

What Does It Mean that We Are Sapiens?
Reflections on Darwin Day
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Today is Charles Darwin's birthday. He was born a little more than two hundred years ago on February 12, 1809. (Interestingly, Abraham Lincoln also has the same birthday and birth year.) In recent years, Darwin's birthday has become known as International Darwin Day, an annual opportunity to celebrate the principles of "perpetual curiosity, scientific thinking, and hunger for truth" that guided his life. A tragedy of the ongoing "Creationism vs. Evolution" debate is that coming to terms with Darwin's theories of evolution, natural selection, and common descent were among the greatest intellectual challenges of the late nineteenth and early twentieth century. But we live in the early twenty-first century, long past the point at which Evolution became settled science.

As Unitarian Universalists, our forebears included some of the earliest religious leaders to embrace the paradigm-shifting implications of Darwin's findings: that we humans are not a little lower than the angels, but rather "a little higher than the apes" with whom we share a common ancestor. We now know that at the DNA level there is only a 1.23 percent difference between humans and chimpanzees. We humans are not a uniquely special creation. Rather, we are *Homo sapiens sapiens* — a subspecies within the larger Animal Kingdom. As our UU Seventh Principle affirms, we are deeply interconnected with the other forms of life on this Earth and called to practice "Respect for the interdependent web of all existence of which we are a part."

This year the approach of Darwin Day inspired me to finally get around to reading the bestselling book <u>Sapiens: A Brief History Humankind</u> published in 2015 by Yuval Harari, a professor of world history. And I would like to invite us to reflect on what it means to accept our place in the universe as merely one species among many — as well as the consequences that follow when we deny our place in the grand scheme of things.

Consider this paragraph from the beginning of *Sapiens*:

On a hike in East Africa 2 million years ago, you might well have encountered a familiar cast of characters: anxious mothers cuddling their babies and clutches of carefree children playing in the mud; temperamental youths chafing against the dictates of society and weary elders who just wanted to be left in peace; chest-thumping machos trying to impress the local beauty and wise old matriarchs who had already seen it all. These archaic humans loved, played, formed close friendships and competed for status and power — but so did chimpanzees, baboons, and elephants. There was nothing special about humans. Nobody, least of all humans themselves had any inkling that their descendants would one day walk on the moon, split the atom, fathom the genetic code and write history books. The most important thing to know about prehistoric humans is that they were insignificant animals with no more impact on their environment than gorillas, fireflies, or jellyfish. (4)

A mere 150,000 years ago, there were only about one *million* humans alive on planet earth. Today the world population of humans is more than 7.3 billion, with an overall growth rate of more than one new human being added to the total each second! And far from the negligible impact our one million ancestors had on this planet, since the nineteenth-century Industrial Revolution, human-created climate change from the high-impact lifestyles of the increasing numbers of us is hurtling us toward a potential sixth mass extinction here on Earth (13).

Today we *Homo sapiens sapiens* are massively dominant on this planet, but that is a relatively recent development in the 4.5 billion year old history of Earth. Many of you can likely recall seeing t-shirts (or similar cartoon depictions of evolution) with a line moving from left to right of an ape, then an ape standing upright, then a caveman, then a more evolved caveman,

progressing all the way up to a modern human. But that episodic, linear progression is misleading. The word human means "an animal belong to the genus *Homo*." And "humans first evolved in East Africa about 2.5 million years ago from an earlier genus of apes called *Australopithecus*. And from about 2 million years ago until around 10,000 years ago, at least six different humans species lived together at the same time — just as today there are many different species of cats, dogs, bears, and other animals" (5-8). Evolution is messy and complicated — just like life!

We humans used to be in the middle of the food chain: we hunted and ate smaller creatures — and larger creatures sometimes hunted and ate us! However, through major innovations like the domestication of fire and the increasingly sophisticated communication potential of human language, we jumped to the top of the food chain with shocking speed — especially from the slow-moving perspective of evolution. Harari writes:

Other animals at the top of the pyramid, such as lions and sharks, evolved into that position very gradually, over millions of years. This enabled the ecosystem to develop checks and balances that prevented lions and sharks from wreaking too much havoc. As lions became deadlier, so gazelles evolved to run faster, hyenas to cooperate better, and rhinoceroses to be more bad tempered. In contrast, humankind ascended to the top so quickly that the ecosystem was not given

time to adjust. Moreover, [we] humans failed to adjust. Most top predators of the planet are majestic creatures. Millions of years of dominion have filled them with self-confidence. [We] by contrast are more like a banana republic dictator. Having so recently been one of the underdogs of the savannah, we are full of fear and anxieties over our position, which makes us doubly cruel and dangerous. (11-12)

Becoming more aware of this dynamic can at least give us some hope. As the saying goes, "The first step is admitting you have a problem!"

Now, there is a lot more to say about the history and implications of our species's evolution. But in reflecting on the implications of what it means to be *Sapiens*, I would like us to consider not only genes, but also what are sometimes called memes. A **gene** is a region of DNA that is passed down biologically from parent to offspring. From a certain perspective, the more of

your DNA that survives, the more you can be seen as winning at the game of evolution. In contrast to a biological gene, a **meme** (from the Greek word $\mu i \mu \eta \mu \alpha$, which also gives us the words mimic or mime) is an element of culture that is passed down not through biological genetics, but through social imitation (120).

To give an example of the difference of genes and memes, consider the bee hives that are in the corner of our property here at UUCF. If you look closely at those bee hives, you will see complex social structures; but what you see is instinctual, genetic behavior. "Bees don't need lawyers, because there is no danger that they might forget or violate the hive constitution. The queen does not cheat the cleaner bees of their food, and they never go on strike demanding higher wages" (120). In contrast, for us humans, **many of our laws and customs (at their best)** are precisely to shape us in ways counter to what our natural, genetic selfish instincts might be. (There are also ways that our customs and laws sometimes uphold war, corruption, and division in ways that run counter to some of our natural *unselfish* instincts toward compassion, connection, and empathy.) And here's a crucial point about memes versus genes: "A conscious effort has to be made to sustain laws, customs, procedures and manners, otherwise the social order would quickly collapse" (120).

Whereas genes are inherently and biologically within us, memes are "artificial instincts" that must be taught through culture (163). Consider, for example, the second sentence of the Declaration of Independence, written by our Unitarian forbear Thomas Jefferson: "We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty and the pursuit of Happiness." Jefferson writes about these truths as "natural" laws — inherent, almost "genetic" and built into the order of things. But an evolutionary biologist might invite us to consider that if we were to be honest about what an actual "genetic" perspective tells us, Jefferson's soaring prose might have to be rewritten as: "We hold these truths to be self-evident, that all [humans] evolved differently, that they are born with certain mutable characteristics, and that among these are life and the pursuit of pleasure" (110).

Similarly, our UU First Principle is "The inherent worth and dignity of every person." A major influence on that choice was the 1948 United Nations's "<u>Universal Declaration of Human</u>

Rights." The very first line of its preamble recognizes that, "the inherent dignity and the equal and inalienable rights of all members of the human family is the foundation of freedom, justice and peace in the world...." Likewise, following the preamble, the very first sentence of Article I says, "All human beings are born free and equal in dignity and rights." I find it to be profound, powerful, and hopeful to be part of a religious movement that has explicitly chosen to weave into our First Principle the starting point of the Universal Declaration of Human Rights. But a Darwinian perspective invites us to be honest that this claim is more a *meme* than a gene — which is a reminder of how precious and precarious some of our deepest values are (110-111). There are many vital aspects of our culture that we must not take for granted. If we don't defend them, they can be lost.

As the saying goes, "History may not exactly repeat itself, but it does often rhyme." So are there lessons from the history of our species *Sapiens* than can help us predict what the future might hold?

One lesson from history is that there have been five previous mass extinctions on this planet, so there are many reasons to take seriously that the threat of human-created climate change could cause a sixth mass extinction on Earth. Harari writes that some people call climate change "the destruction of nature," but from his perspective of seeking to take the longview,

it's not really destruction; it's change. Nature cannot be destroyed. Sixty-five million years ago, an asteroid wiped out the dinosaurs, but in so doing opened the way forward for mammals. Today, humankind is driving many species into extinction and might even annihilate itself. But other organisms are doing quite well. Rats and cockroaches, for example are in their heyday. These tenacious creatures would probably creep out from beneath the smoking rubble of a nuclear Armageddon, ready and able to spread their DNA. Perhaps 65 million years from now, intelligent rats will look back gratefully on the decimation wrought by humankind, just as we today can thank that dinosaur-busting asteroid. (350-351)

Now, is that really going to happen? The truth is that the past few months have been a reminder that no one really knows what's going to happen tomorrow much less 65 million years from now.

Yuval Harari, author of *Sapiens*, has his guesses. And I saw recently that he has a sequel due to be published in about a week titled *Homo Deus: A Brief History of Tomorrow*. That title picks up on the final line of *Sapiens*. In reference to how powerful our species has become, Harari concludes with a haunting question: "Is there anything more dangerous than dissatisfied and irresponsible gods who don't know what they want" (416)?

I'll be interested to read Harari's more extended reflections. But I will say for now that there are many ways in which I remain hopeful. The spirit of resistance and resilience in recent days has shown that many of us do know what we want. For many of us, one articulation of what we want is found in our <u>UU Seven Principles</u>:

- 1. In the face of bullying and divisiveness, we support "the inherent worth and dignity of every person";
- 2. In the face of selfishness, cruelty, and greed, we support "justice, equity and compassion in human relations";
- 3. In the face of religious fundamentalism and orthodox dogma, we support "acceptance of one another and encouragement to spiritual growth";
- 4. In the face of anti-intellectualism, propaganda, and fake news, we support "a free and responsible search for truth and meaning";
- 5. In the face of authoritarianism and the undermining of constitutional norms, we support "The right of conscience and the use of the democratic process."
- 6. In the face of isolationism and tribalism, we support "The goal of world community with peace, liberty, and justice" not only for some, but for all.
- 7. In the face of a destructive individualism, we support "respect for the interdependent web of all existence of which we are a part."

We have always had a steady stream of visitors here at UUCF, but we have seen a significant influx of new people in recent weeks. In today's world, **our UU values of freedom, reason, and pluralism are more needed than ever.** We offer a sanctuary to nurture your spirit when the latest news feels too heavy to bear. Our beloved community is a reminder that you are not alone. Together we can more boldly and effectively act for peace and justice.

I began this morning with a reminder that today is Darwin's birthday, an annual opportunity to celebrate the principles of "perpetual curiosity, scientific thinking, and hunger for truth" that guided his life. From certain angles it can feel bleak to reflect on the implications of what it means that we humans are merely a sub-species called *Sapiens*. But Darwin himself would invite us to reframe that view. So on this International Darwin Day, I will conclude with the final paragraph of Darwin's 1859 book *On the Origin of Species*:

from the war of nature, from famine and death, the most exalted object which we are capable of conceiving...the production of the higher animals, directly follows. **There is grandeur in this view of life...**; and 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. (170)