

By Langdon Gilkey

hat I have to say about Creation may not represent at all the viewpoint of many Adventists. I hope that those who disagree will not be offended by my remarks as I present my interpretation of a matter of great importance to all of us: the nature and implications of God's creation of our world and of ourselves.

The meaning and relevance of Creation has a great deal to do with the relation of our common religious faith to contemporary science, and I will try to spell out the interesting complexity of that relation. This intimate relation of Creation to science is, I know, of vast importance to the Adventist community, centered as it is on a strong faith in the divine establishment of our world on the one hand and on the development and utility of present-day science on the other, especially with regard to medicine. Thus, how we are to understand in some coherent way both Creation and contemporary science is a crucial theological problem for you as well as for me.

## Creation and Science at Little Rock

Our general subject, then, is the book of Genesis; my special topic is the present relevance of this opening book of the Hebrew and Christian Scriptures. I shall, moreover, limit my remarks even further and concentrate on the first two chapters: the magnificent hymn to origins, or as we like to call it, the Creation.

Though these chapters of Genesis represent a fairly obscure and enigmatic text from the ancient world of the so-called Near East in the eighth to fifth centuries B.C.E., they are in a number of ways very relevant to us-to our religion, our personal piety, and our theology. Even more, they are significant for the deepest assumptions or presuppositions of our wider, secular cultural life in the West. Not least, they have provided important bases for the enterprise of modern science. Most surprisingly, in the last decades they

have become central also to our present legal and political existence. It is with this latter political and legal relevance that I wish to begin.

When Genesis appears in our present consciousness or the news, it probably connotes issues inspired by the creationists, arguments in which a certain interpretation of Genesis is pitted against almost all of modern science. The creationists are Christian fundamentalists; that is, they hold every proposition of Scripture to be literally true and to contain authenticdivinely revealed—scientific and historical knowledge. Thus they insist that the universe and all that is in it began as Genesis appears to have described it: roughly six

to ten thousand years ago, with its present astronomical structure intact; with its present forms of human, animal, fish, and plant life; and with all its major geological changes to be ascribed to divine intervention—for example, the Flood of Noah. In short, the creationists dispute almost every fundamental theory about nature and its history in the entire spectrum of the contemporary sciences: big bang cosmology, physics, astronomy, and geology, as well as evolutionary biology, though they tend wrongly to blame all of this on Charles Darwin.

Strangely, their leaders are scientists with doctorates from respectable universities who argue that they can prove their case "scientifically." This understanding of origins they term "creation science," to them, the

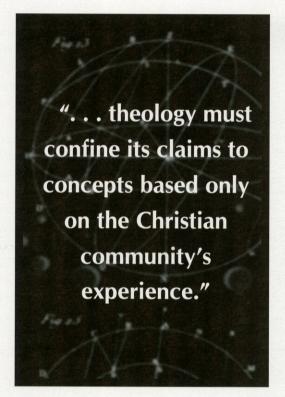
only valid science because it is not based on atheism, as they view the rest of modern science. They lost the federal court case in 1981 in Little Rock, Arkansas; a creationist law had stipulated that creation science be given "equal time" in all the schools of the state. We won the case by showing that their "science" was not science at all but religion, and thus counter to the First Amendment if taught as science in the schools. Most teachers of science in Arkansas said they would not teach either version if forced to give each "equal weight." Teachers, they said, could never prove they had given each of these "alternatives" equal emphasis, and

thus each science teacher would be continually vulnerable to prosecution. Thus, in effect, no science would have been taught in Arkansas had the law gone through.

The creationists have by no means disappeared, however. In fact, since 1981 they have gained significant power over local school boards, textbook publishers, and of course state and national politics. As one leader told me in 1985, "When we do take over control of the Republican Party in the 1990s, this will be the science taught in our public schools." Changes in the makeup of the U.S. Supreme Court might well undo the creationists' defeat at Little Rock; then, as a scientific and technological nation, the United States ironically would have voluntarily saddled itself with an educational system designed

precisely to subvert science!

The trial was brought against creationists by main churches and synagogues of Little Rock: they, not the American Civil Liberties Union, were the initial plaintiffs in the case. In effect they said, "We are happy to defend science, but we are even more interested in defending our right to interpret our beliefs as we see fit. And we wish to defend that right against the power and authority of the legislature of Arkansas, which in this law has defined for all of us the meaning of the doctrine of Creation in literalistic terms. We believe in Creation and in the meaning of the doctrine in Genesis, but we do not accept the creationists' literal interpretation of either. The state has in this case ruled for the creationists' interpretation of our communities' common text.



Hence we are bringing this case to court." As is evident, this trial was not about the age and history of the universe, but about the First Amendment, the so-called separation of church and state.

# How the Controversy Came About

How is it that the main Christian churches and the Reformed and Conservative Jewish communities have come to interpret Genesis in a way compatible with modern science while the creationists have not? What is the difference between a

fundamentalist or literalistic interpretation of Scripture and a modern or "liberal" one, and how did this important difference come about?

These are interesting questions, especially because before the modern period (say before, roughly, 1750) Christian theologians and Jewish scholars regularly interpreted Genesis in a literal as well as "theological" way. As the trial made clear, the leadership of most churches and synagogues and the vast majority of seminaries and biblical scholars do not currently regard the early chapters of Genesis as sources for knowledge on scientific questions such as the age of the universe or the processes of its development,

nor do they regard its historical accounts as ipso facto authoritative. Rather, they look for the religious and theological meanings of these chapters of Scripture.

It is my view that the major causes of this shift of hermeneutic, or mode of interpretation, were developments in modern science, especially in geology at the end of the eighteenth and beginning of the nineteenth centuries. Interestingly, Galilean astronomy and Newtonian physics, despite their clear astronomical and cosmological implications, had not particularly disturbed the widespread historical authority of the Mosaic account of origins. Physics and astronomy were then not primarily historical sciences, and many leading scientists in the seventeenth century—in physics, chemistry, and biology-were also Christian clergy who

accepted—as did almost everyone else—a literal reading of the Mosaic account.

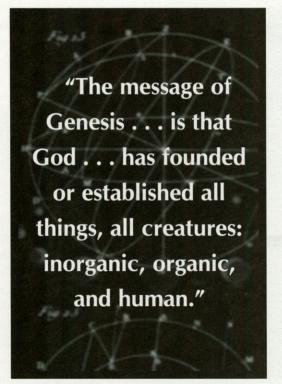
But geology, from its very beginnings in the lateeighteenth century, was a historical science: it traced the history of the earth. When in the 1790s James Hutton began to uncover the long history of the earth's surface, he said, "I see no signs of a beginning." It was plain at once that six thousand years were not enough; even more, it was clear that the earth had not always exhibited its present pleasant and habitable rolling hills, gentle valleys, lakes, and oceans. Besides all this, bones began to appear in West Virginia, in

> Ohio, and then in Russia, bones of species horrifyingly immense and strange, probably extinct, and hence from a vastly different age-creatures Adam had assuredly not named in Eden, nor Noah ushered into the Ark.

> Rembrandt Peale and his sons collected some of these bones and made a fortune exhibiting them in an astounded Europe, defying anyone, as he said, "to find these creatures on our present globe. The bones exist; the creatures do not." Finally, it is said, that the thigh bone of a giant sloth was brought to Thomas Jefferson around 1801. He reportedly exclaimed, "What a cow!" and later wrote, "Such is the economy of nature, that no instance can be produced of her having permitted any one race

of her animals to become extinct," showing he had a very tidy eighteenth-century mind and not a messy nineteenth-century one. Jefferson sent Meriwether Lewis and William Clark westward in part to find these creatures. At that point there was taking place a sea change—a paradigm shift—in understanding nature's past and our past.1

It is therefore no surprise that theologians—at least those in close touch with the cultural, and especially the scientific, world of their time-were beginning to rethink how to understand not only the Mosaic account but also their own basic religious truths, their doctrines, and even the scriptural sources of these doctrines—what kind of truths they in fact had. Thus, in the 1820s, we find Friedrich Schleiermacher saying



that theology must confine its claims to concepts based only on the Christian community's experience. For this reason religious truth has limits; it does not, he said, communicate information about scientific matters, about historical events, or even about "philosophical speculations." What it can articulate on these issues is that we are absolutely dependent on God as the Absolute Cause of ourselves and our world, an experience communicated to us through our experience of the order of the world's process. This we know through our experience of ourselves.2 To me, the influence of classical science. as well as of the new geology, is very evident here.

Most subsequent theology has agreed with this. Theological words and categories have changed a good deal since Schleiermacher, but his point about the limits of theology and the dependence of theology on the community's experience has not. Now as then theology understands itself as being able to witness to God and to God's activity. This witness is based on the community's common experience of God's presence in its history, a presence evident in the events of the Covenant, judgment, and promise as seen by the prophets-and later, for the Christian community, in the events of Jesus' life and death. That presence, or "encounter" as

some put it, was received in faith and responded to by witness to others. In turn, that witness, based on the community's experience, has been written down in Scripture. It is a witness to the presence and activity of God, an activity that works through the ongoing order of the world and the strange, even unique, always novel events of history, and not outside of them. But that witness is also human, reflecting as well as transforming the thought forms of its time and cultural context—as do preaching and theology themselves. Hence, just as the Hebrew community understood its own life and the history in which it lived as established and preserved by God, the sovereign Lord of history, so correspondingly they saw the origin of the entire world as the work of the same God who had rescued, preserved, and loved

them. They understood this deeply religious and important truth in the thought forms of their time. Thus resulted the book of Genesis, a tradition of witness lodged in the oral tradition, the poetry and the prose of seventh- and sixth-century Hebrew faith.

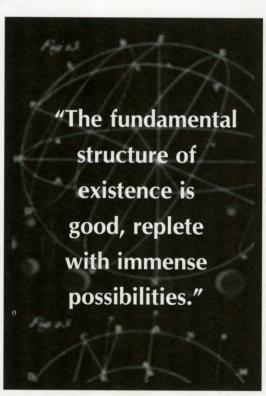
Modern readings of Genesis—whether in liturgy, devotion, theology, or scholarship—thus look for the religious meanings of each narrative, each command, each psalm, meanings for Hebrew faith and for us. That is, the readings seek for "the Word within the words," the religious message there, and not for what Genesis may say about astronomy, geology, biology, or botany.

> As each generation in the Christian and Jewish communities has discovered, that message can be as lively, exciting, and healing as it ever was.

These meanings are expressed through symbols, that is, in analogies, metaphors, concepts, or words taken from ordinary experience and applied to God: the presence of God, the creative work of God, and the purposes and intentions of God; power, order, life, love, and care; Creation, judgment and forgiveness, demand and mercy. Thus, while the words and narratives of Scripture and theology—in praise, in celebration, in repentance and gratitude, and in reflection-refer to what transcends the human, to God, nonetheless these words are human words, parts of human

language, and so their meanings are relative to time and place. Among other things, the words also thus reflect the religious ideas and traditions of the peoples who preceded the Hebrews and surrounded them. As William Temple said, there are truths of revelation, truths witnessing to revelation, "but they are not themselves directly revealed."3

This is the understanding of Genesis that the churches and synagogues of Little Rock wished to defend, an understanding of which the legislature of Arkansas had not the slightest idea. It is also the understanding of Genesis that finds itself fully compatible with contemporary science—a not unimportant issue for any religious community like this one, which recognizes, uses, celebrates, and contributes to medical science.



## The Message of Genesis

What, then, is this message in Genesis, the Word in the words, and how is it related to us?

The message of Genesis, at least in the first two chapters, is that God, the God of the Covenant, of the priestly tradition, and of prophetic faith, has founded or established all things, all creatures: inorganic, organic, and human. Further, God has set humans here in a habitable and fruitful world to live a meaningful and cooperative life and to multiply a life of work and of

love, a life in turn under the watchful care of God. Things did not, to be sure, turn out as they were intended, as chapters three and four, along with the subsequent history, make very clear. Nonetheless, theology, Christian or Jewish, can never speak of human nature as evil or basically evil.

The fundamental structure of existence is good, replete with immense possibilities, and God is continually filled with mercy for our waywardness; thus can there be hope for the future. This is the main point, repeated throughout the account: the goodness, care, and mercy of God, and the goodness of the world that God has created, despite its ambiguity, pain, and suffering-and mortality. The main

point is thoroughly Hebrew, although many of the images and models through which this is said derive from other traditions. It is a unique vision because, I believe, of the uniqueness of the God of the Covenant, of the priesthood, and of prophecy-for it was in that relatively later religious context that this text about the beginning was recited and then written.

We have noted that Genesis is a text from the ancient world and so reflects that world in many of its concepts. It is, therefore, a narrative or "myth" strange to us—as the trial in Arkansas clearly revealed. But in important ways it is not so strange. The reason is that, perhaps supremely among the biblical texts, it has formed us and our view of the world in which we live. It has, first of all, provided the most fundamental, that is,

"ontological" presuppositions for the common religious heritage of Judaism and Christianity. All of the central theological concepts and beliefs of these two traditions assume this view of the world, of ourselves in it, and of our history—namely, as created and preserved by the power, the order, and the love of God, the God of the Covenant, of the Torah, and of the prophets. Whatever the secularity of our present in the West, it is clear that these two religious traditions have shaped even our secular existence in many fundamental ways. Western cultural life has had two major sources from the ancient world: Hellenic or classical on the one hand, and Hebraic

> on the other. Hence many—though not all-of our assumptions about our existence stem from this crucial part of the Hebrew inherit-

First, and of primary importance, is the theme, repeated in the Creation account, that women and men were created in the image of God. As a consequence, they are, whatever their race, power, status, gender, or talents, of inestimable value—an aspect of our common tradition that is itself of inestimable value. Though it has taken an excruciatingly long time for the clear implications of these words to work their way fully into our common life, these Hebrew (not Hellenic) words are the source of what is probably the most creative element in our cultural life: belief in the equality and value of every human being before God and one

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another.

More surprisingly, our notions of time, and so of history, and hence of the prospects of life in history and in history's communities, are dependent on the interpretation of Creation as set forth in Genesis. Time itself, said Augustine, interpreting Genesis, is a creation of God; it is a creature like us, and thus also under God's power and care.4 There is, therefore, no Tyche or Fortuna—no blind, remorseless Fate—determining God's purposes, for God is sovereign over all creatures. Accordingly, there is no Fate determining our existence either, even of the least of us. We are all in the hands of God and of our own freedom—though the latter, as Augustine knew, can get us individually and socially into serious trouble. Hence an impersonal Fate or Destiny,

ruling over even the gods, fear of which haunted the late classical world, was banished, and even astrology has been refashioned in this light.

Further, for Genesis, time apparently had a beginning and runs its course irreversibly from its beginning at Creation to its end in God's promises. Because of the biblical inheritance, therefore, time is linear for the West; it is not cyclical, returning upon itself endlessly and meaninglessly—as it was in Hellenic or classical culture. Correlative to the biblical conception of God as dynamic and temporally active, and so related, is the notion of a linear time filled with unrepeatable and

unique moments, a sequence headed toward its fulfillment under God. Our modern sense of time-secular or religiousis thoroughly dependent on this biblical vision of a linear sequence headed toward fulfillment, and not on the endless temporal cycles of the classical world. Clearly the Enlightenment, post-Enlightenment, and American belief in progress—which is not biblical (recall the Fall)—and the material dialectic of Marxism, both have their roots here. They are visions or "myths" of linear, developing time, each seeing history as headed toward its own fulfillment-very different from one another and their common Hebrew source.

Even more surprisingly, contemporary scientific cosmology also has its roots in the Hebrew tradition and Scripture. This cosmology sees natural process as a linear temporal sequence filled with unrepeatable, unique events, a process extending over immense stretches of time. We are told that it began with the Big Bang, that it proceeded through the galactic transformations modern astronomy traces, that it issued further in deep changes in geological structure, and that it culminated in those evolutionary mutations in life forms that contemporary biology describes.

In many fundamental ways we are all-secular or Christian—children of Genesis who understand our natural world in a variety of ways shaped by this old Hebrew text. For it was precisely this contemporary scientific cosmology of development—along with the

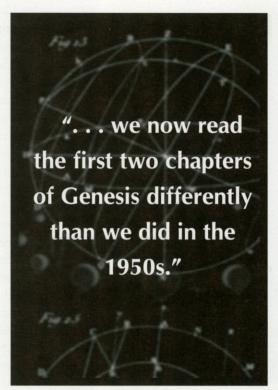
churches and synagogues of Little Rock-that was pitted against the creationists. Despite the fact, therefore, that neither the creationists nor their scientific opponents were aware of this point, each side in Arkansas was in its own way dependent on Genesis.

Finally, as the Genesis account makes very clear, all of creation is "good" because made by a caring God. Thus there is, and there can be, nothing essentially evil—an evil, so to speak, built into things as part of their intrinsic nature—and so irremovable and unredeemable, a necessary aspect of temporal and worldly existence. On the contrary, each part of reality has

> possibilities for good-even, to Augustine's Hellenistic consternation, matter and the body, both of which, as he had to admit, God had created and therefore, despite appearances, must be good. Again, it has taken a long time for these implications too to realize themselves. But slowly they have helped to establish an empirical science of earthly material motion, that is, modern science, a new understanding and celebration of the body and its sensual life, and an inherent confidence that there are always possibilities of new beginnings latent in almost any historical or social situation. Changing natural processes, order, spontaneity, and life; novelty, and, especially, our real but relative freedom are the characteristics of a world created by a caring God. Surprisingly these characteristics form the

essential structures of our contemporary scientific cosmology. Note: these are aspects as fundamental to the new postmodern vision as they have been to those of us older dwellers of the twentieth century.

The biblical view, informed by Genesis, is by no means rosy or over optimistic. There is, after all, the Fall and its consequences of injustice, conflict, violence, and suffering—as well as hypocrisy. This true symbol or "myth" of the Fall should have warned us of that which our modern culture had ignored but which has been repeatedly validated: namely, that every historical development gives new possibilities for evil as it opens up new opportunities for good. Nonetheless, it remains the case that the goodness of creation in its essential nature—that is, in its inherent possibilities—means that



there is always in history, whatever the grim actualities of our present, the chance for renewal, for new beginnings.

## Recent Developments

This interpretation, which stems from the theologies of the early and middle parts of the twentieth century, has since been very much debated. To me, it represents the heart of the long traditional influence of these chapters on the religious self-understanding of

the Christian and Jewish communities and on our wider cultural life. Nonetheless, it remains only one of many present scholarly readings.

Moveover, it is appropriate to mention two places where this interpretation from the 1930s to the 1950s seems now to be really lacking, though considering the relativity of all things historical, this is hardly surprising. First, although it can be said that an earlier generation believed firmly in equality, the rise of gender consciousness since the 1960s has made all of us much more aware of the tone of male dominance that seems to permeate these accounts of our creation and certainly most subsequent theological and scholarly interpretations of them. Surprisingly, this imbalance is worse in chapter two

(where Eve is created out of Adam's rib or side) than in chapter one (where God creates male and female at the same time). One can, I believe, claim legitimately that all movements of liberation since the 1950s and 1960s represent long-term effects of the imago Dei; but there is little doubt that the accounts themselves—the rib, the role of helpmeet, and so on-have (as the Southern Baptists have so elegantly manifested to us) been a large part of the problem of the subordination of women as well as the ultimate source of the answer.

Second, there is the status and role of nature, also a matter of a new and sharper consciousness on the part of all of us, a consciousness, let us recall, that has been with us only since the late 1960s and the early 1970s. I do not think it fair to blame all our exploitation of and

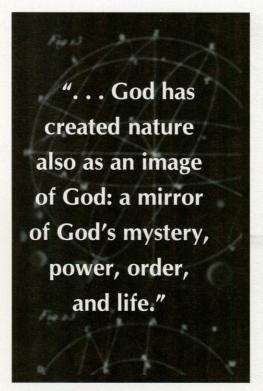
indifference to nature on our Biblical heritage, as does Lynn White Jr.<sup>5</sup> A humanist culture also centers its values on human beings and their needs, as John Dewey showed. Arguably, moreover, the scientific viewpoint tends to objectify (make manipulatable objects out of) the natural processes that science studies. Thus science as well as Christian desacralization has helped to strip nature of its intrinsic value. Surely the development of technological power has only increased these tendencies. In modern technological culture the age-old human domination of nature has threatened to become extravagantly exploitative, capable in the end of destroying the

fertility of the earth, and is in fact "demonic." Hence, technology has provided effective instruments for the infinite and ruthless greed what Buddhists term "Desire"that has driven modern life even more relentlessly than it did in ancient life. Perhaps this is what a wise Genesis meant in speaking of human wrongdoing as corrupting and polluting the earth.

Still, with these necessary caveats, let me say that a close and aware rereading of these chapters shows that the critique of the biblical tradition on ecological grounds-that it has ignored the value and integrity of nature—is well taken indeed.6 The whole of Scripture, not least our two chapters, is centered on God and God's doings; nonetheless, like the first and second commandments of Jesus,7 it is also centered on the

human, on the relation of God to women and men and on the relations of men and women to one another. In that sense it is, while dramatically theistic, also humanist-it reveres and so dignifies the human. We have already noted the very great benefits accruing from that emphasis on the value of the human.

However, there is always a dark side to all good things on earth, including religion and—even more surprising—humanism. This is a side that has also become plain to our generation. That is, that nature is here strikingly ignored if not demeaned. Karl Barth was right when he approvingly said that in Scripture nature is essentially a backdrop—or, better, the mere stage on which the drama between God and human beings is played out. Although Barth was right in this general



assessment, there are wonderful passages in the Psalms and Job, especially, in which nature is portrayed—shall I say?—as also made in the image of God. By that I mean that nature is celebrated as manifesting God's power and order as well as God's care, where the infinity and immensity of God are disclosed to us, and so where God's glory is plainly set forth. Still, these are, let us admit, subordinate themes.

Above all, that repeated divine injunction, or, better, command, to exercise dominion over nature and its creatures, in fact to subdue them, clearly spells out the subordination of nature to our human interests in ways that offend our contemporary convictions. Of course, we must recall with some empathy that ancient cultures were then themselves just moving out of their own religious, moral, and social self-understanding as subordinate to nature's patterns and powers. They were becoming for the first time conscious of the human as unique and of the social community as markedly different from the natural processes around them. One finds this consciousness clearly set forth in the distinction between nature and art, nature and polis, in Greek thought, just as it is clearly present in Hebrew understanding, as we have just noted. At this point, one might say, humans could only barely and precariously secure their own existence over against nature's gigantic threats to everything on which they depended.

Because of technology, industrialism, and science, we now know of no such precarious existence day-by-day with regard to nature; rather it is history that terrifies us. We have subdued nature and established almost total human dominion over it. Only once in a while does nature surprise and dominate us. Dominion over nature has, let us note, been the aim of humans since the beginning, explicitly since Francis Bacon spoke of knowledge as power—the power to effect what we want. Like all apparently good things, this new dominion through knowledge has now revealed itself as also a vast potentiality for destruction—destruction of nature, and, as a consequence, destruction of ourselves. Nature has now come under the dominion of history, of our wills, and so under the dominion of the waywardness as well as the creativity of human freedom, a terrifying transition indeed! Hence we now read the first two chapters of Genesis differently than we (and my generation) did in the 1950s. In modern existence, dominion over nature has in truth become the subjection, exploitation, and destruction of nature by our intentions, by our freedom; it is an example, therefore, of human sin, that is, of inordinate greed and pride, and thus a fit occasion for repentance and reform.

In sum, to me an even deeper amendment of these chapters is essential. God has, to be sure, created women and men in the divine image. But also, if we take the Psalms and Job seriously, God has created nature also as an image or mirror of God: a mirror of God's mystery, power, order, and life. Creation means, therefore, not only the infinite glory of God and the goodness of life, but also the intrinsic value of nature. Above all, nature and nature's processes are a mirror of the divine union of life with death, that is, of the power everywhere patterned in natural process with which God brings new life constantly out of death. This praise of nature as God's creation in God's image might have been said, but was not, in the first two chapters of Scripture. Let us proceed to say it now.

#### Notes and References

- 1. Jefferson, Notes on the State of Virginia (1787), in Paul Leicester Ford, ed., The Works of Thomas Jefferson, 12 vols. (New York and London: Putnam, 1904-5), 3:427, cited by John C. Greene, The Death of Adam: Evolution and Its Impact on Western Thought (Ames: Iowa State University Press, 1959),
- 2. See Schleiermacher, The Christian Faith (Edinburgh: Clark, 1828).
- 3. Temple, Nature, Man, and God (London: Macmillan, 1934), 317.
- 4. See Augustine, The City of God, 11.6; Confessions, 11.13.
- 5. White, "The Historical Roots of Our Ecologic Crisis," Science, Mar. 10, 1967, 1203-7.
- 6. I repeated the following critique of this inheritance at an ecological conference some years ago when I was on the same platform with Carl Sagan. After my talk, he shook my hand warmly and said—he was a very charming man—"I'm so glad to hear someone from religion criticizing religion!" I thanked him, and said I would be equally glad to hear someone from science criticizing science. He said, "Humph!" and walked
  - 7. Matt. 22:37-40; Mark 12:29-31.

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