

“A Great Unfolding”

Sermon by Rev. Dr. Jan Carlsson-Bull
Unitarian Universalist Church in Meriden
Evolution Sunday
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Why not “*The* Great Unfolding” as promised for the focus on this Evolution Sunday? I thought about it. “The” is too final, too locked in. The twists and turns of all that has been discovered since the days of Charles Darwin suggest multiple, perhaps infinite, variations on how evolution happens and raises the question of how many “great unfoldings” there have been amid the stream of life over time. “A Great Unfolding” leaves the door ajar, a more prudent stance for science and religion, the two channels of understanding that call us to ask and wonder on this Sunday when we join the company of hundreds of other congregations in honoring the life and legacy of Charles Darwin, which surely includes faithfulness to the unsealed nature of revelation through which we seek to peel back the layers of nature itself.

For any who dare to peel back even a layer or two, curiosity is a prerequisite. Courage is a mandate. Resistance to apparent truths that rock the boat of scientific or religious comfort is inevitable. Imagination helps. “What if?” asks she or he who dares to explore, study, and reveal whatever interim truths are discovered.

Such a person was Charles Darwin. What a remarkable life and legacy we inherit. While his theories of natural selection and sexual selection—the two theories for which he is most noted—were not original with Darwin, choice and circumstance and a highly inquisitive mind conspired toward Charles Darwin writing and publishing 19 books, each a facet of his kaleidoscopic powers of observation and reflection. In every dimension of his life, Darwin heeded those invitations greeting each of us at birth: “Open your eyes! Open your mind! Open your heart!” and the questions accompanying each: “What do you see? What do you think? What do you feel?”

Born on February 12, 2009 in Shrewsbury, England to Dr. Robert Waring Darwin and Susannah Wedgwood Darwin, Charles was a middle child. His older brother, Erasmus, was named for their paternal grandfather, a physician and naturalist who preceded Charles in writing on the likelihood of natural selection as an explanation for the variability of creatures over time. Charles had three older sisters—Marianne, Caroline, and Susan—and a younger sister, Catharine. Altogether there were six children in this household parented by Robert and Susannah. Their maternal grandfather was Josiah Wedgwood, renowned for his pottery. Dr. Robert Waring Darwin was a physician, well loved by his family and neighbors and patients. Susannah was known for her gentle and compassionate nature.

At the outset of what Charles Darwin refers to as a “sketch of my life,” begun in May, 1876, at the age of 67, he recounts his earliest memory, “when I was a few months over four years old, when we went to near Abergele for sea-bathing, and I recollect some events and places there with some little distinctness.”

Ah yes, the beach as an early image, with its wealth of buried treasures, its invitation to inhale air unlike anywhere else, its playground of shifting sand and vexing waves, its beckoning horizon. The beach was my personal choice for plumbing the pages of *The Origin of Species*, Darwin's *magnum opus*. What better place for such a read than where I could breathe in the salty scent inhaled by creatures billions of years ago, where I could dive into the waves and imagine that I hadn't yet lost the gills of my sea-siblings—ancestors all. But I'm diverting you from the flow of Darwin's young life.

Barely eight years old, Charles was sent off to day school in Shrewsbury. Just a few months later, his mother, Susannah, would succumb to what was most likely tuberculosis, the disease that took so many lives on both sides of the Atlantic during this time. Curiously enough, he admits, his memory of his mother focused on the concrete—what she wore on her deathbed, the table where she had worked. Even as the young Darwin grieved the loss of his mother, his attention to detail is notable.

By this time, he recounts, "My taste for natural history, and more especially for collecting, was well developed. I tried to make out the names of plants, and collected all sorts of things, shells, seals, franks, coins, and minerals." Darwin also admits to a reputation for mischief, albeit mischief with conscience, since the incident I recount troubled him greatly afterwards.

"I told another little boy (I believe it was Leighton, who afterwards became a well-known lichenologist and botanist), that I could produce variously coloured polyantheses and primroses by watering them with certain coloured fluids, which of course was a monstrous fable, and had never been tried by me."

The young boy became the young student became the young man. He briefly entertained the idea of becoming a physician. He even played with the idea of becoming a clergyman. Darwin studied at Edinburgh and then at Cambridge. His was a mind that could have sauntered off in any of number of directions; but while at Cambridge, he sought the acquaintance of John Stevens Henslow, a professor passionate in his regard for the sciences. Young Charles was drawn to Henslow's capacity to form "conclusions from long-continued minute observations." Henslow served as mentor and muse, and it was he who alerted Charles to the opportunity to set sail aboard the HMS *Beagle* as a cabin-mate to Captain Robert Fitz-Roy. Darwin was invited aboard as the *Beagle*'s resident naturalist. I can almost hear his response—a rousing high-decibel "Yes!"

The HMS *Beagle* set sail on the 27th of December 1831 for a round-the-world voyage that would last five years.

"The voyage of the *Beagle*," wrote Darwin decades later, "has been by far the most important event in my life, and has determined my whole career...I have always felt that I owe to the voyage the first real training or education of my mind; I was led to attend closely to several branches of natural history, and thus my powers of observation were improved, though they were always fairly developed."

Darwin observed; he collected; he documented; he thought; he reflected; he wondered. His gaze fell on creatures of the sea and sky and land never imagined by him. His attention was drawn magnet like to sea shells found inland and coral reefs and atolls whose origins he theorized with inspiration from his Grandfather Erasmus, who had boldly declared “Everything from shells.” (Milner, 19) Off the coast of Chile in 1835 he witnessed a volcanic eruption and related it to the work of geologist Charles Lyell, who had theorized that with sufficient time, natural forces at play in the present explain the formation of such geological phenomena. (Milner, 20)

It was in the Keeling Islands in the Indian Ocean, where they arrived in the spring of 1836, that Darwin actually observed the coral reefs and atolls and formulated his theory of their formation over millennia atop sinking volcanoes. A few months later, the HMS Beagle docked in England. Laden with specimens and documentation and journals, Darwin’s primary sources were in hand. Soon after, he met with Lyell, who shared the excitement over Darwin’s theory of reef formation, though it varied from his own. Regarding the prospect of public credibility, Lyell’s words to Darwin, penned in a letter to his friend, rang as prophetic as they did enthusiastic:

“I could think of nothing for days after your lesson on coral reefs, but of the tops of submerged continents. It is all true, but do not flatter yourself that you will be believed, till you are growing bald, like me, with hard work & vexation at the incredulity in the world.” (Milner, 21)

Charles Darwin began to distill his theory of natural selection as a mechanism for evolution, that is, the adaptation of living things over time, as early as 1838, just six years after returning to England. It was a theory supported by relentless observation, diligent study, meticulous documentation, and open thinking:

“Let it be born in mind how infinitely complex and close-fitting are the mutual relations of all organic beings to each other and to their physical conditions of life,” he would write. “Can it, then, be thought improbable, seeing that variations useful to man have undoubtedly occurred, that other variations useful in some way to each being in the great and complex battle of life, should sometimes occur in the course of thousands of generations? If such do occur, can we doubt (remembering that many more individuals are born than can possibly survive) that individuals have any advantage, however slight, over others, would have the best chance of surviving and of procreating their kin? On the other hand, we may feel sure that any variation in the least degree injurious would be rigidly destroyed. This preservation of favourable variations and the rejection of injurious variations, I call Natural Selection.” (*Origin of Species*, 74-75)

Twenty years would pass before he *The Origin* would see print. It wasn’t that he didn’t publish. Eight of his 19 published works were issued before the 1859 publication of *The Origin*. Darwin was anxious over how it would be received.

He had just become familiar with the ideas of Thomas Malthus, who posed the dilemma of human procreation outpacing the food supply, with starvation as the solution. While Malthus's ideas were understandably unpopular, Darwin respected the dilemma that he was addressing, as indicated in his own reflections years later:

“...being well prepared to appreciate the struggle for existence which everywhere goes on from long-continued observation of the habits of animals and plants, it at once struck me that under these circumstances favourable variations would tend to be preserved and unfavourable ones to be destroyed. The result of this would be the formation of new species. Here, then, I had at last got a theory by which to work; but I was so anxious to avoid prejudice, that I determined not for some time to write even the briefest sketch of it.” (*Autobiography*, 48)

And so he did not, though his developing theory remained not quite on the back burner of his attention. He would write and publish on related topics, before occasion rose for the deep breath that told him it was time to make public his theory of natural selection. Weighing the pros and cons of what to say and when, he applied a similar methodology to his decision to marry.

Emma Wedgwood was his cousin; and surely not enough was known, even by Darwin, about the possible consequences of marrying one's cousin, to pose a deterrent. The deterrents were recorded in Darwin's vacillation about marrying at all. He made a pro and con list, with reasons for and reasons against. Among the “cons” were: “freedom to go where one liked—choice of Society & *little of it*... to have the expense & anxiety of children.” On the “pro” side he listed: “Children...—Constant companion, (& friend in old age)” and most likely, tongue in cheek, “better than a dog anyhow.” It's unlikely that Emma ever saw the list, but if so, Charles had some explaining to do or he would find that it was not quite a lowly canine who belonged in a doghouse.

In the many letters the couple exchanged, Charles poured forth his hopes and confidence that he harbored a theory about where we all came from and how, along with doubts with regard to a divine force behind creation. Emma was forthright in declaring how painful it would be to her if he held to his theory and certainly if he made it public, and a plaintive opinion that it would prevent their being together in eternity. As a staunch Unitarian, Emma held to her belief in God the Creator and the promise of an afterlife. It seems that the claim of the 16th century Unitarian martyr from Transylvania, Francis David, had made its way to England: “We don't need to think alike to love alike.”

Emma and Charles married in January 1839. Residing for a few years in London, Darwin completed books on his voyage aboard the *Beagle* and his theory of the formation of coral reefs. The first two of their ten children were born there, including his beloved daughter, Annie. In 1842, the young family moved to the country into what would be their home for many years, “Down.” Emma gave birth to eight more children, though two died in infancy. By all accounts, Emma and Charles adored each other, and they adored their children. Emma was warm and gracious; Charles was playful and indulged his children's mischief making in the spirit of his own early pranks.

Charles Darwin was a husband and father full of heart, and his heart was broken when Annie became ill, very ill, in April of 1851. On April 23 they lost ten-year-old Annie. Darwin poured his grief onto the page:

“We have lost the joy of the household, and the solace of our old age. She must have known how we loved her. Oh, that she could now know how deeply, how tenderly, we do still and shall ever love her dear joyous face! Blessings on her!” (*Autobiography*, 102)

A theory of natural selection in no way undermines love or affection or conscience or gratitude or grief or wonder. If we are alive to life, if we deeply behold and reflect on what we witness, and if we bring to bear “a free and responsible search for truth and meaning,” we *will* collide with convention, we *will* unwrap the gifts of truth—hard truth and luminous truth, we *will* take to heart and mind what our sense of reason and soul reveal, and we *will continue* to search and to question.

The celebrated conflict between a theory of natural selection driving evolution and a belief in Creation’s design and sustenance by a divine force that many call God need not be. Evolutionary biologist Francisco Ayala is well grounded in science and theology and posits Darwin’s epochal contributions as a gift to science and religion. The age-old question of how a loving benevolent God can allow suffering in the world is a chronic itch. While theologians have sought to explain human generated suffering as sin, what about earthquakes and tsunamis? Ayala’s introduction to evolution was in Catholic grammar school in mid-20th century Spain. Evolution was taught as a given.

“The theory of evolution,” he writes, “provided the solution to the remaining component of the problem of evil. As floods and drought were a necessary consequence of the fabric of the physical world, predators and parasites, dysfunctions and diseases were a consequence of the evolution of life. They were *not* a result of deficient or malevolent design: the features of organisms were not *designed* by the Creator.”

When Ayala came to the United States, the creationist movement shocked him. He has served as an expert witness in federal courts on the matter of “creation science” being taught in the public schools. In brief, his contention is that “creation science” is bad science, bad theology, and counter to the US Constitution.

It was in my early years of theological study that I became acquainted with the work of the early 20th century French philosopher, paleontologist, and Jesuit priest Teilhard de Chardin. His voice resounded posthumously, for as a Jesuit priest he was banned by the ecclesiastical powers for teaching and publishing. His legacy echoes in his *Hymn to the Universe*:

“Blessed be you, mighty matter, irresistible march of evolution, reality ever new-born;

You who, by constantly shattering our mental categories, force us to go ever further and further in our pursuit of the truth.

Blessed be you, universal matter, unmeasurable time, boundless ether, triple abyss of stars and atoms and generations;

You who by overflowing and dissolving our narrow stands of measurement reveal to us the dimensions of God.”

Charles Darwin was not subject to the censorship suffered by de Chardin and so many others, but recall his anxiety over public opinion that significantly delayed the publication of his pivotal work. While the very name Darwin still triggers fear and animosity in many whose notion of the sacred is conditional, others have challenged the theory of natural selection not via religious assertions but through the discipline of molecular biology.

As recently as the March 2014 issue of *Discover*—and March 2014 isn’t even here yet—molecular evolutionary biologist Mastoshi Nei claims that Darwin couldn’t prove natural selection as the driving force behind evolution, because it isn’t.

“If you say evolution occurs by natural selection, it looks scientific compared with saying God created everything. ... If it’s science, you have to explain every step... Just a replacement of God with natural selection doesn’t change very much. You have to explain how.”

And he proceeds to do so...which I hope leaves you wondering. If so, know that you inherit the spirit of Charles Darwin and Teilhard de Chardin and the prophetic curiosity of women and men of all ages who have dared to step aboard their own HMS Beagle and set forth into the farthest stretches of this great unfolding. Bon voyage and Amen.

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