

## **“In Praise of Randomness”**

It's said that history repeats itself, the first time as tragedy and then as farce. That adage came to mind as I thought about arguments currently being played out in a federal court in Pennsylvania, where eleven parents from the town of Dover are seeking relief from a decree handed down by the local school board that requires a four-paragraph statement be read to all ninth graders casting doubt on Darwin's theory of evolution.

Rewind eighty years, to another small town, Dayton, Tennessee, where evolution went on trial once before. Many of us have read or seen Jerome Lawrence and Robert Lee's famous dramatization of that encounter, *Inherit the Wind*. There in a sweltering southern courtroom, with the flies buzzing and the ceiling fans working overtime, two great adversaries went head-to-head. In actuality, though, the case of Tennessee v. John T. Scopes was far more complicated than a face-off between fundamentalism and modern science.

William Jennings Bryan, attorney for the state, was not at all the ignorant bumpkin depicted on stage and screen. The Democratic nominee for President in 1896, Bryan was known as a prairie populist, the champion of progressive causes, from the rights of labor to women's suffrage to independence for the Philippines, which the U.S. had acquired as part of a growing empire at the end of the Spanish American War. Clarence Darrow, counsel for the defense, was equally renowned as defender of the underdog. He'd gone to bat for socialists like Eugene Debs and Big Bill Hayward and for black men like Ossian Sweet and the Scotsboro Boys who were never going to get a fair shake in court at that point in American history without a powerful ally on their side. Darrow and Bryan alike were men of principle and high ideals. And in a trial where winners and losers were bound to emerge, both could not be victors.

According to the ruling of the judge, Darrow lost the case. John Scopes, the twenty-four year old science teacher and football coach, was fined \$100, the court having determined that he violated the law by telling his students that human beings were mammals and that the earth had once been molten and too hot to support life. In a broader sense, of course, Darrow and the evolutionists carried the day. They won in the far more important court of public opinion, while those who looked to the Bible for a factual account of human origins were thrown back on the defensive.

And the tragedy is that nothing really got resolved. Darwinism did achieve an ascendancy in the scientific community and among biologists there is near unanimity that species have evolved on planet Earth over the course of billions of years through a process of random variation and natural selection. But many people of faith had trouble figuring out what God's role in any of this might be. Their religion, unlike the rest of the world, wasn't able to evolve. Large numbers continued to interpret the Biblical creation story in the most literal way, so that today almost half of all Americans say they believe

that you and I are descended from Adam and Eve, who lived roughly six thousand years ago in the Garden of Eden.

That's apparently also the view of the school board in Dover, which overruled the objections of high school science teachers there and ordered them to instruct their pupils that there are unexplained "gaps" in the theory of evolution, referring students to a book titled *Of Pandas and People* to learn more about "intelligent design." The *Pandas* volume is published by an organization that describes its mission as "proclaiming, publishing, preaching and teaching the Christian Gospel ...." And the authors, Percival Davis and Dean Kenyon, wrote the book in 1989, two years after the Supreme Court outlawed teaching so-called creation science in public schools. Up to that point, both were advocates of creationism, arguing for the historicity of Noah's flood and the book of Genesis as an accurate guide to the science of life. One of them had already written a book titled *Case for Creation*, published by the Moody Bible Institute. But after the Court's ruling, the two men realized they needed a subtler approach and popularized the phrase "intelligent design" through their *Pandas* book, which asserts that life "owes its origin to a master intellect" and that "new organisms arise from a blueprint, a plan, a pattern, devised by an intelligent agent." Though the identity that master intellect is never specified (and could be a space alien or the goddess Kali), many Christians have come to see "intelligent design" as the Trojan Horse they need to sneak their particular version of the deity back into science classrooms. And this was certainly true of the school board in Dover, where the chair of the curriculum committee announced that "This country was founded on Christianity and our students should be taught as such."

My own opinion is that children should be taught science in their science classes—not taught Christianity or Hinduism or any other religious belief system—and that intelligent design is not a scientific theory. Unlike genetics or population biology or paleontology or the other major supports for what's called the modern synthesis, ID (as it's called) makes no testable predictions about the inter-relationships that exist between living organisms past or present. Intelligent designers claim that certain biological features, like the human eye, are really too complex and intricate to have come about purely by chance. But ID is really a theological hypothesis rather than a scientific one. It's less an explanation for how life evolved than a protest that it couldn't all just be haphazard.

Of course, it is unnerving to think that you and I might be here simply by accident. And yet, it's even more unsettling to think that all the details of molecular biology have somehow been masterminded by a deity who micro-manages the DNA for roughly ten million different species, deciding which ones flourish or go extinct. What in the world was the Creator thinking when he made the Ebola virus or parasites like the guinea worm that afflict so many children in Africa? Is there a "intelligent design" behind genetic diseases like cystic fibrosis or Huntington's Chorea, now known to result from a trinucleotide mutation on chromosome 4? Not one that I can see. Charles Darwin himself struggled with the religious implications of his theory over a hundred and fifty years ago. In his *Autobiography*, he confessed "the extreme difficulty or rather

impossibility of conceiving this immense and wonderful universe, including man with his capacity for looking far backwards and far into futurity, as the result of blind chance or necessity.” And yet soon after *The Origin of Species* appeared, he wrote to the American biologist Asa Gray that “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.” Probably he had in mind creatures like the wasps that lay their larvae in the abdomen of living caterpillars, slowly devouring their host from the inside out, when he wrote to Joseph Hooker, “What a book a devil’s chaplain might write on the clumsy, wasteful, blundering, low and horribly cruel works of nature!”

The fact is that it’s a dicey and dangerous world we live in. Even the Bible recognizes that “the race is not always to the swift, nor the battle to the strong, but time and chance happen to them all.” Events in our lives, fortune and misfortune, seem to occur randomly, often for no good reason. And there is some comfort in that. As a pastor, for example, I prefer to tell parents whose child has been born with a congenital heart defect that these conditions are the result of genetic anomalies rather than part of some divine master plan. I don’t believe in the kind of deity who brings babies into the world with a chamber of their most vital organ missing. Saying that it’s “God’s Will” doesn’t work for me. And this means there aren’t always satisfactory answers to the inevitable question, “Why?” And if this is the case when bad things happen, it’s equally true when good things happen, as well. For each of us is the recipient of random acts of kindness and senseless acts of beauty. The stars spangled across the night sky, not arranged in any order or pattern our minds can discern, but lovely nonetheless; wild daisies, their seeds dispersed by wind and spattered like raindrops over an open meadow; cumulus clouds, shifting shapes in the updrafts and the play of sunlight through the spaces in between; all of these are phenomenon based on chance, just as the birth of every child, boy or girl, contains an element that’s indeterminate except through the flip of a coin. Randomness is built into things, right down to the Brownian motion that keeps the microscopic world quivering in a state of unsupervised excitement.

Shift gears, and think metaphors for a moment. Does life unfold governed by some pre-existing blueprint, like the *Panda* people suggest? Or is life more like a curious toddler, not given to much forethought, liable to wander off at any moment in some unexpected direction? Is life like a railroad, built to move straight ahead with no detours toward a predestined goal? Or is life more like some old-fashioned mariner, blown hither and yon by breeze and current, touching down on shores she wasn’t looking for and making her greatest discoveries quite fortuitously? I think life is more like a boat on the ocean than a train on the track, and more like a baby than a blueprint.

As Forrest Gump says, life is like a box of chocolates. You never know what you’re going to get. And it makes me no less grateful to believe that our existence here is largely the result of happenstance, the consequence of an amazing string of lucky breaks, rather than the outcome of careful advance planning. I feel more challenged and energized by a future that’s wild with possibility than by one that’s already been

preordained from the beginning of time. And the divinity that I believe in is not some cosmic control freak who meddles in the minutiae of genetic engineering, causing some bits of ribonucleic acid to mutate in just the right way. God is not the one who physically constructs organs like the human eye—assembling lens and cornea and retina—so much as the one who opens the door to that rush of pure pleasure we get when we use those same eyes to look out on the world and see how beautiful it is, lifting up our spirits to behold the light of one more dawn. God isn't the one who gives some infants healthy hearts and others hearts with bad valves so much as the one who opens every heart to care for the unfortunate.

There's nothing in this kind of faith that's contrary to theory of evolution. And it gives me hope to think that the tragic split of science and religion might be someday overcome. But the monkey business being replayed in Pennsylvania this month doesn't advance the cause of good science or good theology. It's time to let go of "intelligent design" and embrace a more intelligent faith instead.