Creationism to Universal Darwinism: Evolution and Religion Today

Taner Edis

Thus sayeth the polls

Today, more than a century after Darwin convinced biologists that life had evolved, we still see a raging controversy over creation and evolution. Together with this, we have a large range of ideas about what evolution means for religion.

Since we live in poll-driven times, let us start by looking at public opinion. We find that in the United States,

- \sim 45% are creationists; often of the young-earth variety. When pollsters ask whether humans were created in a form much as they are today, within the last ten thousand years, they say yes.
- ~45% believe in a progressive evolutionary process guided by a divine force, typically identified with the traditional God. This is the common liberal Christian option, though it is also strong in New Age circles.
- \sim 5–10% accept naturalistic evolution with no explicit divine involvement, though a God may still be lurking behind the scenes.

This poll data has remained fairly consistent since at least 1980. And unsurprisingly, it reflects the religious make-up of the country. The United States is unusual among industrialized Western countries in its intense religiosity, and certainly in its large religiously conservative population.

The polls also demonstrate the thinness of public support for *Darwinian* evolution in the US. Only a minority completely reject evolution, if we take evolution to mean no more than descent with modification over long ages of time. However, if we emphasize the naturalism of modern evolutionary

theory, where the history of life is shaped by blind mechanisms, we see that full-blown Darwinians are the smallest minority.

Creationism and "Intelligent Design"

Outright creationism, including its recently evolved cousin, "Intelligent Design" (ID), are the most religiously orthodox options. However, it is important not to caricaturize rejection of evolution as a byproduct of a mindless Bible-thumping mentality. In Darwin's day, editorial cartoonists would depict evolutionists as monkeys; today every time a state such as Kansas or Ohio flirts with anti-evolutionary ideas in their school boards, cartoons with ape-like creationists show up. But there is more to creationism than scriptural literalism. ID proponents in particular can be rather sophisticated, and from within a religious perspective, there are respectable reasons to resist evolution.

ID'ers in particular object to the Darwinian mechanism of evolution, precisely because it is a *mechanism*—not a way in which a creative purpose interferes with an otherwise formless and lifeless material world. Their central concern is *design*; they demand that complex functional order such as that we see in biology must be a direct product of a mind. This claim is not confined to biology, it might be more directly seen as a claim about the nature of intelligence. Intelligence must not be reducible to material processes; it must impose order from outside the material world. In this guise, ID resonates with the convictions of many people who are not fixated on Genesis.

So it is no surprise creationists and ID proponents attack evolution with a particular vehemence. They perceive that materialism has gained ground, in our intellectual culture if not in everyday beliefs. They also see evolution as a prime example of removing creativity from God and relocating it in the natural world. So denying that evolution can account for true creative novelty makes sense: they block materialism by refusing it a foothold in the first place.

Guided evolution

Religious liberals try to defuse the Darwinian challenge, first of all by confining it to biology. If creationists tend to see biological evolution as a particularly nasty manifestation of a larger materialist threat, liberals treat it as a theory about the history of life only, something which calls for some reinterpretation of doctrine but not much more.

Moreover, liberals are not just defensive about evolution—they can be quite positive about it. The salvation history in scripture may no longer be literally believable these days, but liberals displace the cosmic purpose and meaning expressed in the old stories onto the history of life in the universe. They see evolution as an intrinsically progressive unfolding, an ascent towards higher and higher levels of complexity, consciousness, spirituality, and morality. And of course, there must be a transcendent driving force behind this process. Evolution becomes God's way of creation.

Though this is not a Darwinian vision, liberals do not object to Darwin. Since they see evolution as descent with modification only, they have no problem with Darwin as an important scientific figure. And after all, Darwin did leave room for God as a somewhat remote First Cause, so there's room for a happy coexistence with religion.

In fact, this is a common liberal theme. There can be no conflict between science and religion since, if done properly, they address entirely different concerns. Religion has no business pontificating about the fossil record, and science has no business pronouncing on ultimate matters like purpose in the universe. Science and religion have separate spheres, end of story.

Religion-free evolution

Many, however, would emphasize the separation of science and religion more strongly. After all, guided evolution still brings them together, since it uses evolutionary progress to support a spiritual view of the history of life. Most biologists would point out that evolution is not quite so progressive, and would like the wall between science and religion to be higher.

Natural selection, most importantly, is a mechanism with no intrinsic direction. Evolution is blind—it has no foresight to choose a path of progress and follow it. Of course, there are trends like the existence of increasingly complex and brainy forms of life as we get close to the present. However, this

"progress" is just an artifact, due to the fact that life started out simple and stupid. From this starting point, Darwinian evolution explores a diversity of ways of life, and among these, some just happen to be more complex options.

Most biologists will further argue that blind natural selection is the source of creativity in evolution. Other pieces of the puzzle such as genetic drift, phenotypic plasticity, mass extinctions and so forth are also very important in shaping the particular history the fossils record. However, creative novelty is due to Darwinian variation-and-selection.

Modern biology, in other words, presents a thoroughly naturalistic picture of life; not one which requires any God. But many biologists would add that this does not mean evolution opposes religion. Biology, they might say, is naturalistic because any science *must* operate that way. This only means we must seek God elsewhere, not that science has anything negative to say about God.

Godless evolution

All very well, but this backing up and declaring no intention to poach on religious territory sounds a bit suspicious. Critics of religion have generally not been so reticent, arguing that there is much about evolution that makes it very dubious that a God is running the universe.

To begin with, the old, robust concept of revelation seems to be crippled after Darwin. And this is no small thing. Though there is much liberal handwaving and reinterpretation going on, there is something unconvincing about the effort. Ernest Gellner, when comparing the conviction inspired by Islam to the anemic religiosity in Britain, described Christianity as "a religion bowdlerized by its own theologians." At a certain point, a religion which keeps backing off and accommodating to naturalistic science becomes hard to take seriously.

Evolution is, in fact, a good illustration of the religious danger of making God an unnecessary hypothesis. We might be tempted to declare that God works through evolution, even if saying this adds nothing to our understanding of biology. But this God is like a Santa Claus to the Christmas of Darwinian evolution. We do not, after learning the ugly truth, insist that Santa Claus is still real, that he is the moving spirit behind the holiday season, and that he works through parents placing gifts under trees.

On top of all this, Darwinian evolution seems to go very well with a classic

reason to doubt the existence of a God: The Problem of Evil. Evolution is a cruel and inefficient process, not the instrument of a infinitely competent and benevolent force trying to achieve any humanly intelligible end.

Of course, all this does *not* mean that evolution disproves God in any strict sense. Any discussion of the implications of evolution for God must be part of a much broader argument. Nevertheless, evolution does have a place in the debate over religion—this cannot be avoided by invoking separate spheres. And it would appear that Darwinian evolution throws its weight on the side of the infidels.

Universal Darwinism

All of the preceding ideas were, in various primitive forms, part of the early debate over evolution and religion. Today, however, we have a new species on the scene: Universal Darwinism.

The basic thrust here is that Darwinian evolution is not only one of the most profound theories our sciences have come up with, but that it applies beyond biology. The Darwinian process underlies *all* creativity; it is central to achieving *all* complex functional order.

Some of the ideas in this fold are rather speculative. For example, Lee Smolin proposes a "Darwinian cosmology" to explain certain features of our universe. He takes current ideas about a multiplicity of universes, and how the formation of a black hole might create another universe—one, perhaps, where the laws of physics are similar to that of the parent but slightly mutated. In that case, we can bring Darwinian population thinking to bear on cosmology, and find that the most common universes will be those which produce lots of black holes and hence offspring. Such as our universe.

Another speculative idea applies Darwinism to human culture. Richard Dawkins and Susan Blackmore speak of "memes" as units of culture which reproduce via human brains, copied by imitation. The notions of memes and meme complexes still needs much development; they appear to encompass anything from a catchy advertising jingle to a complex scientific theory, even religions. Still, ideas do, in some sense, reproduce and are subject to selection. So "memetics" does show some promise at least.

A more solid example of universal Darwinism, however, is perhaps the most significant. Much recent research in machine intelligence concerns using Darwinian processes to move computers beyond pre-programmed responses,

having them produce genuine creative novelty, even if only in narrow contexts so far. Indeed, there are very good reasons to believe that ultimately *our own* intelligence and creativity relies on Darwinian processes in the brain!

Darwin vs. God?

Today, with Darwin's ideas spilling over far beyond biology, the Darwinian challenge to religion is much broader than it once was. Our religions have typically imputed creativity to minds standing apart from mere nature, claiming that spiritual realities shape the material world. If we universalize Darwinism, however, we do much more than chase God out of biology. Whether in the physics of complexity, brain sciences, or the cultural role of religion, the Darwinian approach substitutes naturalistic explanations where the devout were wont to see the hand of God.

The challenge today's Darwinism presents to religion is also deeper. Back in the nineteenth century, evolutionary ideas emerged as an alternative explanation to intelligent design. Evolutionary thinkers set aside the products of design, and said that life was not so similar to these artifacts, that a mindless process was in fact responsible for their origin. But if our own creativity is rooted in Darwinian variation-and-selection, this sharp division comes into question again. For then, if life is a direct product of Darwinian evolution, our artifacts are indirectly also Darwinian products. In that case, religion is in deep trouble. Traditionally, divine creativity has been conceived of analogously to human creativity, leading to the classical design argument. Now, this analogy cannot even get started, because our own minds appear to be completely rooted in the randomness and mindless mechanisms of the material world.

In other words, it is no accident skeptics about religion are usually such great fans of Darwin. His ideas are, in fact, central to a thoroughgoingly naturalistic picture of the world.

Unfortunately, it also no surprise that opposition to evolution so consistently appeals to religious people. Though creationists are masters of the bad argument, their basic intuition that modern evolutionary theory has a corrosive effect on religion is correct. Liberal assurances that Darwin's ideas are no threat to spirituality are at best evasive. So anti-evolutionary reactions are not about to go away; we can expect creationism to flare up with regularity in deeply religious cultures like the US and the Islamic world.

To learn more

All of this is very interesting, but it is but a short taste of a long argument. In finding out more about evolution and religion, particularly the implications of Universal Darwinism, the following may be helpful:

- www2.truman.edu/ edis/
- Taner Edis, The Ghost in the Universe: God in Light of Modern Science (Amherst: Prometheus, 2002).
- Daniel C. Dennett, Daniel C. Dennett, *Darwin's Dangerous Idea: Evolution and the Meanings of Life* (New York: Simon and Schuster, 1995).