Happy Birthday Charlie! Rev. Kate Rohde February 8, 2009

February 12th marks the 200th birthday of two of the 19th century's pivotal figures, Abraham Lincoln and Charles Darwin. It says something interesting about Unitarian Universalists that more ministers are preaching on Darwin this week than on Lincoln. Although to be honest, if I had realized a couple of months ago that it was a dual birthday, I personally might have gone with Abe. He is a bit more like us in his outlook and I am more comfortable in his realm of public political theology than with a guy who spent such a tremendous part of life looking at sexual reproduction in barnacles. But after the fact, I am glad to have spent some time with Darwin.

One of the things that first struck me as I began my reading is how little I really had been taught about Darwin. I knew about his voyages in the Galapagos and South America and that he wrote the seminal work on evolution, and not a heck of a lot more (despite having gotten a better than average high school education in a moderately liberal state and having attended a first rate liberal arts college which had me reading Plato, Aristotle, Aeschylus, Euripides, Dickens, Locke, and literally hundreds of the great works of the Western world). Nowhere had I been asked to read <u>The Origin of Species</u> nor learned much about the history of science. We studied science as a topic, but nothing much about it as it relates to the history of ideas and how it relates to our changing view of the world. Ironically, we never studied the evolution of scientific thought, something that would be more useful to the layperson like me than was memorizing the periodic table.

Perhaps I am unique in this room, but I doubt it, so I will tell you a bit about what I learned. One of the most interesting things about Darwin is how reluctant he was to put forward his revolutionary theories. He made the great exploratory voyages, the voyages that got him thinking about the great questions he later tried to answer, when he was in his twenties. However, he didn't publish <u>The Origin of Species</u> until he was 50, and he only did so then because he was forced to do so or lose out to a rival. But I get ahead of myself.

I had always thought of Darwin as this adventurous young man sailing to foreign climes and having a sweeping brainstorm. Although there is some truth in that picture, his biographer paints a different, less exciting, more conflicted, more human, man. Darwin had somewhat unconventional relatives — freethinkers, Unitarians, eccentrics — but before his voyage he had been a rather ordinary sort of young gentleman, a divinity school graduate who had little interest in the church. He was a beetle collector with a passion for shooting. His father was quite concerned that he would become a feckless youth, a disgrace to his family and friends. Perhaps that was the push he needed. His voyage on the *Beagle* and the careful research and information on geology and zoology he collected on that five-year voyage not only transformed him into a true scientist and naturalist, but made a reputation for him back in England. He was well-regarded when he returned home, and, at 27, he had gone from callow youth to respected naturalist.

As a layperson, I found it interesting to try to understand the world of ideas within which Darwin was working. One of the most astonishing things to me was the fact that 19th century science didn't have what we would consider a basic understanding of genetics. Gregor Mendel, the monk who is sometimes called the father of genetics, did his work at about the same time as Darwin, but it was not work that was abroad in the scientific community until the beginning of the 20th century. Thus, Darwin and other naturalists of his era knew something about heritability, but had very little true knowledge of how it worked. Indeed, one of the things Darwin got wrong was his idea that acquired characteristics could be passed along to offspring. The lack of genetic knowledge makes the discovery that much more amazing.

I was also unaware of the degree to which naturalism and theology were bound up together in the early 19th century. It was not an unusual leap for Darwin to study theology and then decide to sail off and study the natural world. Evidently, studying nature and glorifying God were seen to be immensely compatible. Many a naturalist had theological training and aspirations while many clergymen were amateur naturalists. Indeed, Darwin's scientific mentor, J.S. Henslow was **the Reverend** J.S. Henslow. Darwin was not atypical in being an amateur. Science was not a profession in the way that the law, medicine, or the ministry was at that time. Science was not a way people generally earned a livelihood but was either done by people like Ben Franklin or Joseph Priestly, who made their living doing other things, or by gentlemen who had an independent income. Darwin's father made his son's scientific career possible.

Before Darwin, "species" were not believed to be linked in a single "family tree" but rather were unconnected, unrelated, and had not changed since their creation. Humans were not seen as an integral part of the natural world. As I read it, species were almost considered in a Platonic way. Apparently, people believed there was an ideal form of each species and that any variation was a variation from that "ideal" norm of the original creation. A perfect chicken created by God, say, with all future chickens only approximations of that chicken.

Evidently, Darwin had the basics of his idea of evolution when he was 28 and ideas about natural selection at 29. By 33, the ideas were fleshed out. There are all kinds of theories as to why it took him until he was 50 to publish. Most feel that he realized how startling his ideas would be. Some feel that he wanted to accumulate a lot more evidence and data before publishing. He did do a lot of scientific work in the interim in which he looked at many related things such as natural variability. He spent nearly a decade studying all kinds of barnacles, their variation, their relation, and their reproduction. He studied human selection in breeding plants and animals, with a special interest in pigeons. Others feel that he was worried about how he might be regarded as the originator of a theory that challenged cherished worldviews among religious friends and family. Still others think that building up his scientific reputation was important to him and that he thought that publishing controversial ideas at a young age might bring down the scientific establishment upon him.

What galvanized Darwin to publish is that another, younger scientist, Albert Wallace, living in Asia, sent Darwin a paper with Wallace's own, very similar theory of evolution and natural selection. Darwin saw the credit for the discovery on which he had labored and written for so long slipping away. So, with the help of friends, he arranged to present Wallace's paper and a paper of his own simultaneously. He then quickly worked up his revolutionary book, <u>The Origin of Species</u>, which set out the theory of evolution by natural selection and published it in 1859. It quickly sold out.

The theory was controversial among scientists and naturalists for many years. Many championed it immediately while others, including some who had been close to Darwin, rejected both the theory and its author. Many accepted aspects of it. The idea of "evolution" — that plants and animals changed over time and new forms arose — was more quickly acceptable than the idea of the mechanism of "natural selection" — the idea that the changes happened because certain random variations led to a higher rate of survival. Many people accepted both ideas but had some kind of asterisk when it came to human beings. Some people accepted the ideas but hypothesized that God had some kind of hand in directing evolution, especially in areas where fossil records couldn't fill in the gaps. The fact that the theories were based primarily on an inductive methodology, as any historical theories must be, rather than on experimental methods made it more difficult. Still, at his death in 1882, Darwin was given a state funeral, something rarely accorded British commoners, and he is buried in Westminster Abbey.

In reading about Darwin and his discovery of evolution and natural selection, I have thought some about how his ideas have provoked so much controversy, continuing for 150 years after they were first proposed. Few scientific discoveries have been so rejected by the general public long after having been accepted by science. We often think of the objections as being primarily about very literal religious views. But as I thought more about it, I realized that there are a great many things that might seem to be contradicted in the Bible but which are none the less generally accepted. There is a certain picking and choosing when it comes to what is lifted up to be literal about. What was particularly disturbing about evolution and natural selection? One disturbing thing was that evolution has much larger theological applications than, say, a prohibition on pork or various purity regulations. Natural selection, the part of the theory that seemed most to disturb people, posited a far more random and chaotic creation — one with neither higher intelligence directing it nor moral purpose animating it. Moreover, it dethroned human beings from our "special" place as lords of creation and placed us as one creature among many.

While moderate and liberal theologies evolved in response to Darwin, it was devastating to many who wanted to continue to see a Creator as designing every being and to see human beings as superior and apart. Indeed, so much was the desire for human superiority important that even today many who <u>believe</u> in evolution fail to see that the theory does not suggest that humanity is in some sense superior but suggests only that we have been genetically successful for a little while. Those who articulated evolutionary theory, while they may have understood that it had a huge impact on our

belief about ourselves, the meaning of our lives, and the relationship to the cosmos and one another, didn't really think as deeply as they might about the effects the theory might have beyond science itself and how they might frame the new thought. This had some devastating consequences, in my opinion.

Darwin's discoveries were quickly appropriated from the descriptive describing <u>how</u> the world works — to the prescriptive — how the world <u>should</u> work. In fact Darwin's own cousin, Sir Francis Galton, after hearing his cousin's ideas in person, was so excited by the ideas that he developed the beginning of what would become the "eugenics" movement. Galton assumed that the better people were at the top of British Society and were not producing enough offspring while the dregs were among the lower classes and producing too many. He advocated the "better people" should be given incentives to marry young and produce a lot of children. Thus, less than a decade after Darwin put forth his ideas they began to be perverted into advocating social policies favoring elites. Going forward in time, the eugenics movement got even more retrograde in advocating for shrinking certain racial and ethnic groups believed to be inferior, culminating in the terrible eugenics notions of the Nazis. Even today, my friends who raise money for Planned Parenthood tell me that many a wealthy donor is motivated more by wanting to make certain that groups they regard as inferior don't have many children, rather than by a concern for women and their well being.

Another social appropriation of Darwin was what became known as "Social Darwinism". Some of this was actually an appropriation of Malthus, the man whose ideas gave Darwin his inspiration for natural selection. The theories of Malthus about increasing population leading to famine and so on gave British politicians the idea that they should not help out the poor with any kind of social safety net because it would only lead to their increase. Social Darwinism is a description of a late 19th century laissez-faire capitalism that said that whoever did best and got the most was the fittest and that those at the bottom were undeserving of concern. Indeed, the "survival of the fittest" was used as a justification for a lack of social concern.

Some of this came together in the Scopes trial. As you probably know, the trial was initiated by the ACLU who was looking for a test case and Scopes probably wouldn't have even gone on trial if he hadn't wanted to test the law. Contrary to the fictitious depiction in "Inherit the Wind", the trial was far more complicated in terms of where we might put our sympathies. Liberal writer, Gary Wills (not to be confused with conservative columnist George Will), suggests that the trial was a very different matter than secular liberals believe.

Although William Jennings Bryan prosecuted Scopes for teaching evolution, Wills suggests that he was not strongly against the teaching of scientific evolution and had actually favored teaching it alongside his own ideas. Rather Bryan was strongly against Social Darwinism. According to Wills, Bryan was the most politically progressive man ever to run for the Presidency on a major party ticket. He was a feminist and strong supporter of suffrage long before it passed. He was anti-imperialist. He was anti-war. He was concerned about the poor. He was suspicious of the unchecked power of big business, and about monetary policy that hurt the common citizen. Bryan brought populism to the Democratic Party and revitalized it, preparing the way, historians feel, for Franklin Roosevelt. For most of his life, Bryan was a moderate in religion and made common cause with those in the Social Gospel movement who felt that Jesus' message of social justice and concern for the poor should be at the core of religion.

H.L. Mencken, the eastern journalist who made the Scopes trial a media event, had very different views. Mencken was known for his anti-black, anti-Semitic, misogynistic, elitist, pro-Nietzsche views, and his admiration for Prussian militarism and materialism. He later disdained the New Deal. He was a believer in Darwin. On natural selection, Mencken wrote: "There must be a complete surrender to the law of natural selection — that invariable natural law which ordains that the fit shall survive and the unfit shall parish. All growth must occur at the top. And that they may do so, they must waste no strength in trying to lift up the weak."

Mencken had great disdain for ordinary people and particularly for Southerners, although ironically, later in life he married a Jewish woman from the South. Bryan, on the other hand, wrote: "Progress comes from the moral support of the weaker. When reform comes in this country it comes from the masses. Reforms do not come from the brains of scholars." Thus, although liberal intellectuals failed to see it either then or later, a subtext of the Scopes trial for ordinary people was Social Darwinism. In their eyes it pitted the snobbish, elitist, and the powerful, against a respect for ordinary people and a concern for their welfare. Mencken vs. Bryan. Wills suggests that ordinary people were so put off by the nasty treatment of Bryan and the values he had represented by powerful outsiders from the East, that this has affected their views up to this day.

Certainly it increased opposition to evolution and created a suspicion of outsiders pushing it. It is something of an historical irony that one of the major spokespeople for evolution today has the same kind of nasty wit, elitist manner and disdain for ordinary people that Mencken had, which suggests that those interested in seeing wider public acceptance of the scientific truth of evolution have learned little from their PR mistakes in the Scopes trial nearly a century ago.

Of course, none of this was Darwin's fault. Darwin was not into eugenics. He urged a humanitarian concern for the poor, he was anti-slavery, and had a relatively democratic spirit for his time and social location. Nor, I think, is there essentially anything undemocratic, elitist, or threatening to a positive view of humanity inherent in his discovery. Like the teachings of great religious teachers have been perverted to justify terrible things, so Darwin's theories were "spun" to their detriment. And like religion has been rejected by some for the bad use made of it, so Darwin got a bad name from those who used his name and his theories to less than admirable ends.

Shelton Hendricks and I had an interesting conversation about Darwin and I asked him something about his views. I liked what he had to say and I hope I am quoting him correctly when I say that what he values about Darwin's views is partly aesthetic. Like many mathematicians and scientists, he admires the beauty, elegance, and simplicity of Darwin's scientific idea. Philosophically, he likes the democratic nature of the theory: Creation goes from the simple to the complex, from the bottom up rather than from an autocratic creator down. Perhaps if someone like Shelton had given William Jennings Bryan that kind of populist view of evolution, the Scopes trial might never have taken place! Whatever, the case, I liked his view.

As I did my own reading after our conversation, I found several other aspects of the theory that appealed to me from a theological, philosophical point of view. I hadn't realized how much Darwin's theory changed our view of our connection to the rest of life on the planet. Although people have seen his theory as establishing hierarchy, it does nothing of the kind. In my view, it's quite the opposite. It seems to me to be profoundly relational. It said for the first time that we are related to every other living being on the planet and that our well being and the well being of our offspring are dependent on and determined by everything else. Indeed, the Unitarian Universalist Seventh Principle's reference to "the interdependent web of existence of which we are a part" is essentially a Darwinian formulation. And although science takes no ethical stance on the importance of relationship, certainly it has long been a part of who we are to value more highly that with which we feel a relationship. And the more we learn scientifically, the more we are learning how very close relatives we are.

The other thing I read in Darwin, which many of the <u>social</u> theorists seem to have ignored, is that variety within a species allows for life to flourish more abundantly. That means that having all different kinds of people, or cats, or beetles, or whatever, contrary to what had previously been believed, is not only a good thing, but an essential thing. It is variation that allows us to evolve and adapt. Where previously it had been thought that creation was trying to meet a certain one perfect standard, Darwin's theory suggested that "what the best thing is" depends on the circumstances. So having great variety means a greater likelihood of surviving and flourishing. "Profound relationship" and the "value of diversity" are both scientific ideas from Darwin that can be seen as the basis of important theological ideals. That is what I have come to appreciate about Darwin.

So Happy Birthday Charlie! And may those who care about what you have taught, do better by you in the next hundred years.