

Darwin's Dangerous Idea— And The Even More Dangerous Reaction To It

A Sunday morning address¹ to the Ethical Humanist Society of Long Island
By **Tony Hileman**, Senior Leader New York Society for Ethical Culture, February 11, 2007

The very day I officially assumed my duties at the New York Society for Ethical Culture, I receive a phone call from New York Times columnist, Clyde Haberman. “What a town,” I thought, how warm and welcoming.

Turns out he wasn't exactly calling to welcome me—he didn't even know I was newly arrived—but rather to get my take on allowing parking on both sides of the street on no less than 34 holidays a year, many of them somewhat obscure “religious” holidays. He was looking for suggestions on what secular days of observation might qualify for such privilege.

I was still living in a hotel at the time, so what did I know of the intricacies of alternate-side parking? And I certainly didn't want to challenge his assumptions about what constitutes religion. None the less, I got the gist of it and, according to Haberman, in his column the next day, jokingly suggested Darwin Day, celebrated by many Humanists on Darwin's birthday. Well, he got it mostly right, all except for the joking part. I think we should set aside a day each year to recognize and celebrate science and evolution—the story of how we came to be—and this is that day.

It has been my experience that when people pause to think about Charles Darwin and the implication of his “dangerous idea” they often change their mind on some central and cherished convictions that have comforted and guided them through life. It can be jarring to suddenly realize that you are an Ethical Humanist, a philosophic naturalist. You can feel like you've lost something, that you've been robbed.

In case anyone here this morning should have such an experience, let me issue a disclaimer: Neither I nor the Ethical Humanist Society of Long Island is responsible for lost or stolen beliefs.

One hundred and ninety-eight years ago tomorrow, on February 12, 1809, two great men, two great emancipators, were born; Abraham Lincoln, emancipator of American slaves, and Charles Darwin, emancipator of human thought.

Today, we continue to struggle with both these liberations.

During this, Black History Month, we are reminded that while slavery itself is now a part of our nation's shameful past, human trafficking still continues in our world, and racial discrimination is still very much with us in America. Both are more subtle, perhaps, and certainly less covert, but nonetheless pernicious. Great strides were made by the civil rights movement, in which many Ethical Culturists were active, but even more remains to be done.

There are those who would argue that an insidious slavery still exists in our nation, rooted in a surreptitious discrimination that's less obvious to those who only look, but still palpable to those who feel its sting—a kind of racial bias woven almost imperceptibly into the fabric of our society.

¹ The reader is reminded that this is the written text of an oral address and remains in that style. While the speaker's presentation marks have been redacted, there has been no attempt to edit it into an essay.

There are those who would so argue—and I am one.

Perhaps if we all had a better understanding of the implications and ramifications of Charles Darwin's dangerous idea, and a greater acceptance of—and respect for—the open mind and scientific principles that led him to his germinal conclusions, we could more easily set aside inconsequential differences and embrace our general sameness while appreciating our individual uniqueness.

Perhaps we could even come to like each other!

And if that's possible, is a culture fueled by love all that unimaginable?

You know, it's relatively easy to love humanity. After all, we're each a part of it. But it can be challenging to love humanity one person at a time. So we set aside a special day each year to pay attention to love. And this coming Wednesday is the day we take to celebrate love with special events, special meals, flowers, chocolates, and other scrumptious treats—like the simple pleasure of being together with those we love.

February 14 is a day we set love free. The month of February is a month when we focus on the unfinished work of setting each other free. And today we are mindful that we also have to set science free.

Abraham Lincoln was elected to the presidency of the United States just a year after the publication of Darwin's *On The Origin of Species By Means Of Natural Selection*, generally shorthanded to *The Origin of Species*. Lincoln characterized the era as a time when the “dogmas of a quiet past are inadequate to a stormy present.”

Today, it is the dogmas of the past that are largely responsible for our stormy present. We are a divided culture that views the world in radically different ways. And it wasn't so very different in Darwin's day.

Natural science already had a pretty good head of steam by the time Darwin came along. The nineteenth century was one of advancement in many fields, and young Charles had a front row seat for much of it. His grandfather was a physiologist and an outspoken skeptic. His father a somewhat more reserved physician.

Darwin himself studied medicine for a time and was active in student societies for naturalists. He was keenly interested in botany, zoology, and the emerging field of biology. And he was well acquainted with the as yet unexplained theories of evolution by acquired characteristics.

He was also well aware of the virulent resistance elicited by any scientific hypothesis, theory, or fact that challenged traditional thought, or ecclesiastic knowledge, wisdom, or authority.

While over the preceding centuries an educated laity had sprung up in England and spread throughout Europe, Darwin was mindful of the fate of Galileo Galilei and his embrace and advancement of Copernican theory, which was promptly and stiflingly censored as nothing less than heresy.

The thought that the universe did not revolve around the earth was devastating to the culture of Galileo's day. Putting our lovely planet in its proper place robbed its inhabitants of one of their most cherished beliefs. By eliminating the cosmic notion of up and down, Galileo tossed the concept of heaven and hell right out the window. That was frightening to the people of the time, and terrifying to the authorities.

Galileo tried to separate science and the supernatural, but the religions of the day, whose authority depended on its exclusive stewardship of truth, were having none of it.

And Darwin's theory of evolution by natural selection, encompassing as it does the transmutation of species, promised to threaten a whole lot more than Galileo had.

I lifted the first part of my title this morning from philosopher Daniel Dennett's book by the same name, *Darwin's Dangerous Idea*. Dennett describes Darwinism, and here I quote, as "a universal acid; it eats through just about every traditional concept and leaves in its wake a revolutionized worldview." Thus his emancipation of human thought. Dennett identified Darwinism in philosophic terms as "a scheme for creating Design out of Chaos without the aid of Mind."

This reflects the statement in the third Humanist manifesto, *Humanism and Its Aspirations*, that "Humans are an integral part of nature, the result of unguided evolutionary change." Unguided, without the aid of mind.

Add this whole matter-before-mind approach to the transmutation of species, and you've done away with a divine creator of humans or of the universe. You've also created the makings of another centuries-long cultural battle.

Stuart Jordan, a senior staff scientist at NASA's Goddard Laboratory for Astronomy and Solar Physics recently cast that cultural battle as "A struggle between those who have accepted the naturalistic, humanistic implications of modern science and those who refuse to do so."

He went on to contend that we've been separated into those who accept, indeed welcome the revelations of science, and those who angrily deny them in defense of tradition and in protection of their religion's beliefs. Progress being what it is, those attitudes inevitably clash in dangerous ways.

Darwin challenged tradition in two ways. Accepting a scientific view of our origins means accepting that earth is much older than the biblical creation story says. And in positing that human beings came about through ordinary rather than divine means he also challenged the position of humanity as the favored creation of a supreme being.

The mysteries of the universe yield reluctantly to our understanding. Even more reluctant is the abandonment of supernatural explanations. In 1654, just a dozen years after Galileo's death, Archbishop James Ussher, Primate of All Ireland, proclaimed that, based on his scholarly study, the earth was less than six thousand years old, having been created in 4004 BCE. On October 23rd. At 9:00 am. Based on our calendar, it was a Sunday, the day of rest.

Science says it's more on the order of four and a half billion-with-a-B years old. That's quite a discrepancy, quite a leap. One of my favorite representations of the age of the universe is just up the street from the New York Society at the Hayden Planetarium. There you can walk the Cosmic Pathway and read of the milestones of our existence on large metal markers, one of which places the age of the universe at 13 billion years. No date or time is given for the Big Bang from which we arose, but the 13 is distinct as it's on a brighter colored metal plug that replaced whatever age had been there preciously.

Our knowledge of the age of the universe expanded so they simply drilled out the old idea and plugged in the new. It's not that easy with our culture.

Darwin's monistic view that we are a part of rather than apart from nature stood in stark contrast to the prevailing dualistic view of his day that said we were part natural and part supernatural—consisting of a transient physical body and a non-corporeal, eternal soul.

Now our world was not the center of the universe, the demarcation between a heaven above and hell below, but a pretty insignificant celestial body in a much older, much larger, and much grander universe than the imaginers of ancient creation stories could conjure.

Not only that, but we, it's humble inhabitants, were exposed as natural rather than divine—or even divinely inspired. No longer the image of a benevolent if stern creator, humanity was reduced to the soulless strata of animals.

Galileo deprived the world of heaven. But Darwin was even more threatening. He robbed us of any favored position—he took away our soul. That was more than a nineteenth century balance of belief could abide.

While the publication of Darwin's theory was the beginning of a battle still very much with us today, it was also the exclamation point to a religious upheaval that had been fermenting for at least a half a century. A religious upheaval that saw the founding of our own movement of Ethical Culture by Felix Adler in 1876.

In his book *The Religious Evolution of Felix Adler*, Benny Kraut characterized the times. "The combined force of natural science and the various disciplines had historicized religion and had sent the leaders of organized religion and religious people everywhere reeling."

Adler, himself schooled in a deeply religious tradition, rapidly came to regard the Testaments as historical documents written by men over a period of centuries rather than as divinely revealed accounts of eternally binding dogmas and creeds.

And he recognized natural science as one of the most serious threats to traditional religious belief. In 1882, just six years after founding our movement, he was quoted in the *New York Times*: "I believe that reflecting persons generally agree in attributing the decay of religious belief primarily to the influence of the natural sciences ..."

Of even greater significance was Adler's recognition of the logical extension of that conclusion, which questioned the very existence of religious "truth": could religions claim any "truth" whatsoever, and if so, what was the nature of this "truth"? For if religions were human in origin—a byproduct of our own imagination rather than divine inspiration—then perhaps God was but a human concept existing only in our own minds. And if that were the case, what "truths" could religion offer?

That logic is the chemical composition of Darwin's universal acid. And when considering this reconstructed religion of ours, that logic led Felix Adler to conclude with the quote in your bulletin that, "Whatever religion we adopt must be consistent with the truth with which we have been enriched at the hands of science." Ethical Culture was founded on that conviction and continues to function on it today.

We're all well acquainted with Charles Darwin's scientific impact. Good grief, just look at what he did for the field of biology, a field that itself received its greatest stimulus from one of our own, the English zoologist Thomas Huxley, who became known as "Darwin's Bulldog" for his fierce defense of his friend and colleague.

But Darwin's universal acid spilled over into our culture as well. Past the laboratory, he popularized the scientific method that was latched onto by a surprisingly broad spectrum that came to demand a nexus between cause and effect and was no longer satisfied with the supernatural interpretations offered up and accepted whole for centuries.

Try as they might to force them, and many still do, science and the supernatural do not intersect—they confront. Indeed, as Galileo and then Darwin demonstrated, it is the business of science to subsume the supernatural, rendering it, kicking and screaming, natural—pushing back the frontier of the natural to include what was previously considered supernatural—to rationally explain the irrationally accepted. That’s something science does relentlessly, rendering it—the entire scientific enterprise—subversive to supernatural religious belief, and the institutions that represent them.

In the history of human culture, Galileo and Darwin, stand as symbols of freedom’s battle against authority, just as Abraham Lincoln stands as a symbol of liberty’s struggle with tyranny. They advanced new ways of looking at old problems that gutted the ancient and cherished explanations upon which princes and prelates and plantationers based their empires.

That’s pretty heady stuff.

Earlier I mentioned Thomas Huxley, whose avid defense of Darwin’s science included a crushingly successful application of a scientific and rationalist worldview over that of a religious faith.

During a debate at Oxford in the summer of 1860—a debate sponsored by the British Association for the Advancement of Science—Archbishop Samuel Wilberforce—better known as *Soapy Sam* and no friend of evolution—asked Huxley whether he was descended from an ape on his grandmother’s side or his grandfather’s. Unruffled, Huxley pointedly responded, “I would rather be the offspring of two apes than be a man and afraid to face the truth.”

This of course grew into the proportion of legend, due in no small part to the daily press that rapidly reduced his remarks to “I’d rather be a baboon than a bishop.”

Darwin later weighed in and said, “For my part, I would rather be descended from a baboon as from a savage who mistreats his enemies, treats his wife like a slave, and is haunted by the grossest superstitions.” He had no great respect for the unbending positions of traditional religion and had become as outspoken about it as his grandfather.

The irascible Erasmus Darwin eloquently insisted that ignorance and credulity had long “misled and enslaved mankind,” while philosophy or experimental science, and here I quote, “has in all ages endeavoured to oppose their progress, and to loosen the shackles they had imposed: philosophers have on this account been called unbelievers, unbelievers of what? Of the fictions of fancy, of witchcraft, hobgoblins, apparitions, vampires, fairies; of the influence of the stars on human actions, miracles wrought by the bones of saints, the flights of ominous birds, the predictions from the bones of dying animals, expounders of dreams, fortune-tellers, animal magnetism, metallic tractors, with endless variety of folly? These they have disbelieved and despised, but have ever bowed their hoary heads to Truth and Nature.” Grandfather Erasmus died in 1802, seven years before his famous grandson’s birth, so maybe this thinking was in his genes—who knows?

Which brings us to another issue: I really can’t address this subject on this day without addressing the continuing struggle of creationism with evolution. This seems as good a point as any to do just that.

Adler adopted Darwin’s theory of natural selection as the operating mechanism of nature, and he enthusiastically endorsed the principle of scientific progress in the world. But others did not. Moreover, he accepted religion in general, and organized religion in

particular, as human creations, acknowledging that sociology and anthropology supersede theology as the basic categories of religious explanation. But others did not.

Those were open times on the one hand, welcoming of new and free thought. But defensive on the other, protective of traditional religious privilege. The threat from the latter was enough to keep Darwin from publishing his theories for over two decades, just as those same threats had constrained Galileo centuries before, and restrain scientists and liberal religionists from speaking out today.

Through it all, we continued to live in a culture that wanted to stand apart from nature—to be above it all—and we continue to live in that atmosphere today.

We live in a culture of creationism, creation science, and now intelligent design. In that regard, the Scopes trial in 1925 really stirred things up, and they haven't settled down much since. There have been periods of calm, but it's been more turmoil than tranquility.

Creationism is a religious concept, a theological explanation of existence, that views evolution with disdain. This disdain spread and has grown hostile toward science in general, and distrustful of progress of any sort. That the world doesn't work the way they maintain it does, and that the application of ancient ways are no longer affective in a modern world, is increasingly frustrating to those who cling to them for sustenance.

When first taking up residence in the classrooms of America, creationism was presented for what it is, a religious teaching, and was properly clad in clerical robes. And it was properly tossed out.

It went outside, grabbed a lab coat, and came back in as creation science. No one was fooled. "Creation" means not evolution, whether you try to wrap it in reason or not. You could see the clerical robes poking out beneath the lab coat creationism had donned, and again it was shown the door.

But religious activists are nothing if not persistent, so they took creationism, slapped a school uniform on it, and are trying to send it back into the classrooms of America as intelligent design. Intelligent design is nothing more than creationism dressed up to go to school.

Religions differ, but science, like music, is an international language that speaks to all people in very similar ways. While music is both intellectual and entertaining, science is our most reliable knowledge system, and it has been and continues to be acquired through human curiosity and ingenuity. Moreover, evolution via genetic variation and natural selection, as introduced by Darwin, has become the central organizing principle in biology. As the zoologist, Theodosius Dobzhansky, (1900-1975) said, "Nothing in biology makes sense without evolution."

Current research in the field of genetics, including that on the human genome, has conclusively shown that all humans are essentially identical and that we are genetically related to all other living things on this planet. Thus an enlightened view of genetics is one of unity and equality among all humans and also one that fosters a deeper sense of respect and appreciation for life.

Darwin's idea was dangerous to the defenders of tradition. And their reaction to it is even more dangerous to the progress of humanity, indeed to the peaceful and sustainable existence of humanity.

I'd like to end with one more example of the universal acid that Dennett spoke of, an illustration of just how wide reaching the science of Darwin's time has become, a

scientific illustration of one of Ethical Culture's organizing principles—the interrelatedness of humanity—and an example that, through science, brings us back to Black History Month.

A few years after the publication of *Origin of the Species*, a reclusive Austrian monk, Gregor Mendel, published his findings that eventually led to the field of modern genetics. Mendel's work went largely unnoticed for several decades before being discovered and confirmed by several European botanists at the end of the nineteenth century. Isn't it ironic that the father of modern genetics, a field that faces so much religious opposition today, was a man of the cloth?

Anyway, that led a century later to the Genographic Project, an ongoing joint venture of the National Geographic Society, IBM, and others. The Genographic Project is an effort, a successful one, to map humanity's journey through the ages—to understand the human journey of where we originated and how we came to live where we do today. While genealogy starts with the living and works backward in time, this study in deep ancestry starts at the beginning and works forward.

Through the collection and mapping of hundreds of thousands of DNA samples, the Genographic Project has traced our common ancestry to a single man from whom we are all descended.

There was an Adam. He lived some sixty thousand years ago, in Eastern Africa, near the Ugandan border in what is now Kenya.

We are all, all six and a half billion of us, conclusively of African decent—and proudly so.

It has been my experience that when people pause to think about Charles Darwin and the implication of his “dangerous idea” they often change their mind on some central and cherished convictions that have comforted and guided them through life. It can be jarring to suddenly realize that you are an Ethical Humanist, a philosophic naturalist. You can feel like you've lost something, that you've been robbed.

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A member of the American Ethical Union
and the International Humanist & Ethical Union

2 West 64th Street • New York, New York 10023
212.874.5210 • www.NYSEC.org