect literary art from the depersonalization of contemporary life, these poets concentrated on purely aesthetic questions and preached the mystical slogan, "Art for art's sake." Nevertheless, novelists such as Thomas Hardy, with his gloomy fatalism, and Joseph Conrad, with his explorations of a subconscious "radical evil" at the root of human nature, bridged the gap between the heady evolutionary hope of the early nineteenth century and the twentieth-century literature of despair.

The myth of evolutionary ascent was already losing much of its bogus teleology when the First World War focused the attention of many writers on the implications of a worldview based on impersonal chance and infinite time. Writers of major stature then struggled, as they still do, with the question of finding meaning in the midst of an infinite flow of unrelated moments, an endless extension of time in both directions. Bereft of a

8. Lines 73 f., 197-200, 219 f.; in Abrams, *op. cit.*, pp. 915, 919 f.

consciousness of the Creator who gives direction and coherence to the advance of time, twentieth-century novelists and playwrights reflect profound historical lostness. In an essay on Wyndham Lewis, Anthony Burgess pinpointed a major problem confronting twentieth-century novelists:

The art of the novel is temporal, like the art of music, though most great novelists have been uneasy about time: three contemporaries of Lewis—Proust, Joyce and Virginia Woolf—were obsessed with dredging the lastingly significant out of an endless flux they knew to be oppressive.⁹

The early work of T. S. Eliot reflects the same struggle with the problem of meaning in the midst of a splintered experience of life. Even when Eliot contemplates a possible future interruption in the endless flow of dissociated moments, the "eschaton" is an anticlimax:

This is the way the world ends
This is the way the world ends
This is the way the world ends
Not with a bang but a whimper.¹⁰

After the Second World War there developed in France an even more radical approach to the problem of meaning in a godless universe. This approach, the Theatre of the Absurd, was not so much an attempt at a solution to the problem of purpose and meaning as it was a denial of all solutions to the problem. Samuel Beckett's *Waiting for Godot* (1952), for example, explores both through form and through content the absurdity of men who still think eschatologically in the face of the infinite and disconnected passage of time. As the play labors on, tramp-clown Estragon and Vladimir fill the endless time with banal and self-pitying small talk and debates over the relative advantages of suicide or of waiting yet another day for Godot, an unknown savior whose promise to come is qualified by an infinite number of postponements and whose plan of salvation is equally obscure. Time is an endless burden (a message eloquently conveyed by the drably repetitive form of the play) and chronology is absurdity; yet still the pitiful clowns wait for Godot. Near the close of the play the blinded Pozzo lashes out at the tramps' preoccupation with time, a symptom of their incurable belief that history has purpose:

Have you not done tormenting me with your accursed time! It's abominable! When! When! One day, is that not enough for you, one day he went dumb, one day I went blind, one day we'll go deaf, one day we were born, one day we shall die, the same day, the same

9. Anthony Burgess, *Urgent Copy: Literary Studies* (New York: W. W. Norton and Co., 1968), p. 96.

10. "The Hollow Men," section V, lines 28-31; in Louis Untermeyer, ed., *Modern American and Modern British Poetry, Revised* (New York: Harcourt, Brace and World, 1955), p. 220.

second, is that not enough for you? (*Calmer.*) They give birth astride of a grave, the light gleams an instant, then it's night once more.¹¹

The evolutionary worldview has yielded bitter fruit in the work of Beckett. If time is infinite and cosmic purpose only a fool's wishful thinking, every day is as every other and a human life becomes an instant of consciousness dropped by accident into an infinite sea of impersonality.

Consistent with Beckett's denial of direction in temporal life is the novelistic style of the French critic and writer, Alain Robbe-Grillet. Convinced that events as they happen are without meaning, that there are no intelligible interrelationships in the objects of experience as such, Robbe-Grillet follows Immanuel Kant in placing the source of meaning in the subjective consciousness of man. And since Robbe-Grillet believes that the novel should reflect raw experience, he deplores any sense of meaning or direction in a novel as an unnecessary intrusion of the writer's subjective interpretation onto the experience of the reader. David Grossvogel comments:

Robbe-Grillet refuses the "archaic myth of depth" derived from a belief in inherent "significances" and chooses instead a flat texture, which, whatever the author's craft, never constructs a "story": it is able to create only an unlinked sequence of objective moments and momentary objects.¹²

Startling as the idea may sound to those familiar with the history of the novel, what Robbe-Grillet is arguing is that plot must be banned from the novel of the late twentieth century. And in this assertion he is simply applying his evolutionary worldview to his art with more consistency. The comprehensive teleology of the Romantics' evolutionary myth has given way to a radical solipsism in which an author places before the reader's eye objects which (it is thought) are void of inherent meaning or direction and (ideally) also void of any subjective interpretation placed upon them by the author. Grossvogel again observes:

At a moment of the human quandary when life has lost its predetermined meaning, objects have ceased to be reassuring, identity has become problematical, and divine right and the natural mastery of man are at best speculative theories, Robbe-Grillet's is a novel for our times.¹³

The resolution of the modern dilemma of meaning and teleology in literature, which is a central problem particularly for "story-telling" forms such as prose fiction (novel and short story) and drama, is to be found neither in the illusory teleology of sentimental Evolutionism nor in the

11. Samuel Beckett, *Waiting for Godot* (New York: Grove Press, 1954), p. 57.

12. David L. Grossvogel, *Limits of the Novel: Evolutions of a Form from Chaucer to Robbe-Grillet* (Ithaca: Cornell University Press, 1968), p. 281.

13. *Ibid.*, p. 299.

more contemporary denial of meaning and direction in our temporal existence. Rather, the solution lies in the biblical teachings of creation and providence. From the outset, the Bible denies the very roots of the worldview which has produced the absurdist play and the plotless novel. The Bible denies that the cosmos is at its source impersonal. It denies that human consciousness is the result of random chemical reactions in an infinite sea of time and flux. Rather, the personal, all-powerful Creator gave substance and shape to the created universe. The same Creator is also the sovereign Lord who orders and rules the temporal life of that creation according to His infinite wisdom. Every event and object is teleological and meaningful because it was planned by the all-wise God. Therefore, because the source and sustainer of history is the personal Creator rather than the impersonal infinity of time and chance, history has a plot. History's plot has both progression and coherence. It has a beginning—creation—, a crisis or conflict—the fall of man and the ravages of sin in the created world—, a climax—the redemptive work of Jesus Christ in history—, and a denouement—the application of Christ's victory in the historical life of the people of God and at his return in glory.

Because history has a plot, plot is possible for the literary artist under God. The Christian writer need not shy away from that interpretive process which is involved in every human communication and which is refined and developed in "serious literature," that is, literature in which careful attention is given to the form as well as the content of the communication. Even Robbe-Grillet cannot avoid this interpretive process, since the mere selection of "uninterpreted" events and objects is itself an act of interpretation. Yet the only adequate ground for this interpretive activity is the omniscience of the Sovereign God of the Bible. Every successful narrative work—epic, novel, play or short story—must contain in some measure the elements of unity and progression which distinguish plot from a mere catalogue of events. Yet it is precisely the elements of unity and progression in time which the evolutionary worldview, carried to consistency by men like Beckett and Robbe-Grillet, cannot provide. The successful narrator is the writer who, whatever his personal philosophical or religious beliefs, still exhibits (either through contact with a Christian consensus or through the image of God which he still bears in marred form) sensitivity to the two marks of unity and progression. Every plot is an implicit testimony to men's awareness of the Sovereign Creator and Lord who planned and directs our temporal existence.

III. DEFENDERS OF THE FAITH

Augustine

ROGER WAGNER

I

In the early centuries of the Christian era much of the church's vitality in faith and life came to expression among the congregations of northern Africa. In many ways the African church was the guiding light and pioneer of Christendom. Moderns who tend to associate Africa with Mohammedanism are surprised at the number of great leaders of the early church that hailed from North Africa, especially from the areas surrounding the two great social and cultural centers of Alexandria in Egypt and Carthage in the area of modern Tunisia. Clement of Alexandria, Tertullian, Cyprian, Anthony the Hermit, Alexander, Athanasius, and Cyril all were products in their maturity of the Catholic Church in North Africa.

The subject of our present study was perhaps the brightest and most influential of the stars in the African sky. He is Augustine, bishop of Hippo, destined to forge the orthodox faith in the heat of controversies with heretical sects: Manichaenism, Donatism, Pelagianism. He developed a body of Christian dogma that provided inspiration for much of medieval Christian teaching, though the Pelagian perversion became increasingly entrenched in the Roman Church system. It was the rediscovery of the New Testament teachings of Paul that brought Luther, an Augustinian monk, to life in the sixteenth century, and much of the fuel to feed the purging flames of Reformation was found in the rediscovery of the writings and teachings of Augustine of Hippo. Thus, the legacy of this great saint and scholar is indeed rich and varied, and of great importance to the professing orthodox church in the modern day. So we turn to discover something of the life and thought of St. Augustine.

In the early weeks of November, 354, Monica was awaiting the birth of a child. She was the wife of a middle-class patrician of the North African town of Thagaste, in the Roman province of Numidia. Patricius, her husband, was eager for a son and heir, and a son indeed it was: born on the 13th of November and named Aurelius Augustinus. The child's mother was a confessing Christian, a member of the local congregation, but Patricius was holding out against the faith—both out of lack of con-

viction of the truth of Christianity, and also because many of the more influential members of his class were still secretly practicing pagans, and their friendship was essential to his position.

The young Augustine was taught by his mother to revere the name of Christ, and she continually prayed that God would grant her son a new life in Christ. But the child was wayward. This is Augustine's own declaration. In his *Confessions*, he goes to great length to show how his young spirit wandered from the God and Savior of his mother, and from his own Lord Christ (he had been converted before he came to write the *Confessions*). He tells us that, like all men, he was moved by a love of self that easily and often became a contempt of God. The famous incident of the stolen pears is indicative, in Augustine's mind, of his waywardness and self-love. One evening he and his boyhood friends stole into a neighbor's orchard in order to gather fruit from a tree not their own. As they fled, being surprised by the owner, they found that their booty was not yet fit to eat, being unripe. Yet there was a delight in the stolen pears, though Augustine admits that he had all the pears he could eat for the asking at home, because they were taken for self-gratification without reference to God or his commandment: "You shall not steal."

Augustine enjoyed all that Thagaste had to offer in the way of primary and secondary education, and at the age of eighteen, through the favor of a wealthy friend of his father, he was sent to Carthage to study arts and sciences. Again in the *Confessions*, Augustine tells us of his riotous living in Carthage, a city seething with the delights of this world. While at Carthage, first as a student and later as a professor of rhetoric, several important and formative influences came to bear on Augustine. The first was his discovery of philosophy. While a student he had read the now-lost "Hortensius" of Cicero, and became so inflamed with a desire for the life of philosophy and intellectual contemplation that he was committed to the vocation of a scholar from that day forward.

Secondly, while at Carthage he became an active member of the heretical sect of the Manichees. Augustine had forsaken the teaching of the Catholic Church, because he had been persuaded that it was a foolish and irrational system of thought. By the same token, he was delighted with the alleged rationalism of the Manichaeans, with their ability to explain the cosmos in the light of reason. Mani, the founder of the sect, had blended Zoroastrian philosophy, Persian mystery religion, and the language of the Bible, and put forth his materialistic dualism as the correct interpretation of Christianity. The universe was made up of two eternal and material substances, the Good and the Evil; which were in all things in constant struggle. Manichaean anthropology thus called men to forsake the body and the lusts of the flesh (here they borrowed

the language of Scripture) and through celibacy and asceticism to seek the higher life of the good.

The sect was divided into the "elect," who sought to follow out the behavioral tenets of the teachings of Mani with complete consistency, and the "hearers," who were instructed in the sect but were still allowed to marry and bear children, and to work in the world in order to support the "elect." Augustine, not feeling that he was willing to renounce the flesh, and having taken a mistress and sired a child, became a "hearer" in the sect, and sought earnestly to learn all he could of the Manichaean philosophy. But he was soon to find that the "rationality" and intellectual respectability of the sect was merely a matter of outward show. He began to dig and question about the relationship of good to evil, of soul to body, and was unable to find members of the sect who could instruct him on such a level. Even one of their bishops could give him only the old answers and encourage him to seek more faith. Augustine thus soon grew cold on the sect, though he remained a member for some time.

Seeking new fields of intellectual pursuit, Augustine left Carthage and Africa for Rome in A.D. 383. He was unhappy with the quality of pupils he had in Carthage as a professor, so he left in search of better students of his now accomplished art of rhetoric. After a short stay in Rome he received an appointment as the public orator of Milan, Italy, through the good offices of a pagan nobleman in Rome. And here in Milan he came to his final battleground in his war against the Lord of heaven.

In the episcopal chair of Milan at the time of Augustine's arrival was the great and powerful champion of the Catholic faith, Ambrose. As a courtesy, the newly arrived Augustine paid a visit to the august bishop and was immediately impressed with the man's piety and great intelligence. He began to attend the sermons of Ambrose, and heard them with great interest and delight. It was the preaching of Ambrose that renewed the confidence of the young orator in the intellectual respectability of Catholic teaching. Still a convinced materialist and skeptic, struggling with the question of the existence of God and the problem of evil, Augustine was now at least prepared to listen again to the teaching he had long before received. Yet he was still ambitious for position, and committed to a life of pleasure, so much so that he dismissed his mistress for the sake of contracting a socially favorable marriage with a girl of Milan, and while awaiting her father's decision took up with yet another mistress. All of this conduct which was to grieve deeply the converted Augustine in the years to come. Thus Augustine's resistance to the faith was not alone intellectual, but moral, as Biblical teaching would lay the axe at the root of his whole way of life.

While at Milan, Augustine discovered the works of the philosophical school of Neo-Platonism. This philosophy declared that the true reality

was spiritual and one, and that the universe, including man, is a series of emanations and degenerations of the spiritual One. Evil and matter are identified, and are alike a privation of the good and the spiritual. Because Neo-Platonism had been much influenced again by the terminology of Scripture, much of what Augustine found in his new reading of the Scriptures seemed duplicated in the Neo-Platonists. This deeply impressed and delighted Augustine, who felt he had finally found a philosophy which agreed with what he saw as the Catholic faith. Neo-platonism also stressed deliverance from the flesh and a striving after the inward, spiritual experience of the One, and thus was not totally unlike the Manichaeism of Augustine's youth. Neo-Platonism had a profound effect on Augustine, such that his post-conversion struggle was one to free himself from the errors of Neo-Platonism, as he became more aware of the clear teaching of the Word of God in the Scriptures. This progression can be traced throughout his earlier and later writings, with his thought becoming less and less eclectic, and more consistently Christian as he reached his maturity as a thinker and apologist.

Ambrose's preaching, the Neo-Platonic philosophy, and his reading of the New Testament all conspired to bring Augustine to a corner, in a garden in Milan, under conviction of his intellectual and moral rebellion against God. In the *Confessions*, book VIII, he records for us his conversion experience. At the house of a friend in Milan, Augustine and a friend were having witness born to them of the truth and power of the Christian faith; Augustine was much troubled and was calling to God for deliverance. Fleeing to the garden, he heard a child's voice from nearby saying, "Take up and read, take up and read." Having with him in the garden a copy of the letters of Paul, he opened and read: "Not in rioting and drunkenness, not in chambering and wantonness, not in strife and envying, but put ye on the Lord Jesus Christ, and make not provision for the flesh to fulfill the lusts thereof" (Rom. 13:13, 14). The sharp, two-edged sword of the Word of God had pierced to the heart of Augustine and laid bare his drunkenness, his wantonness, his envying and pride, and gave him the answer to his prayer—"put on the Lord Jesus Christ." Augustine was made new.

In the months of the autumn of A.D. 386, immediately following his conversion, Augustine and several companions, including his mother, retreated to the estate of a friend, Cassiciacum, to study and teach, to read, to discuss and pray over the Word of God. Out of this period come Augustine's first post-conversion writings. Still strongly influenced by Neo-Platonism, they nevertheless show Augustine on a new road. That new road led geographically back to Africa, following his baptism by Ambrose on Easter, A.D. 387, back to his birthplace of Thagaste. But before he left Italy his mother Monica, having finished her course, died

and was buried at Ostia. Augustine, though deeply grieved, now faced her death in the light of a new consolation in Christ.

In Thagaste, Augustine and several of his companions decided to gather into a spiritual contemplative community for the study of the Word of God and meditation. But in A.D. 391 Augustine was wrenched, over his own opposition, away from the life of seclusion and contemplation, and thrust into the world of controversy and earthly and ecclesiastical affairs that was to busy him and consume him until his death. He was forced into ordination as a priest to assist the aged bishop Valerius of Hippo. This assistantship proved to put virtually the full load of episcopal duties on the shoulders of the inexperienced priest, and therefore when Valerius died in 396 Augustine was the natural choice as his successor. Accordingly, he was consecrated bishop of Hippo that same year.

As a North African Catholic bishop, Augustine had the duties of a full-time pastor over a local parish in Hippo. In addition, he was a busy teacher and preacher within the see, and also he served as the presiding judge of a busy civil court of local jurisdiction. During the years of his episcopacy he was called away to councils and controversies, and at the same time produced volumes of carefully reasoned expositions of Scripture and treatises on theological subjects. His vast literary output is doubtless a result, to a great extent, of his ability to dictate extempore a carefully thought-out and reasoned discussion to a secretary. His training in rhetoric was doubtless a great help in this way.

The years of Augustine's service as bishop of Hippo were taken up with many duties, as noted above. Yet the great impact of his ministry came in the service he rendered to the orthodox cause in two great controversies: those surrounding the Donatists and the Pelagians. The Donatist Controversy was precipitated by the persecution of the church of A.D. 303-313, when many of the members, laymen and clergy, submitted to the demands of the emperor to escape persecution. Many of these later repented and were restored by the Catholic Church. The Donatists felt this to be a grave error. They accordingly maintained a "pure" communion in isolation from the Catholic communion. They felt the sacraments of the Catholic Church were invalid, for the Holy Spirit worked effectually only through a minister untainted with mortal sin. Donatism was very strong in North Africa, and had presented a problem to the peace and unity of the church for a long time. Augustine argued the efficacy of the sacrament was based on the work of Christ, not the merit of the officiator, and hence the validity of the sacraments of the Catholic Church. In addition, he sought to persuade the troublesome Donatists to return to the fold, but they would have none of his persuasion. Thus, in the end, Augustine felt compelled to use force of arms to repress the Donatists.

The Pelagian Controversy arose from the teaching of an English priest, Pelagius, who attacked the orthodox doctrines of sin and grace, while claiming to be the voice of orthodoxy. He denied any real imputation of the sin of Adam on his posterity. Every man is born able to sin or to do the right before God. Adam set a poor example, but the human will is free to obey God and find His favor in and of man's own power. Augustine rightly argued that Pelagianism made unnecessary the saving grace of God. If man could attain the good on his own, then God was no longer the source of all righteousness and truth. Augustine stressed, with Paul, that man was dead in his sins, and he was unable to please God or choose the good. Thus the saving grace of God in Christ is essential to the blessedness of any man. Without it no man can see life. The Fall of Adam had changed the love of God into the love of self and contempt for God; it was an act of the human will, and irreversible by another act of man's will. Man is in need of an uplifting love, Augustine declared, the love that comes through the Incarnation and Atonement. The life-giver is the Holy Spirit poured upon the church at Pentecost. He said, "Men will not do what is right, either because the right is hidden from them or because they find no delight in it. But that what was hidden may become clear, what delighted not may become sweet—this belongs to the grace of God" (*De peccatorum meritis*, ii, 26). It was thus that Augustine set forth the doctrines of free and sovereign grace from God in Christ to sinful and destitute man. These were the doctrines rediscovered by Luther and Calvin that struck at the heart of Rome's medieval semi-Pelagianism, and restored to the church the true doctrine of salvation.

Augustine spent his life in the defense of the name and glory of Christ, and the truth and authority of God's Word. And therefore it was a weary and aged Augustine who saw the hordes of Vandals sweep across North Africa in the second decade of the 5th century, and finally lay siege to Hippo itself in 430. In the third month of the Vandal siege, Augustine became bed-ridden with a fever. He passed his last few days in penitence for his sins and prayer to the Lord. His senses were unimpaired to the end, which came on August 28, 430, nearly forty years following his ordination to the clergy, having served as faithful bishop and pastor in Hippo for some thirty-four years. He was in his seventy-sixth year. His own words provide a fitting epitaph: "The true philosopher is the lover of God" (*City of God*, viii, 1).

Augustine was a prolific writer. In addition to a great many sermons that remain for us, and a large collection of personal correspondence on various subjects from his pen, the bishop produced many volumes on philosophical, biblical, and theological themes. Among the better-known of his formal treatises are the *Confessiones* (397–400), about which we will speak below; *De Doctrina Christiana* (397–426), a compendium of

systematic studies of Christian doctrine; the *Enchiridion ad Laurentium* (421), a study of the Christian graces of faith, hope, and love; *De Trinitate* (395–420), his declaration and exposition of the orthodox doctrine of the trinity; *De Civitate Dei* (413–426), an encyclopedic volume embodying his philosophy of history; and the *Retractiones* (426–428), an honest reflection by the mature Augustine on the merit of all his works previously published. Of these several pieces, two deserve some further attention—*The Confessions* and *The City of God*.

In the *Confessions*, Augustine attempted to trace the history of his early life of wandering before his conversion to the Catholic faith (some ten years prior to the time of writing). Thus, this work provides primary source material for any biographical study of the bishop's life. It tells of his parentage and childhood in Thagaste, of his education at Carthage, his life under the influence of the Manichaeans, his time in Rome and Milan up until his conversion in 386, and his subsequent return to Africa. This account brings us to Book X of the *Confessions*, in which Augustine relates his spiritual and intellectual condition at the time of writing. Books XI–XIII shift their attention to a consideration of God's creation of heaven and earth, with commentary on the early portions of Genesis.

The book is unified around the theme of Augustine's "confession" to God. A modern reader is likely to consider confession as alone the act of making our sins known unto God. And although there is much of this sort of confession to God, we are mistaken if we assume that *The Confessions* is primarily taken up with the cataloguing of Augustine's sins. The saintly bishop is deeply grieved by his wickedness before the Holy God, and there is much hearty confession and repentance over the sins of his youth contained in the book. Yet the "confession" Augustine is making is primarily a confession of thankfulness and praise to God for his faithfulness and loving mercy, for his condescension and free grace in saving such an errant wanderer as Augustine sees that he was. Thus, even the confession of sin is a means to the end of praising and thanking God for his lovingkindness toward such a sinner.

There is yet a third way in which Augustine "confesses" in this work. It is a confession of the *faith* of the bishop of Hippo. It is filled with phrases and quotations from Scripture, as Augustine takes the Word of God upon his own lips to confess and profess his faith in the sovereign Lord of Scripture. In this way the last section of the *Confessions*, containing his reflections on the doctrine of creation, is not merely an appendix, disunited from the earlier ten books. It is a confession of his faith in the God who made heaven and earth, the Lord who made man in his own image, to glorify him and enjoy him forever. In this section, Augustine ascribes praise and glory to his Lord and King because of his works of creation and providence. The Scriptures, so long unopened to his dark-

ened and sinful mind, are now made plain to him, and beginning with creation he will profess and confess all that he finds in them: "Let me confess unto Thee whatsoever I shall find in Thy books, and hear the voice of praise, and drink in Thee, and meditate on the wonderful things out of Thy law; even from the beginning, wherein Thou madest the heaven and the earth, unto the everlasting reigning of Thy holy city with Thee."

In the *Confessions*, Augustine clearly sets himself at distance from the ancient pagan cosmologies by asserting clearly and powerfully the doctrine the God created all things by his fiat Word of power. He rejects the ancient notions that the world and the universe are eternally existent, or that they are self-created. By faith he receives the word of Moses in Scripture: "In the beginning God created the heavens and the earth" (Gen. 1:1). He goes on to ask:

But how dost Thou make them, how, O God, didst Thou make heaven and earth? Verily, neither in the heaven, nor in the earth, didst Thou make heaven and earth; nor in the air, or waters, seeing these also belong to the heaven and the earth. . . . Nor didst Thou hold anything in Thy hand, whereof to make heaven and earth. For whence shouldest Thou have this, which Thou hast not made, thereof to make anything? For what is, but because Thou art? Therefore Thou spakest, and they were made, and in Thy Word Thou madest them (*Confessions*, XI).

Jesus Christ, the second person of the Trinity, was present at the creation as the Word of God, and by the speaking of that Word, all things in heaven and earth were made. Christ, the Lord of history and the Judge of all the earth on the Last Day, stands also at the foundation of all things. Thus, with his doctrine of creation by the Word of God, Augustine here lays the foundation for his theocentric philosophy of history: God in Christ creating, redeeming, and bringing to consummation all things.

The City of God, though touching on many themes and subjects in philosophy and theology, is of primary interest because of the view of history contained in it. It was begun in 413, just three years after Aleric and his Visigoths had sacked Rome and had sent a shudder to the core of the doomed empire. Old Roman paganism, somewhat eclipsed by the Catholic Christian Church since Emperor Constantine, again reared its head to lay the blame for Rome's troubles at the door of Christianity, because it had forsaken the old and traditional gods of the empire and thus had precipitated the present tribulation. It was with a view to refute the false accusations and blasphemies of the pagans that Augustine, now bishop of Hippo and most noted spokesman for the church, undertook to write this vindication of God in his dealing with men in history. A secondary, though very important, purpose in writing was to encourage and comfort those whose faith in God and his Word had been shaken by the turn of world events. This he hoped to accomplish through the setting forth of

a corpus of positive ethical and theological doctrine drawn from the faith of Scripture.

Augustine begins by attacking and refuting the ancient classical notion that world history is but a series of eternally recurring cycles. Societies supposedly emerged from the vitality of primordial chaos and anarchy to develop more and more highly organized structures in political and social life, only of necessity to return to the life-giving fountainhead of chaotic anarchy. These recurrent periods of nihilism were essential to state and society, and though societies tried to circumscribe the character and duration of the periods of chaos, they often broke loose to the total destruction of society and overthrow of empires. Thus, the major factors giving meaning to this classical philosophy of history were the elements of control (structure) and power (chaos), without reference to development, movement, or progress in history.

In opposition to this view of history, Augustine traces the biblical picture of a progression of history from creation to consummation, under the providential guidance of God, who is the source of history, by the act of creation, and its fruition, as he calls it, to a close in the "great and terrible Day of the Lord." Augustine finds two things particularly abhorrent about the cyclical view of the pagans, both considerations of great existential concern to the bishop and all of the faithful. Firstly, the cyclical view of history destroys the uniqueness of the person and work of Jesus Christ. From the Scriptures Augustine confessed that Jesus was the *unique* (only-begotten) Son of God, *alone* among all the race of man in his sinlessness and total obedience to the Father. He confessed that having been brought forth of the virgin Mary in the "fullness of time" he gave himself *once for all* an atonement for sin on the cross of Calvary, that he was buried and rose again, waiting now to return on the last day to judge the living and the dead. If the pagans were correct, Augustine argues, in viewing the present age as but one of an infinite number of eternally recurrent ages, then Jesus *cannot* be the unique Son of God, *cannot* have put away sin by the once offering of himself, *cannot* come one day to receive us unto himself for evermore. Therefore, the idea of eternally recurrent cycles would make God a liar, which Augustine cannot accept: "Let God be true, and every man a liar" (Rom. 3:4).

Secondly, Augustine asserts that the doctrine of eternally recurrent historical cycles is *without hope*. If periods of bliss are followed by periods of misery, inevitably and without hope of change, then what becomes of the Christian hope of eternal blessedness and fellowship with the Lord after the consummation? Here again, because God has promised that we who believe shall ever be with the Lord, and because God cannot lie, Augustine must reject the notion of historical cycles as abhorrent to the Word of God and destructive of the faith and hope of the church.

We have noticed above that Augustine's doctrine of creation by the Word of God, recorded for us in the latter books of the *Confessions*, provided the foundation for his philosophy of history. With the pagan notion of the eternality and self-existence of the cosmos goes the idea of eternal recurrence in history. The biblical doctrine of creation overthrows *both* pagan ideas. The doctrine of creation also has certain implications for a philosophy of history that are by no means lost to the acute mind of the bishop.

History, rather than being merely a recurrent manifestation of social and political control and power, begins to manifest progress and development toward a *goal*, the goal Augustine sees as the eternal blessedness of the City of God in the presence of the Lord.

[Augustine] bears witness to the faith of Christians that, notwithstanding all appearances, human history does not consist of a series of repetitive patterns, but marks a sure, if unsteady, advance to an ultimate goal. As such, it has a beginning, a middle, and an end. . . . In this conviction he finds the marching orders, so to speak, of the militia of Christ.¹

The meaning of history is not to be found in the rise and fall of world empires, but in the issue of God's judgment upon the world of men. By virtue of the creation, and the judgment, history derives its meaning only with reference to the God who began, continues, and will end it.

Because God, by his own power, for his own glory, according to his own purpose, created the heavens and the earth, he stands above it in the relationship of Lord to creature. He is not, like the classical deities, subject to time and space, as it were, "locked up" in his creation. He moves history and nations in terms of his decree through the agency of his providence. Meaning for history is bound up with the eternal *decree of God*. Central for the interpretation of the meaning of history is thus the revealed will of God in the Scriptures. The *key* to the meaning of history is not the positivistic amassing and study of the details of political and social history, but the faithful and careful exegesis of Scripture, for in the Scriptures are the plans and purposes of the God of history revealed. Thus, it is not too surprising that in *The City of God* Augustine is not very interested in the *details* of world history, beyond using them to illustrate the scriptural principles involved. It is through the study of God's Word that he learns of the source and purpose of history, and whatsoever things come to pass are to be seen in terms of those two points of reference.

The structure used by Augustine to set forth the meaning and progress of history, as his title suggests, is the two "cities"—the City of God and the Earthly City. The former began with the creation of angels and Adam and

1. Charles N. Cochrane, *Christianity and Classical Culture* (New York: Oxford University Press, [1940] 1968), p. 484.

Eve in their perfection. It is characterized by love for God, obedience to the Word of God, faith and hope and love. Its destiny is eternal fellowship with the Creator God. The latter city began with the fall of angels and men, and it is comprised of the rebellious, unregenerate portion of angels and mankind. It is characterized by self-love, by exchanging the glory of God for the glory of the creature, by hatred of the true and living God, and by rebellion and blasphemy. It is destined to eternal death, separation from God, punishment.

Since the Fall, the City of God has become a redeemed community in Christ: those elect of God, called in time, justified, sanctified, and awaiting the adoption of their bodies and glorification together with Christ. This city is the kingdom of God as a worshiping and conquering community in every area of life. It is the continued antagonism between the City of God and the Earthly City which gives dynamic and development and meaning to history in Augustine's view. He traces the history of the two cities from the time of Cain and Abel to the age of Rome, and looks forward to the final triumph of the City of God at the consummation, and the blessedness of God's people with him forever.

In the history of the two cities traced in the *City of God*, Augustine draws out the implications of the doctrines of creation and final judgment for the meaning of history. By this he seeks to convince the gainsayers that the fall of Rome is but one more instance of God's judgment on the Earthly City for its blasphemy of the true God, and its rebellion against his Word. Additionally, he would comfort the flock of Jesus Christ with the assurance that *all* history is in the hands of him who spoke the worlds into existence by the Word of his power, and now works all things together for the good of *his* City, the people of God.

Here then is Augustine's total philosophy of history. By faith alone can we accept the existence of the triune God. By faith alone do we and can we accept the redemptive work of Christ and his Spirit in history. By faith alone can we accept the fact that we are creatures and sinners before God. By faith alone can we understand the progress of history to be that of the conflict of Christ against Satan. By faith alone can we accept the fact that the issue of each man's life and of history as a whole is that of eternal life and eternal woe with victory for Christ over his foes.²

Augustine, the man of God, the aged bishop of Hippo, having fought so long to defend the name of Christ against those who would count it as nothing received his comfort in the assurance that as God was shaking the nations, that which could not be shaken would remain.

2. Cornelius Van Til, *A Christian Theory of Knowledge* (Nutley, N. J.: Presbyterian and Reformed Publishing Co., 1969), p. 137.

IV. BOOK REVIEWS

Speculations and Experiments Related to Theories on the Origin of Life: A Critique, by Duane T. Gish. Institute for Creation Research, San Diego, California. 1972. 41 pp., \$2.50.

Reviewed by GEORGE F. HOWE

A scene of modern "geochemists" running experiments on the origin of life reminds one somewhat of the witches from *Macbeth* who hovered over their mystic brew pots. Unlike the creative mixtures in the Shakespearean caldron which included lizards' legs, owlets' wings, blindworms' forks, and adders' stings, the contents of these prosaic vats used by our evolutionary "wizards" seem drab by comparison—usually involving such stuff as methane, ammonia, and water. Whereas these sober-minded scientists had hoped to stick in their thumbs and pull out clear evidence for the origin of life, Dr. Gish has shown in this amazing book that they have pulled no plums from the evolutionary pie but only problems, uncertainties, negations, and improbabilities!

Dr. Gish has listed 5 successive steps in evolutionary logic, from primitive earth atoms up to the origin of the first life cell. Under each point he gives the reader laboratory reasons to reject evolutionary conclusions. For example, these "brew" experiments previously mentioned involve a device which a chemist uses to isolate end products in a reaction—a "cold trap." This handy piece of equipment helps speed up the reaction rate and protect the products from destruction by the same forces involved in their formation. But one is about as likely to find anything like a cold trap in the theoretical ancient ocean as he is to find a color TV set buried in one of the pyramids of Egypt!

Perhaps the best way to experience the vigor of Dr. Gish's arguments is to read this book along with a very well-known evolutionary publication on the same theme by Cyril Ponnamperuma.¹ Dr. Ponnamperuma *et al.* leave the reader with the feeling that somehow the formation of life on earth by evolution was inevitable. Dr. Gish asserts the opposite—that life without supernatural design is highly improbable. Where Ponnamperuma uses equilibrium constants to foster belief in an atmosphere of methane, ammonia, and water, Gish uses this same two-edged sword to show that supposed evolutionary chemical reactions actually lie far to the left, favoring smaller, less complex molecules and leading nowhere. Dr. Ponnamperuma points to the isolation of this or that organic chemical from a brew-spark experiment by using careful controls and special artificial conditions. Dr. Gish shows that if one simply mixes certain of the products from several of these individual reactions (amino acids with sugars, for example) he ends up with "nonbiologic products" (p. 14). It takes no background in science to understand that conditions on any early earth-ocean system would resemble Gish's model, not Ponnamperuma's.

1. "Molecular Differentiation in Primordial Systems," by Cyril Ponnamperuma, Linda Caren, and Norman Gabel, in *Cell Differentiation*. Edited by Ole A. Schjeide and Jean de Vellis (New York: Van Nostrand Reinhold Co., 1970), pp. 15-30.

Protein microspheres have been heralded by certain noted evolutionists as precursors to living cells, when in reality these little blobs are hardly more complex or life-like than oil drops in Russian salad dressing. Both Drs. Gish and Ponnampерuma lament the starry-eyed, unrealistic claims that certain investigators have made for these small protein bubbles.

In comparing the two documents, it is evident that Dr. Gish meets most if not all of the evidences Dr. Ponnampерuma proffers as support for evolution and shows that they warrant no such conclusion. Dr. Gish writes as a scientist and philosopher who is aware of a hypothesis other than his own, and then he proceeds to demolish the opposition. Dr. Ponnampерuma lamely states at the onset of his paper that it is "—based on an evolutionary philosophy," and he never once admits to a viable alternative philosophy, nor does he cover his flank against any of the telling criticisms that a creationist like Dr. Gish might raise.

This contrast might seem mildly amusing were it not true that: (1) the shabby views of evolutionists such as Dr. Ponnampерuma are promulgated in public classrooms at public expense, and very few if any textbook lines are devoted to skillful criticisms by creationists; (2) Dr. Ponnampерuma and others are supported in their vacuous research by millions of dollars, and an independent worker with little or no research budget can cut their argument to ribbons using chemical criteria alone.

Critique of Radiometric Dating, by Harold S. Slusher. Institute for Creation Research, San Diego. 1973. 46 pp., \$2.50.

Origin and Destiny of the Earth's Magnetic Field, by Thomas G. Barnes. Institute for Creation Research, San Diego. 1973. 64 pp., \$2.50.

Reviewed by GEORGE F. HOWE

Line upon line, precept upon precept, through precise mathematical formulation and clear verbal evaluation, Harold Slusher shows that radioactive dating is by no means a "clock in the rock" which never lies. To the contrary, he demonstrates that all radiodating techniques are based on grossly unverifiable assumptions and that the data have sometimes actually been tailored to fit preconceived evolutionary notions.

From his own calculations and those of others, Professor Slusher presents the following specific tenets, among others:

1. Radioisotope decay rates cannot be proved constant and in some cases have been found to fluctuate.
2. Pleiochroic halos indicate a rapid creation of rocks and mineral elements.
3. One can never ascertain the "original conditions" of a rock crystal and yet such knowledge is absolutely essential to radiodating.
4. Rocks are by no means "closed systems," and yet they must be if radiodating is to have validity.
5. "Radiogenic" lead may have been largely produced through rapid neutron reactions rather than throughout elapsed eons of decay.
6. Recent lavas give false "old" ages by the potassium-argon method.
7. Evolutionists have sometimes "forced" the age estimates from different isotopic methods to yield the same "date."
8. The relative amount of C-14 present in the atmosphere thousands of years ago was probably much lower than at present for a variety of reasons.

9. Formation and decay of C-14 are in disequilibrium and this strongly suggests an age of less than 10,000 years for the earth's atmosphere.

Dr. Barnes proves that the actual data of science point toward a rapid decay of the earth's magnetic field and hence a very recent creation. He meets the challenge of Dr. Elsasser's dynamo theory and the paleomagnetic theory of repeated magnetic field reversals. Since the earth's magnetic field is known to have a half-life of only 1400 years, Dr. Barnes shows by extrapolation that only 10,000 years ago the earth would have had a magnetic field as high as that surrounding typical magnetic stars—100 gauss. Since a field much higher than this would have required inconceivably high electric currents in the earth's core and phenomenal joule heating effects, Barnes puts the upper limit of earth age at 10,000 years.

Dr. Barnes's book could be widely adopted in physics classrooms as a primer on the subject of magnetism in general. It could likewise be used as collateral in classes of geophysics. Both authors have achieved the enviable goal of preparing books which will assist both laymen and specialists—novices and experts at the same time. Each presents lucid pages on the basics for beginners, yet both men move to topics involving mathematical rigor. Non-mathematicians will read these pages with profit, however, because the authors have a commendable habit of putting into good English what is otherwise obvious to the quantitative elite who comprehend the cryptic clauses of calculus. However, most of section IV in Dr. Barnes's book (pp. 53-64 deal with the calculation of magnetic fields and electrical currents) will benefit only those readers who are familiar with differential equations and triple integrals. While arithmetical details are never spared, neither author has allowed mathematics to become a tail that wags the dog.

The evidence of these two volumes comes through loud and clear—dating methods are full of flaws and the earth is probably very young! All teachers of science should buy and read these books, and any science teacher who can read such documentary evidence without being jarred and without making some changes in curriculum should tear up his contract and begin looking for a different kind of job.

Evolution: The Fossils Say No! by Duane T. Gish. Institute for Creation Research, 2716 Madison Avenue, San Diego, California. 1972. 129 pp., \$95.

Reviewed by R. J. RUSHDOONY

This brief study, written in a more popular vein, is one of a number of works published by the Institute for Creation Research. It is of considerable merit for general readers as well as students.

Dr. Gish contrasts the evolutionary and creationist explanations of the fossil records. In page after page, he points out how the evolutionary faith raises more questions and answers none. It is held as a blind faith in preference to accepting creationism and God. As D. M. S. Watson has said, speaking as an evolutionist, it is "a theory universally accepted not because it can be proved by logically coherent evidence to be true, but because the only alternate, special creation, is clearly incredible" (p. 10).

Gish's analysis of what constitutes a "kind" is clear and to the point (pp. 18 ff.). His account of the fraudulent, deceptive, and prejudicial reconstructions of "early" man is a telling summary of the slippery grounds of evolutionary thought (pp.

72 ff.). Gish quotes from Mark Twain's *Life on the Mississippi* to cap his analysis. Twain declared: "There is something fascinating about science. One gets such wholesale returns of conjectures out of such trifling investment of facts" (p. 91).

Telling also is his reference to the evolutionist's use of time to replace God and to become the source of all miracles. To hold that a frog can be turned into a prince is to believe in a fairy tale. To hold that a frog (or some other amphibious creature) in 300 million years becomes a prince is called science (p. 5).

The establishment of the Institute for Creation Research is to be welcomed. Together with the Creation Research Society, the Bible-Science Association, and other organizations, it is rendering a needed service by analyzing the absurdities of contemporary "scientific" myths.

CHALCEDON PUBLICATIONS

ROUSAS JOHN RUSHDOONY

Biblical Philosophy of History (148 pp.). History is meaningless and ultimately unexplainable apart from the decrees of a sovereign Creator. Criticism of the various alternative theories: evolution, cycles, Marxism, non-theistic conservatism, historicism, relativism.

Bread Upon the Waters (102 pp.). A series of short, popular essays, originally published in *The California Farmer*, dealing with such topics as law, the family, ownership of the child, the Bible and property, and the subsidizing of evil: 51 essays in all, each two pages long. It serves as a handy introduction to practical Christianity.

By What Standard? (212 pp.). An introduction to the problems of Christian philosophy. It focuses on the philosophical system of Dr. Cornelius Van Til, which in turn is founded upon the presuppositions of an infallible revelation in the Bible and the necessity of Christian theology for all philosophy.

Flight from Humanity (67 pp.). A study of the impact of neoplatonism on Christian thought. This pagan heresy, which has been mixed with Christian intellectual categories for two thousand years, teaches that matter is sinful and spirit is good. Therefore, men are called to forsake the world and retreat into "spiritual" holiness and cultural irrelevance. This outlook has led to the impotence of the church and other Christian institutions.

Foundations of Social Order (232 pp.). Subtitled, "Studies in the Creeds and Councils of the Early Church," it deals with many of the heresies of the early Christian centuries that are with us still. They all have one point in common: a doctrine of Christ's subordination. By compromising either His divinity or His full humanity, these heresies led to the substitution of the state or the church as man's only link to God.

Freud (69 pp.). A well-documented study of the writings of the famous psychologist. Freud attempted to relegate guilt into the realm of biology and science, so as to deal with it apart from Christian or other openly religious categories. Science is to save man, assuming anything can—and Freud was not certain that anything can. Much of our contemporary social legislation is an outgrowth of Freudian concepts.

Institutes of Biblical Law (890 pp.). A massive study of the meaning, history, and contemporary implications of biblical law. All laws in the Bible, argues the author, can be subsumed under one of the ten commandments—case law applications of the Decalogue. Over 3,000 scripture references are indexed. Numerous references are included from the basic rabbinical literature, including the Babylonian Talmud.

Intellectual Schizophrenia (133 pp.). An introductory study on education. All education is ultimately moral and religious, since all human standards involve a concept of law. The attempt to fuse secular concepts of man and Christian education has led to our contemporary intellectual schizophrenia. No such fusion is possible between utterly conflicting world views. Secular, “neutral” state education is, by definition, the established church of the religion of humanism.

Law and Liberty (152 pp.). A short, popular survey of some of the topics covered in detail in *The Institutes of Biblical Law*: authority, chaos, evolution, magic, the family, property, government, Marxism, and parenthood.

Messianic Character of American Education (410 pp.). An in-depth study of over two dozen key thinkers who were the founders of progressive education in America. Its thesis is that progressive education is a religion and, as in all true religions, its goal is world transformation. The book also includes a section of biographical and bibliographical data on the various figures.

Myth of Over-Population (56 pp.). A survey of literature, both scholarly and popular, dealing with the question of the population explosion. The conclusion: secularism, government intervention, and urbanization have combined to reduce agricultural production and subsidize the least productive citizens. The goal of the anti-population prophets is to control the most basic of all capital resources: human beings.

Mythology of Science (134 pp.). There can be no thought—let alone scientific thought—without ultimate intellectual presuppositions. Thus, all claims of neutrality are mythical and misleading. Modern science is founded upon the doctrine of the autonomous universe and the autonomous human mind. It therefore becomes enmeshed in the great intellectual paradox: total impersonal determinism vs. total chance and randomness. Without the doctrine of creation and the doctrine of the Trinity, no science is possible; secular science borrows Christian premises in order to function at all.

Nature of the American System (181 pp.). A compilation of essays dealing with American constitutional, intellectual, and religious history. Chapters on Fisher Ames and Alexander H. Stephens restore these

two neglected figures to their proper place in American history. Chapters on the "religion of humanity"—Unitarianism—and the United Nations indicate the drift toward revolution and government control. "The Conspiracy View of History" is also treated carefully.

The One and the Many (388 pp.). A history of a long-neglected and absolutely critical philosophical question: unity vs. diversity, monism vs. pluralism, totalitarianism vs. anarchy, monotheism vs. polytheism. Secular thought has been unable to solve the problem and so ignores it as a basic problem. The answer is the Trinity: one God, three persons. It is the philosophical foundation of Christian reconstruction.

Politics of Guilt and Pity (371 pp.). The first truly serious and thoroughly theological explanation of the necessity of Christian conservatism. God alone is sovereign; all secular attempts to augment the powers of the civil government beyond the biblical definition of government—as defined by Old Testament and New Testament law—will result in tyranny. Men will be "saved" by statist law rather than by God's grace.

This Independent Republic (172 pp.). A revisionist history of the foundations of early law. The American Revolution was a Christian counter-revolution against the illegitimate extension of parliamentary power into the affairs of the colonial parliaments, i.e., the legislatures. It refutes the oft-repeated claim that Deism had an impact on the public writings of the founding fathers.

Thy Kingdom Come (256 pp.). "Studies in Daniel and Revelation" demonstrate that the prophetic sections of the Bible were optimistic with respect to the external, visible triumph of God's church and Christian institutions prior to the visible return of Christ in glory. Men are therefore called to reclaim God's earth and exercise dominion over the creation to the glory of God. Christian faith is the opposite of neoplatonic, pietistic retreat.

GARY NORTH

An Introduction to Christian Economics (412 pp.). An attempt to rethink economics in terms of explicit biblical revelation. The focus of the book is on monetary policy: inflation, its consequences, and how to defend oneself against it. In addition, it provides an outline of Old Testament and New Testament teachings on property, stewardship, and ownership. It also contains chapters on socialist planning, women's liberation, bureaucracy, urban renewal, and property taxes.

Marx's Religion of Revolution (253 pp.). An in-depth study of Marx's philosophy, sociology, and economics. It demonstrates that the over-

riding concern of Marx was revolution, which served in his system as an alternative to personal salvation and Christian reconstruction. His system was self-contradictory at point after point, but all inconsistencies were subordinated to the idea of revolution.

GREG BAHNSEN

Theonomy in Christian Ethics (forthcoming). A defense of the applicability of Old Testament law for New Testament ethics. Apart from God's explicit, revealed law system, all ethical systems become graveyards. The civil magistrate is therefore compelled to enforce biblical law; political life is theonomic in character rather than autonomic.

BOLTON DAVIDHEISER

To Be as God (41 pp.). Modern science has abandoned the traditional idea of the quest for knowledge. Instead, it has turned to a quest for power. Men seek to become creator gods. Dr. Davidheiser's study focuses on the biological sciences.

ELIZABETH FELLERSSEN (editor)

Toward a Christian Marriage (43 pp.). Five essays on the theological meaning of marriage. Aimed at the layman; useful for classes in marriage counseling.

FRANCIS NIGEL LEE

Communist Eschatology (1201 pp.). A massive, exhaustive study of the eschatological vision of Karl Marx, Engels, and Lenin. It argues that this optimistic vision of ultimate triumph has been successful in winning converts precisely because of men's faith in its inevitability. Christians need therefore to reaffirm the original optimism of the apostles and the prophets if they are to escape the tragedy of cultural impotence and irrelevance.

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THE MINISTRY OF CHALCEDON

[Pr. 29:18]

Chalcedon [kalSEEdon] is a Christian educational organization devoted exclusively to research, publishing, and to cogent communication of a distinctly Christian scholarship to the world at large. It makes available a variety of services and programs, all geared to the needs of interested laymen who understand the propositions that Jesus Christ speaks to the mind as well as the heart, and that His claims extend beyond the narrow confines of the various institutional churches. We exist in order to support the efforts of all orthodox denominations and churches.

Chalcedon derives its name from the great ecclesiastical Council of Chalcedon (A.D. 451), which produced the crucial christological definition: "Therefore, following the holy Fathers, we all with one accord teach men to acknowledge one and the same Son, our Lord Jesus Christ, at once complete in Godhead and complete in manhood, truly God and truly man. . . ." This formula challenges directly every false claim of divinity by any human institution: state, church, cult, school, or human assembly. Christ alone is both God and man, the unique link between heaven and earth. All human power is therefore derivative; Christ alone can announce that "All power is given unto me in heaven and in earth" (Matthew 28:18). Historically, the Chalcedonian creed is therefore the foundation of Western liberty, for it sets limits on all authoritarian human institutions by acknowledging the validity of the claims of the one who is the source of true human freedom (Galatians 5:1).

Christians have generally given up two crucial features of theology that in the past led to the creation of what we know as Western civilization. They no longer have any real optimism concerning the possibility of an earthly victory of Christian principles and Christian institutions, and they have also abandoned the means of such a victory in external human affairs: a distinctly biblical concept of law. The testimony of the Bible and Western history should be clear: when God's people have been confident about the ultimate earthly success of their religion and committed socially to God's revealed system of external law, they have been victorious. When either aspect of their faith has declined, they have lost ground. Without optimism, they lose their zeal to exercise dominion over God's creation (Genesis 1:28); without revealed law, they are left without guidance and drift along with the standards of their day.

Once Christians invented the university; now they retreat into little Bible colleges or sports factories. Once they built hospitals throughout Europe and America; now the civil governments have taken them over. Once Christians were inspired by "Onward, Christian Soldiers"; now they see themselves as "poor wayfaring strangers" with "joy, joy, joy down in their hearts" only on Sundays and perhaps Wednesday evenings. They are, in a word, pathetic. Unquestionably, they have become culturally impotent.

Chalcedon is committed to the idea of Christian reconstruction. It is premised on the belief that ideas have consequences. It takes seriously the words of Professor F. A. Hayek: "It may well be true that we as scholars tend to overestimate the influence which we can exercise on contemporary affairs. But I doubt whether it is possible to overestimate the influence which ideas have in the long run." If Christians are to reconquer lost ground in preparation for ultimate victory (Isaiah 2, 65, 66), they must rediscover their intellectual heritage. They must come to grips with the Bible's warning and its promise: "Where there is no vision, the people perish: but he that keepeth the law, happy is he" (Proverbs 29:18). Chalcedon's resources are being used to remind Christians of this basic truth: what men believe makes a difference. Therefore, men should not believe lies, for it is the truth that sets them free (John 8:32).

