Finding Gould’s God

The scientific community suffered a great loss on May 20, 2002, with the death of Stephen Jay Gould. For anyone interested in evolution and natural history, or in the relationship between science and religion for that matter, the name Stephen Jay Gould is a household word. For twenty-seven years, his monthly columns and numerous books have entertained and informed a vast and appreciative audience. He will be sorely missed. Gould was a professor of zoology and geology at Harvard University, a prolific and influential writer on the subject of evolution, and a devoted disciple and admirer of Charles Darwin, having referred to him on more than one occasion as his hero. He was also a self-proclaimed agnostic.

Brown University biologist Kenneth Miller published a book entitled Finding Darwin’s God: A Scientist’s Search for Common Ground Between God and Evolution. Given Gould’s admiration and respect for Charles Darwin, one might ask if Miller indeed has found Darwin’s God (as the title of his book suggests), has he not found Gould’s God as well? Perhaps. Let us begin by comparing the religious views of Darwin and Gould, and then, if similarities can be found, consider the integrated view of evolution and theology proffered by Miller and others.

Charles Darwin
Charles Darwin has come to be one of the most controversial scientists in history, which is quite interesting in light of his compassionate and unassuming personality. Far from the poster boy for atheism that many groups have marketed him as, Darwin’s life reads as the moving story of an honest and vulnerable human being in a state of perpetual soul searching. It depicts a man slipping from theism, to deism, to agnosticism, a fall driven as much by his scientific ideology as by his inability to reconcile human suffering with a benevolent God.

Darwin entered his adult life as a theist. In 1831, he graduated from Cambridge Divinity School with modest aspirations of life as a country parson. He boarded the H.M.S. Beagle a literal believer in the Genesis account of creation. During this voyage, many of his yet unchallenged scientific and religious beliefs came into question.

While much has been made of Darwin’s naturalistic exploits aboard the Beagle, one should not overlook the significance of his more humanistic encounters, particularly the missionary work attempted in Tierra del Fuego. On board the ship were three Fuegians kidnapped by the English during a previous expedition to South America. The young hostages had been brought back to Europe where they were raised in the safe confines of Anglican society. The goal was to return them to their homeland along with a Christian missionary who was to teach the native people the ways of a civilized life. Having befriended one of the “transformed” Fuegians on board, Darwin was shocked by his encounter with the Fuegian people in their native environment. Horrified, too, was the missionary, who in an abrupt shift of priorities, refused to let the Beagle sail off without him. Later the whole experience would affirm Darwin’s speculation that humans, too, are the products of an evolutionary process.

Upon returning to England, Darwin began to mull over the stacks of notebooks he had compiled, and his theory of evolution by natural selection slowly took form. His slip from theism to deism stemmed from his own interpretation of the theory and from...
the general scientific climate of the time. Newtonian physics was assumed by many to reflect the craftsmanship of the great “clockmaker” who had built a wonderfully complex universe, wound it up and let it go, never to intervene on its behalf again. One sees a glimpse of Darwin’s deistic perspective in the closing paragraph of *The Origin of Species*. Darwin wrote:

There is grandeur in the this view of life, with its several powers having been originally breathed by the Creator into a few forms or into one; and that, whilst this planet has gone cycling on according to the fixed law of gravity, from so simple a beginning endless forms most beautiful and most wonderful have been, and are being evolved.¹

Ultimately, however, deism and Christianity would prove unsatisfactory to Darwin, who found its answers to the difficult questions of human suffering too simplistic, if not cruel. In a letter to Asa Gray, Darwin commented on a growing pessimism spawned by his theory:

… with respect to the theological view of the question. This is always painful to me. I am bewildered. I had no intention to write atheistically. But I own that I cannot see as plainly as others do, and as I should wish to do, evidence of design and beneficence on all sides of us. There seems to me too much misery in the world.²

Darwin himself was no stranger to suffering, enduring chronic stomach disorders, migraines, and boils most of his adult life. He felt persistent guilt at the thought of having passed his “wretched” stomach on to his children and was particularly devastated by the premature death of his 10-year-old daughter Annie, an event from which the shreds of Darwin’s faith never recovered.

Emma Darwin, a devoutly religious woman, worried about her husband’s salvation from the first day of their marriage. She constantly urged him to read the closing section of John 13, where Christ informs the doubting Thomas that he is “the way, the truth, and the life.” In one of her many letters to Charles, she implored him to give up his habit of “believing nothing until it is proved.” An anguished Darwin responded: “When I am dead, know how many times I have kissed and cried over this.”

Late in life, when asked about his religious views, Darwin alleged that the question of God’s existence was beyond the comprehension and resolve of the human intellect. Following the precedent and terminology of his friend Thomas Huxley, Darwin confessed:

In my most extreme fluctuations I have never been an Atheist in the sense of denying the existence of God. I think that generally (& more & more as I grow older), but not always, that an agnostic would be the most correct description of my state of mind.³

But reading between the lines, one gets the impression that Darwin never truly relinquished a belief in God. He supported tent ministries in his home town up until his death and contributed financially to an Anglican outpost in Tierra Del Fuego; the natives that had once shocked him with their savagery were eventually clothed and converted.⁴ Darwin understood the value of religion in society. It was his fear, rather, that a shared belief in a supernatural creator was simply a neurological projection, a “beneficial variation” born of natural selection in the same manner as any other trait that confers an advantage for survival. His faith fell victim to his own theory.

**Stephen Jay Gould**

It is readily apparent that Stephen Jay Gould shared much in common with his admitted hero and mentor, Charles Darwin. In his book *Rocks of Ages*, Gould openly professes: “I am not a believer. I am an agnostic in the wise sense of T. H. Huxley, who coined the word in identifying such open-minded skepticism as the only rational position because truly, one cannot know.”⁵ Yet anyone who has read Gould’s work knows that religion is a recurring topic woven into many of his essays as analogy, metaphor, and anecdote. In an age in which so many prominent scientists adamantly refuse to mention science and religion in the same breath, Gould was just as likely to use a verse of
Gould recognized the value of religion in society, and through his agnostic creed, he left a door open for God. But like Darwin before him, he seemed convinced that religion is simply a manifestation of natural selection in a materialistic universe.

Evolution and Theology
Much of the popular debate over evolutionary theory has been waged by opponents at opposite ends of the spectrum, namely by atheistic materialists and by creation scientists. Kenneth Miller falls well within these two extremes. His book presents an ample refutation of creation science and contemporary intelligent design theory, yet, curiously, his book is also an argument for the existence of God. Many of the ideas in Miller’s book are not new. Other scientists and theologians who have successfully integrated scientific and religious faith in a similar manner join him.

One key to reconciling evolution with theistic belief lies in the understanding of the word “chance.” Continuing Darwin’s letter to Asa Gray quoted previously, it reads:

On the other hand, I cannot anyhow be contended to view this wonderful universe, and especially the nature of man, and to conclude that everything is the result of brute force. I am inclined to look at everything as resulting from designed laws, with the details, whether good or bad, left to the working out of what we may call chance. Not that this notion at all satisfies me. I feel most deeply that the whole subject is too profound for the human intellect. A dog might as well speculate on the mind of Newton.

Gould notes: “Darwin does not mean chance in the vernacular senses of ‘random,’ ‘without meaning,’ or ‘incapable of explanation.’ By stating the proviso ‘what we may call chance,’ he implies a view of life for which he had no word, but which historians now call contingency.” Yet it is, in fact, this notion of “chance” as manifested in quantum uncertainty and chronological time that allows evolutionary theory to flourish within the context of both Western religion and modern science.

Miller points out: “One hundred and fifty years ago it might have been impossible not to couple Darwin with a grim and pointless determinism. I believe this is why Darwin in his later years tried and failed to find God, at least a God consistent with his theories.” Darwinism would mean the end of God in a Newtonian world of simple cause and effect.
phenomena. But relativity and quantum theory have transcended the Newtonian picture of deterministic particles moving along in space with something much more supple and comprehensive.

Consider electrons for a moment. They orbit the nuclei of atoms in what are simplistically portrayed as concentric circles. In actuality, the paths must be thought of as probabilistic clouds since both the exact location and momentum of an electron cannot be known at any particular instant. The physicist knows this enigma as Heisenberg’s Uncertainty Principle. Ultimately, however, it is the positions and momentums of these quantum particles that dictate higher order events from simple chemical reactions to complex weather patterns, to super novas, and everything in between. Such sensitivity to initial conditions is part of what is better known as Chaos theory.

One begins to see that the quantum world is both unpredictable and unmechanical. Yet, when considering even a tiny piece of matter, in which the behaviors of lots of quantum particles must be added together, these variations and uncertainties tend to cancel each other out, producing a highly reliable pattern of overall behavior. This is of utmost importance, because it is this reliable pattern of behavior that allows science to be so fruitful—it is the foundation of materialism. Force, in fact, is the product of an object’s mass and acceleration. The pressure of a gas is inversely proportional to its volume at constant temperature. As early as 1945, Erwin Schrödinger surmised that living things, insofar as being complex aggregates of countless quantum particles, must be of sufficiently large size relative to atoms in order to insulate themselves from atomic-level events. Only then can their physiologies be based on predictable natural laws.14

The uncertainty principle tells us that there is specific information about the physical nature of matter that simply cannot be known. This essentially places every piece of matter in the universe under God’s potential control, or under the control of randomness and chance, depending upon one’s world view. It is not a return to the “God of the Gaps” theology, for it is not a principle of scientific ignorance, but of indeterminacy. What ultimately directs the intrinsic unpredictability of chaotic systems is information, not energetic causation.

Addressing Deeper Concerns

Certainly, as Miller notes, quantum mechanics does not prove the existence of God. “If it did, we should expect missionaries to win souls by explaining two-slit diffraction experiments and by showing the derivation of Planck’s constant.”15 Nor was Gould likely to have hopped quickly on the quantum mechanics bandwagon. Belief in God requires insight into the more difficult questions of human experience. Anyone familiar with the writings of evolutionist Richard Dawkins knows that evil and suffering are a significant part of his atheistic argument. Unfortunately, this is where Miller’s book falls short. But others have plowed this ground before. Some helpful and spiritually compelling insight has come from Anglican priest and particle physicist John Polkinghorne.16

According to Polkinghorne, there are essentially two types of evil in the world: moral evil and physical evil. Moral evil, such as that manifested in the form of concentration camps, theft, and murder, exists because our Creator has bestowed upon us a free will. “We are moral beings, with all the possibilities for immorality that this implies, not perfectly programmed automatons.”17 God is not always pleased with our actions, but realizes the consequences of his taking back control over them.

Physical evil, such as a devastating hurricane or a serious illness, is more difficult to rationalize. Surely God has some control over this. Did we not just establish that every quantum particle in the universe is under his potential control? Why does he not constantly perform miracles to protect us from the pitfalls of the physical world? The answer is because God is faithful, faithful to the orderly creation he has made. God does not will evil or suffering,
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but rather allows it in a world that has been
granted the freedom to be other than God.18
Important to Christian theology is a clear
distinction between the Creator and the
created order. For God to love the world,
he must give up some control of it.19 He
does not have to, but he does because of love.
The logic of love requires the freedom of the
beloved.

Christianity, in particular, speaks to the
issue of suffering at the deepest level. Unlike
other world religions, Christianity tells us
that God understands our suffering because
he too has suffered and suffers with us now.
He does more than simply look down upon
us with pity. He stands beside us in our
darkness.20 Only when God is acknowled-
ged to be vulnerable through his love for
his creation, does it become possible to
speak of the mystery of a suffering God.

Concluding Thoughts
Gould knew that science, by its own design,
was not equipped to address
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Certainly Christ struggled. We can only
imagine what he must have been experienc-
ing when he put his own fate into the hands
of his Father in the garden. If Jesus was fully
human as well as fully divine, then a leap of
faith was required of him as well. We are the
beneficiaries. Let us remember his leap and
contemplate our own as we strive to mold
our lives after him.

Notes
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