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G.M. MARSDEN**CREATION VERSUS EVOLUTION: NO MIDDLE WAY***

In the United States biological evolution is widely regarded as an opposite of divine creation and hence incompatible with traditional Christian belief. This simplified view is so widespread that in 1981 so-called 'creationists' persuaded two States to adopt laws purporting to ensure 'balanced treatment' in public schools by countering any teaching of 'evolution science' with equal teaching of 'creation science'. The very appropriation of the name 'creationist' for the creation science anti-evolutionary movement reflects an insistence, often unquestioned by the public and the press, that there are only two choices in the issue. In fact, however, the creation scientists do not advocate creationism in the general sense of any belief in a divine creator or even in the more limited sense of belief in creation by the God of scripture; rather they defend only one view of creation, that the Earth was created in six 24-hour days and is only some thousands of years old. This view, based on the most literalistic reading of the scriptures, excludes any sort of biological evolution. Self-styled creationists speak of only two views: creation and evolution.

But why should so many Americans, such as State legislators, accept this simplified dichotomy as though there were no mediating alternatives? Even among American evangelical Protestants, such mediating views, usually designated 'theistic evolution' or 'progressive creation', have long been represented. Immediately upon the announcement of Darwin's theory some conservative bible believers had a ready answer to the suggestion that evolutionary doctrine must undermine faith in a creator: God controls all natural processes through his providential care. The questions raised by biological evolution are therefore not in principle different from those suggested by other natural phenomena, such as photosynthesis. A full naturalistic account of the

process does not preclude belief that God planned or controlled it. So God may have used evolutionary processes as his means of creating at least some of the Earth's species. Moreover, most modern evangelical theologians have agreed that a strict reading of Genesis does not rule out all evolutionary developments. The language of the first chapter of Genesis might allow for long aeons (days) of God's creative work or it may not have been intended to convey exact scientific information at all.

Even the progenitors of America's fundamentalists tolerated some such latitude. In *The Fundamentals* (1910-15), the publications that signalled the rise of organized fundamentalism, George Frederick Wright contributed one of the essays on evolution. Wright had been a close associate of Asa Gray in defending a theistic version of Darwinism to evangelical audiences. While firmly rejecting evolutionism as a generalized atheistic outlook, Wright insisted that biological evolution could be consistent with God's design so to evolve. Equally striking are the statements made about the same time by Benjamin B. Warfield of Princeton Theological Seminary. Warfield was an inventor of the term 'inerrancy' and a leading proponent of that key fundamentalist doctrine that scripture did not err in any of its assertions. Despite such conservatism, Warfield stressed that evolution and creation were not opposites. For the theist, he observed, evolution was "only a theory of the method of divine providence".¹

Why then, has opposition to any sort of biological evolution become a test of the faith for so many? The mediating positions have, of course, survived and are even dominant among evangelical academics who are heirs to the fundamentalist movement. Nonetheless, in the current popular American discussions, these positions, as well as their counterparts among Catholics, more liberal Protestants,

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and Jews, are widely ignored or unknown. Certainly the popular press had done little to dispel the impression of a life or death struggle for survival of two wholly irreconcilable views. So the historical issue I propose to explore is twofold. Why have creation scientists insisted on this polarization, and why have such dichotomized views been so popular in the United States?

"The Bible tells me so"

The Bible is the authority and 'textbook' for the conclusions of creation science. Henry Morris, founder of the most prominent of the current creation science organizations, asserts that "If man wishes to know anything at all about creation ... his sole source of true information is that of divine revelation".² In recent court cases this theme has been obscured to avert constitutional difficulties. Nonetheless, Morris and his followers agree that it is simply obvious that the first chapter of Genesis refers to creation taking place in 24-hour days and so absolutely precludes evolution. Why do such principles of biblical interpretation persist with such strength? To answer this we must first consider the convergence of two powerful traditions of biblical interpretation.

Millenarianism

The modern premillennial views that have flourished in the United States since the nineteenth century have been based on exact interpretations of the numbers of biblical prophecies. The Bible, such millenarians assume, is susceptible to exact scientific analysis, on the basis of which at least some aspects of the future can be predicted exactly. Seventh-Day Adventists, Jehovah's Witnesses, and the influential dispensational premillennialists among fundamentalists, all treat the prophetic numbers in this way. For such groups it is important to have a biblical hermeneutic that will yield exact conclusions. Moreover, the hermeneutical principles that apply to prophecy should be consistent with those applied to scriptural reports of past events. Dispensationalists have often used the formula 'literal where possible' to describe this hermeneutic. While

they do not wish to apply literal interpretations to statements obviously poetical or figurative ("the mountains shall clap their hands"), they do think that, unless we are compelled otherwise, we should interpret the scriptures as referring to literal historical events that are being described exactly. It is not surprising, therefore, that such groups who derive some of their key doctrines from exact interpretations of prophecy should be most adamant in interpreting the first chapter of Genesis as describing six 24-hour days.

The influence of these prophetic views goes beyond the bounds of their immediate fundamentalist constituents, as is suggested by the fact that the dispensationalist prophetic volume by Hal Lindsey, *The Late Great Planet Earth*,³ was the best selling book in America during the 1970s. The principal creation science organization, the Institute for Creation Research in San Diego, has close ties with this prophetic movement. Moreover, George McCready Price (1870-1963), the main precursor of Morris' young-Earth flood-geology approach, was a Seventh-Day Adventist. Price's whole career was dedicated to confirming the prophecies of Ellen G. White, who claimed divine inspiration for the view that the worldwide flood accounts for the evidence on which geologists build their theories.

Protestant scholasticism

Not all creation scientists are millenarians, however. Another formidable tradition in American Protestantism that has often supported strict views on Genesis One and has influenced both American fundamentalism and popular American conceptions of scripture is Protestant scholasticism. This tradition has been articulated most prominently by the Princeton theologians, such as Benjamin Warfield. The substance of this view of the inerrancy of the scriptures - that because the Bible is God's word it must be accurate in matters of science and history as well as in doctrine - was already incorporated into much of the scholastic Protestantism of the seventeenth century and was common in many quarters of nineteenth century American Protestantism. Belief in the inerrancy of the scriptures did not entail that

they should always be interpreted as literally as possible, a fact which is demonstrated by the allowance for long 'days' of creation by some Princetonians. Nonetheless, the emphasis on the scientific accuracy of scriptural statements was conducive to views of those who insisted that the first chapter of Genesis referred to literal 24-hour days.

A good example is the Lutheran church - the Missouri Synod. For reasons no doubt related both to their Protestant scholastic tradition and an immigrant group's determination to resist infection by modern American theologies, the leading theologians of the Missouri Synod insisted on a most conservative view of the scriptures throughout the first half of the twentieth century. The Holy Spirit dictated or suggested to the writers the very words of the scriptures, therefore these words of God have divine properties. Since God would speak with great accuracy, it seemed to the Missouri Synod interpreters that the days described in the first book of Genesis must be 24 hours long. So evolution was "atheistic and immoral" and theistic evolution was inconsistent with both the scriptures and true evolution. When in 1963 Henry Morris first organized the creation science movement, he found enough allies from the Missouri Synod to make up a third of the original steering committee.

Rational scientific Christianity

A desire to establish a firm rational and scientific basis for Christian belief has been common to the prophetic millennial and the scholastic traditions and has related them to each other. In the eighteenth and nineteenth centuries particularly, defenders of Christianity assiduously collected evidence from the natural sciences to confirm "truths" revealed in the scriptures. Nineteenth century American apologists, whether scholastic or millenarian, typically based their arguments on explicitly "Baconian" principles: cautious examination of evidence that everyone could observe through common-sense procedures.

Crucial to the creation science movement is the desire to restore this harmony of science and scripture which the twentieth century intellectual climate had seemingly

shattered. Henry Morris made his point explicitly in his first book, *That You Might Believe*⁴. While acknowledging that Christian truths must ultimately be based on faith and that he would accept the Bible "even against reason if need be", Morris emphasized that the Bible "in no way does violence to common sense and intelligence". Many twentieth century people regarded Christianity "as outmoded beliefs, conceived in superstition and nurtured by scientific philosophical illiteracy". Morris, by contrast, was sure that biblical beliefs would satisfy even his habit cultivated by his engineering background, of "requiring satisfactory evidence and proof of all that they accept as fact".

Buoyed by this confidence in the Bible, Morris proceeded to illustrate "the great number of scientific truths that have lain hidden within its pages for 30 centuries or more, only to be discovered by man's enterprise within the last few centuries or even years". These 'facts' included statements that the stars "cannot be numbered", or that the psalms directly described evaporation, wind and electrical discharges as the cause of rain (Psalm 135 v.7). The creation science movement grew out of this impulse. While not claiming actually to prove that Christianity must be true, it seeks decisive evidence confirming biblical statements. So, not only do creation scientists assemble scientific evidences pointing to a worldwide flood, they sponsor expeditions searching for Noah's ark.

The whole enterprise relates to a distinctive view of the scriptures themselves. Fundamentalists and their allies regard the Bible as filled with scientific statements of the same precision as might be found in a twentieth century scientific journal. God, they assume, would not reveal himself any less accurately. The Bible, in the fundamentalist and scholastic traditions, is regarded as a book of fixed 'facts'. This view of the scriptures as a series of scientifically accurate propositions has invited the literalist interpretation that allows biblical language as few ambiguities as possible. For instance, a common argument against the evolution of species is that Genesis asserts that plants and animals should produce "after their kind". This phrase is usually regarded as precluding one species ever

producing another. Similarly, a well-known dispensationalist argues that the statement in Genesis ch. 2 v. 7, that man was created "out of the dust of the ground" could not allow for evolution from the primordial dust "since it is to dust that man returns - and this is not a return to an animal state (Genesis ch. 3 v. 19)"⁵

Common sense

Scholars from other traditions might find such thinking incredible, applying linguistic standards of one age to another. Nonetheless, there can be no doubt that in our age such thinking is widely regarded as common sense. Fundamentalists and kindred religious movements have made strong claims to stand for common sense.

The Bible, according to the democratic popularization of this view, is best interpreted by the naive readings that common people give it today. In modern America, common sense is infused with popular conceptions of straightforward empirical representations of what is really 'out there'. Mystical, metaphorical, and symbolical perceptions of reality have largely disappeared. Instead, most Americans share what sociologist Michael Cavanaugh calls an "empiricist folk epistemology".⁶ Things are thought best described exactly as they appear, accurately with no hidden meanings. Such folk epistemology is close to that which works best for engineers, straightforward, consistent, factual, with no nonsense. In fact, there are an unusual number of engineers in the creation science movement.

Most contemporary scientists have difficulty understanding the appeal of alleged scientific arguments of creation science to popular common sense. Evolution may have scientific experts on its side, but it strains popular common sense. It is simply difficult to believe that the amazing order of life on Earth arose spontaneously out of the original disorder of the Universe. The development of specific mechanisms such as the eye through blind chance also stretches common credulity. Could anything appear to be so ordered just by accident? The length of time it would take for the present order of life to arise from disorder is

staggering and stretches popular conceptions of probability. As a common sense argument, an anti-supernaturalistic evolutionary outlook is far less compelling than the traditional explanation.

As to the fact that so many experts agree on the truth of evolution, experts have often been wrong. Besides, the experts contradict each other, so that the lay person has no obligation to believe them. Moreover creation scientists can produce their own experts, as their organizations emphasize. In addition, however, people should be "deciding for themselves in a reasonable way". Audiences in church basements are told to go "see for themselves" fossil evidence that supposedly undermines evolution. "Let's decide upon a method by which we can resolve the controversy", says a typical appeal, "set up definitions, then examine the evidence".⁷

The American folk epistemology, then, is by no means anti-scientific in principle. Rather it is based on a naive realism plus popular mythology concerning proper scientific procedure and verification. These procedures are essentially Baconian, favouring simple empirical evidence. The view of science is optimistic and progressive, the real science will eventually reach the truth, although it may be led off the track by prejudice.

Post-Civil War cultural crisis

The popular appeal of uncompromising anti-evolutionists results not only from the coincidence of their hermeneutical and apologetic assumptions with much of American folk epistemology but also from their ability to convince their followers that anti-evolution is crucial to the future of civilization. Militant anti-evolutionists are almost all Northern European Protestants. Many of them have emphasized vigorously America's Christian (Protestant) heritage. A sense of cultural crisis, typically described as a turning from Christian to secular civilization, seems an important factor in raising the stakes of the anti-evolution effort and hence reducing the likelihood of compromise.

This combination of beliefs seems more characteristic of the United States than of other countries, and more characteristic of the south than of the rest of the nation. The irreconcilability of evolution and the Bible is a widely-held popular belief in the South that dates from before the creation science movement.

The easy answer to explaining the strength of anti-evolutionism in the south is the prevalence of 'old-time religion', the popular resentment of experts, and the relatively low levels of education of many southern Bible-believers. These factors are certainly important, although they do not explain why a belief in the dangers of evolution gained an elevated status in southern folk-religion. An interesting question is why anti-evolution became a standard test of the faith among southern evangelicals earlier than it did among northern fundamentalists. Already by the 1880s several southern theologians had lost their professorships because of their most cautious efforts to reconcile the scriptures to biological evolution. Much of the popular religious press made the issue crystal clear, asking "are we creatures of God or offspring of the apes?".

Why did southern religious groups thus try to bolt the door on even the most modest accommodation between creation and evolution? The answer is that a number of factors converged. First are the dynamics of the southern white church and religious life after the Civil War. The war brought the restoration of the Union but not the reunion of the churches. Southern Christians had to justify this continued separation from their former brethren. The most likely principal explanation was that their northern counterparts had been infected by a liberal spirit, shown originally by their unbiblical attacks upon slavery. Southerners were thus alert for any other trends towards laxity in Yankee religion. The continued separation was justified by the mounting conviction of southerners that they were the only remaining representatives of true religion.

Such justifications of separation from the northern churches were an integral part of the southern glorification

of the lost cause. Although southerners had lost the war on the battlefield, they were determined to win the war of ideas. The effect of this determination was to preclude change in any area and to celebrate whatever had been dominant before the war. This southern determination arose almost simultaneously with the rapid spread of evolutionary ideas in the north. So the widespread belief in the value of change became particularly anathema in the southern thought. Evolution, or change of any sort, could be only a decline.

Such circumstances may have been sufficient to ensure some popular opposition to any evolutionary doctrine. In addition the theologians' stance on the issue of Genesis and biological evolution was reinforced by a firm commitment to a scholastic literalist hermeneutic. Southern theologians, like most early nineteenth-century American churchmen, viewed the Bible as a collection of factual statements. Moreover, they were particularly inclined to a literalistic hermeneutic because of the slavery controversy. The Yankee reading of the Bible as condemning slavery seemed to southerners to involve abandoning the letter of the text for the alleged spirit. Committed to the letter of the scriptures regarding slavery, such southerners were hardly in a position to play fast and loose with other passages that might be reinterpreted in the light of modern progress.

Fundamentalism after 1918

The fundamentalist campaigns against evolution in the 1920s brought the supposed dichotomy to the national level. Before the First World War, anti-evolution does not appear often to have been a test of the faith outside the south, except among sectarians. Probably most conservative Protestants had the impression that evolution and the Bible were irreconcilable opposites, but a large enough number of their leaders saw the problems inherent in this stance to prevent it from becoming a test of fellowship.

As we have seen, even *The Fundamentals* of 1910 to 1915 did not absolutely preclude all evolutionary views. During the 1920s, however, anti-evolution became increasingly important to fundamentalists and eventually became an

essential hallmark of the true faith. The rise of the anti-evolution issue in fundamentalism was related to the convergence of several forces that took their exact shape when precipitated by the catalytic action of the American experience in the First World War. The war brought out sharp conflicts between liberal, or 'modernist', and conservative Protestants. Fundamentalists made the most of the extravagant anti-German propaganda by pointing out that German theology was the source of much modernist thinking. Common to German theology and German *kultur*, they said, were evolutionary philosophies. This "might is right" ideology had led to disaster for that civilization, which had lost all sense of decency. Evolution, moreover, had turned Germans away from faith in the Bible. The same thing that had happened to Luther's Germany could happen to Protestant America. Civilization itself was at stake.

The campaign only needed a leader to become a national sensation. William Jennings Bryan played that role as no one else could have. In estimating the reasons for the rise of an idea one must not underestimate the role of a charismatic personality. The battle for anti-evolution, the Bible, and civilization was a cause whose time had come; but it is doubtful that it would have become so deeply engraved in American thought had it not been for the colourful leadership of Bryan. If nothing else, Bryan's presence ensured wide press coverage, which of course always invited further simplifications of the issue. Bryan's own understanding of the connection between biological evolution and the dangers of evolutionary philosophies to society was an unusual one. In his view, evolutionary social views led to social Darwinism and hence to antiprogressive politics and the glorification of war. His followers, however, were not especially concerned with the details of the threat posed by evolution to civilization. They were convinced there was a threat to traditional beliefs which resulted from the spread of naturalistic, evolutionary developmental philosophies. This supposition was not entirely fanciful. Bryan and his cohorts were aware in a general way of the same secularizing trends associated with evolutionary naturalism in philosophy that were being pointed out by many of their intellectual contemporaries.

One strength of the fundamentalists' position was that they could relate this threat to civilization directly to the abandonment of the Bible as a source of authority and truth. This linkage became most clear in the question of biological evolution. Here again, the fundamentalists were pointing to a real phenomenon of major cultural significance. American college students were forsaking traditional faith in the Bible in droves. Science courses, especially those that taught naturalistic evolution, were the leading contributors to this revolution. In fact, nearly two-thirds of the nation's biologists professed not to believe in a personal God or in immortality. The teaching of evolution was, then, a real contributor to a trend that many considered to have ominous implications for the future of civilization.

The perception of such stakes invited the sort of polarization of the issue that we have been discussing. Bryan's appeal to the quasi-populist rural resentment of experts, especially in the south, added to the over-simplifications. Bryan's own case is especially revealing since the private Bryan and the public Bryan of the 1920s seem to have disagreed on how simple the issue was. Bryan himself held to a somewhat moderate interpretation of Genesis. As Darrow elicited from him at the Scopes trial, Bryan believed that the first chapter of Genesis might allow for an old Earth, a belief that was not unusual among fundamentalist leaders. Bryan even confided just before the trial that he agreed that one need have no objection to "evolution before man".⁸ Yet in his public speeches, Bryan had been allowing no compromise. "The so-called theistic evolutionists refuse to admit that they are atheists", he argued. Theistic evolution, he added, was just "an anaesthetic administered to young Christians to deaden the pain while their religion is being removed by the materialists".⁹ Any public concession to the feasibility of evolution, he explained privately, would give the opponents too much of a presumptive argument for the evolution of humans. Here we see the impact of a skilled popular leader in polarizing an issue. Convinced that the matter was of unparalleled importance, Bryan was not going to allow his constituency to be distracted from the warfare by the fine distinctions of mediating positions.

The warfare metaphor

Exacerbating the tendencies to polarization that arose from the convergence of all the factors mentioned has been the sheer power of military metaphors. For over a century, warfare has been the dominant popular image for considering the relationships between science and religion, evolution and creation. Journalists and historians relish reporting a good fight.

In describing the relationship between Darwinism and religion, argues James R. Moore in *The Post-Darwinian Controversies*,¹⁰ the military metaphor was first promoted by the opponents of religion. In fact, ever since the famed encounter between Bishop Wilberforce and T.H. Huxley of 1860, there was something of a warfare between some churchmen and certain anti-supernaturalist evolutionists. Given the many suggestions that creation and evolution might be complementary, however, these conflicts might easily have been resolved or confined. Militant opponents of the whole Christian cultural and intellectual establishment, however, made the most of the conflict. Darwin's personal difficulties in seeing how theism could fit with his theories lent aid to their cause. Accordingly, Victorian polemicists like T.H. Huxley and historians such as John William Draper and Andrew Dickson White reinforced the idea that the whole history of the relations between science and religion was one of "warfare". As the statistics on the low number of traditional theists among early twentieth-century American biologists show, the weapon of evolutionism was indeed taking a heavy toll in this warfare on Christianity.

Given this actual hostility of many evolutionists towards traditional Christianity, it is not surprising that some Christian groups replied in kind. Particularly this was true of groups that already saw most of reality through warfare imagery. Sects are notorious on this score. Immigrant groups and southerners each had their own reasons to view themselves as conducting at least a cold war with the surrounding culture. Anti-evolution hostilities, however, did not reach nationwide proportions until the rise of fundamentalism in the 1920s. Fundamentalism was a peculiar

blend of sectarianism and aspirations to dominate the culture. It was a coalition of conservative and Protestant traditions with militancy as its most conspicuous, unifying feature. As Richard Hofstadter observes, "The Fundamentalist mind ... is essentially Manichean; it looks upon the world as an arena for conflict between absolute good and absolute evil, and accordingly it scorns compromises (who can compromise with Satan?)".¹¹ William Jennings Bryan's refusal to admit the possibility of limited evolution publicly for fear of giving a weapon to the enemy illustrates this tendency.

The evolutionary explanation

William Allen White said of Bryan that he was never wrong in political diagnosis and never right in prescription. We might say the same of the creation science movement that has been heir to his work. They have correctly identified some important trends in twentieth-century American life and see that these trends have profound cultural implications. They point to the revolution that has brought the wide dominance in American academia and much other public life of anti-supernaturalistic relativism. Evolutionary theory has, as we have seen, often been used to support such an outlook. Carl Sagan's immensely popular television series *Cosmos* furnished a telling example. "The cosmos is all there is, there was, or ever will be", he states in his opening sentence.¹²

Such views are, of course, philosophical premises rather than conclusions of scientific inquiry. No conceivable amount of scientific evidence could settle such an issue. Nonetheless, both sides make the same mistake in debating such questions. Both fundamentalistic anti-supernaturalists, such as Sagan, and their creation scientist opponents approach the issue as though it would be settled on the grounds of some scientific evidence. In each case, the oversimplification of the issue reflects widespread overestimation in American culture on the possible range of scientific inquiry.

Beyond such overestimation of the process of science in general is the peculiar role that "evolution" has come to play in the anti-supernaturalist cultural and intellectual revolution. Both anti-supernaturalists and their creation scientist opponents have reflected common parlance when they have spoken of "evolutionary science" as equivalent to "naturalism" - that is, a view that the Universe is controlled by natural forces insusceptible to influence by any ultimately supernatural plan for guidance.

Moreover, as David N. Livingstone suggests, evolution has become an all-explanatory metaphor in modern culture. It has become a "cosmic myth - an idea which purports to provide, for example, guidelines for ethics and a coherent account of reality". All aspects of being and experience are explained according to evolutionary, developmental, or historical models. Often these are presented as complete accounts of the phenomena involved or as the only meaningful accounts that are available to humans. Evolution is, of course, a model with valuable explanatory powers; but it is worth asking, as Livingstone does, where we have any adequate basis for making this metaphor the foundation for an all-inclusive view of the world.¹³

In any case, creation scientists are correct in perceiving that in modern culture "evolution" often involves far more than biology. The basic ideologies of the civilization, including its entire moral structure, are at issue. Evolution is sometimes the key mythological element in a philosophy that functions as a virtual religion. Given this actual connection with an ideology that opposes traditional Christianity, it is all the more difficult for many conservative Christians to see that the biological theory is not necessarily connected with such a philosophy. Dogmatic proponents of evolutionary anti-supernaturalistic mythologies have been inviting responses in kind.

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