

# *The Evolution Versus Religion Controversy: How Two Mystiques Devolved Into Politics*

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## I

The evolution versus religion controversy rages on, lately simmering in debates about whether so-called “creation science” is a valid scientific substitute for the Darwinian notion of evolution. In the past there have been court cases; indeed one of the hardy perennials of the national news is the story about a controversy surrounding the teaching of evolution in a high school in the South or the Midwest of America. There are always, it seems, the usual suspects at play—the affronted parents, the local church membership, the confused school board, the divided townspeople, the ACLU, the AAAS, the Creation Science Institute, the preachers making their testimony, all eagerly covered by the media complete with references to the Scopes “monkey trial,” the First Amendment, and self-serving op-ed pieces by professors of biology.<sup>1</sup>

It is enough to make the observer cry out, “Enough! You Creationists, stop pretending that what you are doing is science and go back to proclaiming the Gospel and doing good works. And stop using the Bible as a sourcebook for scien-

tific theories. You scientists, stop pretending that physical science can explain everything, and go back to your laboratories and do the specialized research to which you are committed. Admit that natural selection is not the key to explaining every important detail about the origin of life, mind, behavior, religion, ethics, culture, the world, the universe. Both of you, go home and clean up your acts, ersatz science and smug science! There is no reason to seek some irenic stopping point in your cultural guerilla war against each other; no reason to placate either of you as you scar the intellectual and moral landscape with your futile debate.”

That is what one wants to say despite the fact that representatives of both sides would object that their debate is not a fruitless one. And admittedly there are serious issues at stake such as the veracity of the Bible, whether ethics and religion should be explained reductively, and whether nature is a divine creation, of which man is the apex, or a material universe in which the existence of man is the merest accident. Yet the controversy is now 146 years old, since the time of the publication of Darwin’s *Origin of Species* in 1859 and the furious reaction to it by the Victorian public. At Oxford in 1860, there was the famous debate between scientists including Hooker and Huxley defending evolution and Bishop

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Wilberforce and Captain Fitzroy defending the Bible.<sup>2</sup> The religion versus evolution fight has gone many rounds in the meantime down to our own day when four protagonists on each side met in December 1997 to debate on a special edition of William F. Buckley's *Firing Line* television show. There have been so many iterations that the great debate has come to resemble the plot in the movie *Groundhog Day* in which the protagonist is forced to relive one day in his life over and over again with only minor details changed. Unlike the movie, however, there seems to be no happy ending in sight, no resolution of whatever sort available in the great evolution versus religion debate.

To explain the persistence of this debate, I shall go back to another irresolvable controversy of the last century, one not quite as old as the evolution controversy, and one which took place on different grounds in a different place, namely the Dreyfus Affair and its aftermath. The "Case" as it became known separated France into roughly Republican (in the French sense) and monarchical parties which were separated by their views on the French Revolution and the secularization of French culture. This polarization of French political life did not make sense to some of the original group of Dreyfusards who had supported Dreyfus but who were themselves Christian, among them most prominently the writer and publisher Charles Péguy.

Fifteen years after the fact, Péguy wrote a retrospective essay entitled "Our Youth" referring to the time when through his publications he was an important voice supporting the Dreyfusards. In order to explain his point of view, Péguy made the famous distinction between *mystiques* and *politiques*. Everything, he said, began as a mystique and ended as politics, by which he was drawing attention to what he thought of as the decay of the original, heartfelt, and unselfish impulse to come to the defense of Dreyfus in which he and

his fellow Dreyfusards acted as noble "warriors" fighting an entrenched enemy to correct the blatant injustice done to one man. In contrast was the cynical misuse of this pure impulse by politicians to attain the ends of parliamentary infighting and posturing before the French electorate, which came later. The motives of the politicians were not necessarily corrupt but they were *political* in that they traded on the good reputation and youthful energies of the early sharers of the mystique to pass laws and gather political power. Péguy, it is important to note, did not restrict the possession of *mystique* to his party alone but acknowledged that the monarchists had their own mystique, but like that of the Dreyfusards, it too had corrupted into politics, in fact into the swamps of reactionary politics.<sup>3</sup>

Péguy's phrase about the degeneration of *mystiques* into politics helps explain why the great debate between evolution and religion still goes on and what the nature of that debate has become, for both sides in fact began as *mystiques* and have ended in a bitter kind of intellectual and cultural politics. In this regard, it becomes apparent that evolution is not just another scientific theory but rather constitutes a political movement with its supporters and denigrators.

## II

The evolutionary *mystique* originates in the nineteenth century and the histories of science used to present it as a "triumph of the mechanical view of the world." Newton had supplied the theory by which the physical universe could be described in machine-like fashion according to deterministic physical laws, and now it was asserted that Darwin had done the same thing for the biological universe. However, an alternative account of the evolution of evolution, so to speak, relates the theory not to mechanism and physics but to the gentler aspects of Victorian cul-

ture including its love of nature. Here Darwin is the compatriot of Victorian poets such as Alfred, Lord Tennyson, who wrote the poem "Flower in the Crannied Wall" (1869):

Flower in the crannied wall,  
I pluck you out of the crannies,  
I hold you here, root and all, in my hand,  
Little flower—but 'if I could understand  
What you are, root and all, and all in all,  
I should know what God and man is.

In this short poem the interconnectedness of all creation is asserted and the identity of all nature, *i.e.* of all living things, is implied. The very meaning of the existence of both God and man, the divine and the human, is implicit in the flower so small and insignificant that it resides in a crack in the rocks. Thus nature as conceived by the Victorians assumes a cosmic importance. Evolution is at heart a reflection on the unity of nature and on the common identity of all living things that encourages in us a universal sympathy with nature and creation, a point of view which Darwin expressed in the last paragraph of *The Origin of Species*. Darwin's role was to give this sympathetic and somewhat sentimental ideal as expressed by the poets of the time a precisely scientific definition. The linkages between living species was not merely one of sympathy but, in fact, innate in the very cells of organisms that defined the materiality of living things. The precise linkage was actually one of *descent* as Darwin expressed it. Just as the Jewish people were the lineal descendants of Abraham, so all contemporary species were related as siblings or cousins, not by direct, lineal descent necessarily but as members of collateral lines, so that the human race was a cadet line of the whole body of living things. But also implied was that the interconnection from nature to God and man meant that insights Darwin had about nature applied to more cosmic

levels of reality as well.

Darwin's actual work involved providing a scientific account of a climate of opinion about nature and history that was a part of the culture of Victorian England. A historical sensibility as well as a sympathetic appreciation of nature were part of the climate, but not history in the limited sense of the history of England or a history of the popes, but history on a philosophic level, as the grand procession of thought and civilization, or as the progression of liberty. It was not necessarily grand philosophic ideas that originally encouraged Darwin to develop a historical view of life. Rather, it was the nature of scientific evidence of ancient fossils which were being discovered and which had been classified by the Frenchman Buffon.

Dinosaur skeletons, some of them immensely large, had been discovered buried in the earth's strata. Today such skeletons still fascinate us as can be seen from the fact that reassembled sets of ancient dinosaur bones are on display in natural history museums throughout the world. In the Museum of Natural History in New York City two immense skeletons rise like apparitions from the ground floor several stories high into the roof of the main hall. It was these two monstrous skeletons, Stephen Jay Gould said, that provoked his lifelong interest in paleontology. Dinosaur skeletons give profound evidence of a stage of life that existed prior to the coming of man on earth: a whole universe of living things including land creatures as large as whales, savage raptor giants with huge jaws, strange and angular flying things neither bird nor mammal, primitive animal life that rose and thrived and then disappeared long before human history had even begun.

Beyond the fascination they evoke, the evidence of the existence of these defunct life-forms forced the observer to acknowledge that life has existed on the earth for a very long time, in terms not of

generations, centuries, or millennia, but hundreds of thousands and millions of years. This evidence necessarily forced a historical view of life on Darwin's and succeeding generations, that life had undergone a long process of development during the earth's history, and further that the earth itself has a long history. Darwin knew of the vast age of life-forms not only from fossils but also from the new geological science whose best-known exponent, Charles Lyell, was a friend and mentor to Darwin. The evidence that some mountain tops had once been sea bottoms was not new after all since sea shell fossils had been discovered on mountainsides by ancient Greeks and noted by Leonardo daVinci, but such a geological transition would require millions of years. The evidence of such processes as erosion, sedimentation, and volcanic explosions explained the current features of the earth according to the new geology. Further, the deep cuts into the earth's crust made by mining machinery and canal construction during the nineteenth century clearly revealed that the earth was made up of layers or strata in the lower depths of which were found the fossils of ancient creatures. At the time that Darwin published *The Origin of Species*, the ideas of the unity of living things and their historicity were well known and accepted by educated people worldwide, and a certain number of theories of the historical development of life-forms were then current.<sup>4</sup>

### III

The mystique of evolutionism came into conflict with the mystique of the Christian religion in what is historically the major clash between religion and science. The precise form of the Christian religion was Protestantism, which by the time of Darwin was three centuries old but very active in Victorian England, which saw an upsurge in evangelism and activity in the

Christian religion including the arrival of the Salvation Army and the rise of Methodism.<sup>5</sup> The reformers of the Protestant tradition, however disgusted they had been with the excesses of the Catholic Church, faced the burden beyond issues of theological dispute of having to justify their sundering of the unity of the Christian faith and of Christian Europe. This burden made it necessary to have a secure ground on which to base Protestant theology independently of Church authority and from the sixteenth century until now that basis has been the Bible. The doctrine of *sola scriptura*, of the Bible alone as the ultimate resource of the Protestant tradition, made biblical reading and interpretation the practical as well as the doctrinal focus of Protestantism.

One of the main projects of early Protestantism was the translation of the Bible into vernacular languages, and the reading of biblical texts and commentary and reflection on them became the means of prayer and of developing doctrines of the Protestant Christian faith. Biblical texts were read literally, often independently of context, and reduced to separate verses, phrases, and words, each analyzed into its positive meaning and then connected with other textual examples as the basis of a sermon or the justification of a particular doctrine. This emphasis on the word had as its inherent religious basis the belief that Christ is the Word, the *Logos*, the Second Person of the Trinity whose express mission is to manifest the presence of the divine in the material world in which human beings live. In acknowledging the power of the Word and actively spreading knowledge of it throughout European society and the world, Protestant Christians were following the final commandment of Christ on earth, to go forth and teach all nations.<sup>6</sup>

Sole reliance on the Bible, however, has a severe vulnerability if once its literal meaning is attacked. The issue concerns not the meaning of a particular text,

such as whether two or three passages in the Bible disprove Copernicus's view of the relative positions of the sun and the earth. Rather, the entire meaning and source of the Bible had been put in question at the time Darwin wrote by scholarship such as German "form" criticism that compared Bible stories and accounts with the myths and the stories of ancient cultures other than that of the Israelites.<sup>7</sup> Other ancient cultures had flood stories very like that of Noah and poems such as the Epic of Gilgamesh, which provided texts that were nearly identical to corresponding biblical texts. The reaction to what could only be perceived as attacks on the credibility of the Bible among many Protestants was to proclaim the truth of biblical texts even when contradicted by scholarly evidence and to pronounce minimalist fundamental standards for Christian belief, the chief example of which was the founding of the Fundamentalist movement in America in the 1890s. (Many Protestant scholars did attempt to understand the Bible with the aid of the new scholarship that eventuated in a new blossoming of biblical research and commentary, and updated translations including the Revised Version of the King James Bible in 1885.)

If the Protestants were in a defensive mode because of the seeping away of biblical legitimacy as a result of modern academic scholarship, were the Catholics in any better position to face the new mystique of evolutionary thought? The Catholic Church had two advantages in going against the new evolutionary impulse: First, the Church had learned from the case of Galileo not to rush to condemn empirical discoveries on the basis of apparent contradiction of biblical texts.<sup>8</sup> Second, the Catholic practice had always implied that biblical texts could be approached in spiritual and metaphorical ways as well as literal, and in the Middle Ages the "spiritual" interpretation of biblical texts to make moral points

had become so extreme as to leave the literal meaning behind altogether in the hands of some preachers.

And the Catholic Church's chief intellectual representative in England at the time was John Henry Newman who 14 years prior to the publication of Darwin's *The Origin of Species* had caused a scandal by publishing his book *The Development of Christian Doctrine* (1845), which attempted to prove that Christian teachings and practice had evolved from the time of the Apostles until the present day, a belief Newman had acquired through his reading of the Church Fathers. Thus, it was Newman rather than Darwin who had first introduced the possibility that things thought divinely ordained once and for all underwent development into the Victorian mindset. However, the Catholic Church was not an influential social force in the debate, owing to the exclusion of Catholics from the civic life of England from the time of the English Reformation.

#### IV

The potential for conflict was present between the two *mystiques* of evolutionism and religion in the form of Protestant Christianity at the time that Darwin published *The Origin of Species*. Yet, conflict was not inevitable, and as the main point of this essay is to describe how the two *mystiques* have degenerated into the political conflicts of the current day, it is worthwhile to consider how the conflict may otherwise have gone in 1859. To begin with, evolutionism was in the air and Darwin's theory was not the first expression of it, as two well-known facts indicate. First, Darwin's own grandfather, Erasmus Darwin, a physician, had published a vaguely evolutionary work called *Zoönomia* in the generation prior to Darwin's. Second, Darwin's contribution to the concept was to base evolutionism on empirical evidence of the develop-



ment of past life forms, but mainly to provide a specific mechanism that he called “natural selection” to explain how species slowly evolved one from another. But before Darwin was prepared to publish his own account, he received a work from a naturalist in the South Seas, Alfred Russel Wallace, that enunciated the same theory, explaining evolutionary change by means of a culling principle. This instance of simultaneous discovery put Darwin in an ethical dilemma since Wallace was requesting Darwin’s help in getting his theory published, but the dilemma was resolved when accounts by Wallace and by Darwin were published simultaneously.<sup>9</sup>

Evolution is not inherently inimical to revealed religion, Protestant, Catholic, or otherwise, nor does it necessarily imply materialism, determinism, racialism, or ethical egoism as its intellectual consequences. This fact was apparent just at the moment before the conflict developed in a manner more chemical than biological, as a sudden heating up of a volatile compound rather than as the slow development of an organism. Among Darwin’s supporters were Wallace, the South Seas naturalist, and an American botanist, Harvard professor Asa Gray, who were both religious men and who found not merely a lack of conflict but a kind of reinforcement between evolution and religion. Wallace was interested in human intelligence and pointed out that the fossil evidence indicated that the development of the human brain was so rapid in evolutionary terms that it could not be explained by natural selection, thus implying providential intervention.<sup>10</sup> Wallace also made the statement controversial in its day, that a member of the primitive South Sea tribes with whom he lived, if given a proper English education, had the requisite intelligence to qualify as a member of a learned society. Gray was a Christian of the evangelical sort who had undergone a conversion experience,

and who performed two labors on Darwin’s behalf, with whom he frequently corresponded: first, in an important paper he applied evolutionary theory to explain the distribution of flora in North America, thus showing the usefulness of Darwin’s theory to biological research; and, second, he produced a series of theological essays attempting to coordinate evolution with Christian doctrine.<sup>11</sup> Both of these scientists interpreted evolutionary theory teleologically rather than mechanically.

The most compelling element in evolution was its progressivism, for it was assumed that Darwin’s theory explained not only the origin of species but also how it happened that species improved, becoming more complex as time went on aeon after aeon. The existence of fossils proved that the earth was old beyond comprehension, implying a new conception of “deep time,” but their primitiveness also proved that as life had evolved, it had become more complex, from the earliest one-celled organisms to plants, amphibians, animals, mammals, and man. This progressivism was not necessarily scientific for the idea of progress was in the air as an inheritance from the Enlightenment which promised social and technological improvement. It was also an effect of the increasing influence of the German philosopher Hegel, who had described a theory of the universe that combined idealistic metaphysics with historical process. It was assumed in Victorian England, therefore, that evolution was part of a natural process of cosmic improvement that culminated in the human species and its works, specifically in the great civilizations, but culminating in northern European civilization. In this way, evolution had a teleological aspect, for it was a process aiming at a pre-ordained end, namely, the arrival of the human race that stood at the vertex of nature. In this way, evolution also became a theoretical justification for colo-

nialism, eugenics, and racialism.

Despite the congeniality of the evolutionary theory with an elevated view of human nature and creation, evolution rapidly became associated with a materialistic philosophy explicitly opposed to the Bible and set up as a new revelation, a materialistic mystique. The major interpreters of evolutionary doctrine were not Wallace and Gray, but rather T. H. Huxley, who drew out the dreary agnostic and ethical consequences of evolution; Herbert Spencer, a self-taught philosopher who enunciated a general theory of materialistic evolution and social Darwinism; and scientists such as Hooker and Lyell, who rejected biblical religious insights as part of their science.<sup>12</sup> The publicity these figures gave to the new doctrine made it appear that Darwin's theory had only the grimmest consequences for a religious and elevated view of things. Science itself said that the universe gave no evidence of design, that the evolution of life was accidental and yet (somehow) also determined, and that mankind was simply one accidental species among all the others, a "naked ape" as a later evolutionary writer put it. This materialism was an imposition and a forced interpretation of evolutionary theory. The seal, however, was put on the materialistic interpretation when Darwin himself acceded to it, for he had never been particularly religious, and the culmination of his thought was his book *The Descent of Man* (1871), which went into great detail about the resemblances but not the differences between men and apes.

The arrival of evolutionary theory crystallized a number of attitudes and ideas that made up the Victorian mind-set, one strand of which was opposition to the doctrines of the established Church of England and the desire to be free of the social influence of Christianity. This "free thought" was conjoined by thinkers like Marx with evolutionary theory to make up a historical vision in which social

progress, equality, liberation, and civilization all progress together in a path that was assured because nature itself in the form of evolution was innately progressive. The vague, almost spiritual idea of progress that was part of the mystical evolution was thus reduced to a political program and a materialist philosophy. There was, however, a serious conflict within the mix of evolutionary theory and social liberation: how was it possible to imagine that the derogation of human nature from something little less than angelic to something not differentiable from animal nature could in any sense be a liberation? Marxist practice would answer the question. Nonetheless, the materialistic and animalistic view of human nature was assigned an evolutionary and scientific legitimacy that was to have dire consequences and persist until this day.

## V

The theory of evolution has become the chief intellectual agent of secularization in contemporary politics. This is the form of its degeneration from the provocative and amiable mystique of the 1850s to the present day when it has become hardened into what its own proponents ironically term an "orthodoxy." The doctrines of this orthodoxy are, roughly, that all life forms are descended from one another in a process trackable by DNA analysis; that life-forms arise exclusively from the process of natural selection (or some other natural process), that human beings have no special place in nature, that purpose and design are absent from the universe, and that the existence of God is of no matter to the origins and nature of life.

Contemporary evolutionary theory in the form of "sociobiology" combines genetics with animal behavior and presses its paradigm outward in an unwise attempt to explain all aspects of human existence. The confidence that contem-

porary evolutionists have in the theory has led to smugness and arrogance of a degree that has to be experienced to be believed. Many examples might be given: the founder of sociobiology states that evolution is the primary “myth” that will displace the religious myth; an evolutionary apologist states, “[t]here is no denying, at this point, that Darwin’s idea is a universal solvent, capable of cutting right to the heart of everything in sight”; another asks rhetorically, “does knowing how evolution shaped our basic moral impulses help us decide which impulses we should consider legitimate?” and answers, “yes”; still another writes a book entitled with unseemly satisfaction, *The Triumph of Sociobiology*.<sup>13</sup>

One indicator that evolution has passed beyond a scientific theory to become a social and political cause is that two of its chief proponents, Richard Dawkins and Daniel Dennett, are actively proposing that a new class has arrived in society, a group of highly intelligent evolutionists whose beliefs are atheistic and rational, scientific and liberal, and who call themselves, and seek to have others call them, “Brights.” This suggestion, perhaps surprisingly, is taking hold and followers have set up organizations and a web site to promote the cause of “Brights.”<sup>14</sup> It is fair to say that these men, although Dawkins is a geneticist and Dennett a philosopher, and both hold chairs at major universities, are no longer serious intellectuals, but advocates for a cause who argue like spin doctors on cable television programs rather than as scientists or philosophers.

Religious opponents of evolution have also organized themselves, but they do not often argue these days that the earth is only 6,000 years old as calculated by Bishop Usher from biblical genealogies. Most now accept the age of the earth and of life-forms on earth on a scale of billions of years as proven by the scientific evidence. Religious opponents of evolution

more often tend to argue in behalf of a new “creation science” which is based on the biblical account of creation in Genesis, and which, as they have argued in court, ought to have the same standing in public school biology courses as Darwinian evolution.<sup>15</sup> Suing school districts in behalf of creation science has its appeal; it is gratifying, after all, to see arrogant scientists having to explain the in-house controversies surrounding speciation that are usually kept to the scientific journals, in front of a group of aggressive lawyers. There is one major difficulty with creation science, however, and it is a fatal one: that it is not science at all but, as the federal court recognized, a disguised form of religious orthodoxy.<sup>16</sup>

It is not difficult to sympathize with the religious critics of evolution, the evangelicals concerned with the biblical basis of morality, the fundamentalists concerned with the validity of the Word of God, the preachers concerned with hedonism and materialism. The “blue book” on evolution published by the Jehovah’s Witnesses states with sad accuracy that, as a result of “the general acceptance of evolutionary theory, a far more reckless age of violence developed, to which history clearly testifies. ... Morals have broken down and, for multitudes, faith in God has been shattered.” Religious critics also continue to attack evolution as a theory, not just for its negative social effects, and bring up significant objections to its explanatory weaknesses. Unfortunately, the religious critics’ opposition to evolutionary politics has often led them to deny the evidentiary and actual scientific parts of the theory and, in response to the evolutionists’ intellectual arrogance, to suspect vehemently the use of reason as a means of reaching conclusions about moral and religious life altogether. Further, by relying on the Bible for an empirical account of natural processes, religious critics have sometimes brought criticism and even ridicule



upon sacred scripture when interested observers compare the purported biblical account with evidence from astronomy, biology, geology, and history.

The present state of the evolution versus religion controversy is that it is currently being played out as a social, political, and broadly cultural contest roughly equivalent to the “red-state” and “blue-state” political conflict. The controversy begun in large volumes of theological and scientific speculation in Victorian times has now descended to the level of a bumper-sticker war, in the competing Jesus and Darwin fish symbols that appear on the rear of automobiles.<sup>17</sup> Evolu-

tionary proponents continue to publish popular books claiming that evolutionary concepts can solve every mystery of human existence while religious critics continue to promote biblical “science” and to exploit the explanatory gaps in orthodox Darwinian theory. French culture and history moved on from the political conflicts that resulted from the Dreyfus affair and left them unresolved. Attempts to resolve the conflicts resulting from the religion versus evolution controversy are not likely to be successful because evolutionary materialism and biblical literalism have become political positions. It is probably time to move on.

1. Throughout this essay, a distinction should be made between the “creation science” and the “intelligent design” movements. The latter is more intellectual and less inclined to biblical literalism. Among its best known proponents are Michael Behe, William Dembski and Philip Johnson. See my positive review of Behe’s *Darwin’s Black Box* in *Chronicles*, November 1997. 2. Gertrude Himmelfarb, *Darwin and the Darwinian Revolution* (Garden City, 1962), 287-294. 3. Charles Péguy, *Temporal and Eternal*, trans. by Alexander Dru (Indianapolis, 2001), xxvi. Contains edited translations of Péguy’s essays, *Notre Jeunesse* and *Clio I*. 4. Himmelfarb, 216-240; see also Loren Eiseley, *Darwin’s Century* (New York, 1961). 5. Kenneth Scott Latourette, *A History of Christianity*, Vol. II, rev. ed. (San Francisco, 1975), 1160-1204. 6. Robert M. Grant, with David Tracy, *A Short History of the Interpretation of The Bible*, 2nd rev. ed. (Minneapolis, 1984), 92-99. 7. *Ibid.*, 100-118. 8. Himmelfarb, 395. 9. Ross A. Slotten, *The Heretic in Darwin’s Court* (New York, 2004), 148-162. There has been a recent surge of interest in Wallace. See books by Shermer, Raby, Daws, Severin, Fichman and Brooks, all published by major academic presses in the last ten years. 10. Eiseley, 287-324, “Wallace and the Brain.” Wallace’s argument still retains its plausibility as indicated by the remarks of two contemporary evolutionists: Stephen J. Gould, *Ever Since Darwin* (New York, 1977), 179-185; Edward O. Wilson, *Sociobiology, the Abridged*

*Edition* (Cambridge, 1980), 280-284. 11. Asa Gray, *Darwiniana* (Cambridge, Mass., 1963) contains Gray’s published essays on evolution. 12. Huxley invented the term “agnostic” and wrote an influential essay on evolutionary ethics. Spencer invented the term “survival of the fittest” later used by Darwin and was publishing on evolutionary themes prior to the publication of Darwin’s *Origin*. 13. The quotes are from (in order), Edward Wilson, *On Human Nature* (Cambridge, Mass., 1978), 201; Daniel Dennett, *Darwin’s Dangerous Idea* (New York, 1996), 521; Robert Wright, *The Moral Animal* (New York, 1994), 10; John Alcock, *The Triumph of Sociobiology* (New York, 2001). See my review of Dennett in *Modern Age* (Winter, 1997). 14. A website for brights, “an international Internet constituency of individuals,” <http://the-brights.net>, has links to the original essays by Dennett and Dawkins. 15. A Google search reveals that there are many websites for creation science, e.g., <http://emporium.turnpike.net/C/cs/the> “Creation Science home page.” 16. Stephen J. Gould, *Rocks of Ages* (New York, 1999), 141. For accounts of the court case Gould refers to see *The Boston Globe*, May 17, 1998 and *The New York Times*, May 28, 1998. 17. Prof. Tom Lessl of the University of Georgia has done research into the phenomenon which has attracted press notice. See “The war of the Jesus fish is an ever escalating one,” Rachel Sauer in the *Seattle Post-Intelligencer*, Jan. 10, 2004.