



UNITARIAN UNIVERSALIST

CONGREGATION OF FREDERICK
Spirituality · Community · Justice

**Meditation, Neuroscience, Psychedelics:
Who Am I? Who Are You? Who Are We?**

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7 June 2020

frederickuu.org

This morning's sermon draws on our UU Fifth Source of "Humanist teachings which counsel us to heed the guidance of reason and the results of science...." As I was reflecting this past week on our fifth source in light of the #BlackLivesMatter movement, I was reminded of an experience that I haven't thought about in a long time.

Growing up in South Carolina, the first time I can remember really engaging with Black History Month was in middle school. Not coincidentally, that was the same year I had my first African-American teacher. It was 8th grade Earth Science, and every weekday that February various ones of us were assigned to make presentations about different black scientists. I remember some of my classmates voicing racist objections to those Black History Month assignments, but we learned a lot, and I still remember some of those lessons decades later.

Along these lines, I invite you to view a short video of the astrophysicist Neil deGrasse Tyson: [youtube.com/watch?v=z7ihNLEDiuM](https://www.youtube.com/watch?v=z7ihNLEDiuM). One of the many things I love about this video is the reminder that whatever your fields of interest or spheres of influence, there are opportunities to dismantle racism and advocate for building a diverse, multicultural beloved community with equitable opportunities for all.

I. Consciousness

In the spirit of that burning curiosity that fueled Dr. Neil deGrasse Tyson to overcome all the obstacles in his way to pursue his passion for science, I want to invite us to spend some time reflecting on some of the basic questions at the foundation of scientific inquiry that we heard sung in our opening hymn: “Where do we come from? What are we? Where are we going?” I’m particularly interested in that middle question, “What are we?” Even better, we might say, **Who am I? Who are you? Who are we?** Those three questions may seem simple, but if you keep asking them and looking closely, you’ll find they can take you down quite a rabbit hole.

As our guide, I’ll be drawing from the book Conscious: A Brief Guide to the Fundamental Mystery of the Mind by Annaka Harris (Harper, 2019). She’s a bestselling science writer, who also happens to be married to Sam Harris, neuroscientist and bestselling author, whose books some of you may know. (There are some things I really love about Sam Harris’s work and other aspects I strongly disagree with, but that would be another sermon in itself.)

For now, I will say that similar to the curiosity about the universe that led Neil deGrasse Tyson to become an astrophysicist, curiosity about *consciousness* itself is the driving motivation behind Annaka Harris’s book. And it really is quite strange that billions of years of evolution resulted in *consciousness*—in self-awareness, in sentience (3).

We humans are made of the same elemental particles as the stars, as is everything in the universe (6). But the remarkable truth, as one eco-theologian has put it, is that we humans are **“stardust now evolved to the place that the stardust can think about itself! ...We are the universe becoming conscious of itself. We are stardust that has begun to contemplate the stars”** (H 92).

That truth is mind-blowing enough on its own that we could fruitfully stop there and ponder a long while. But Harris challenges us to press on, zoom out, and ask the further question of *what else* in the universe is conscious in addition to humanity. What else has self-awareness and sentience?

- Are our common household pets, *dogs* and *cats*, conscious? Most of us would say, clearly yes, even if our pets have less sentience than we humans do.

- What about *plants* and *trees*? Are they conscious? That’s a harder call, but those of you around for my sermon a little more than a year ago on The Hidden Life of Trees (or if you’ve read the incredible book by that same title) know that there is a growing amount of scientific evidence of sentience in plants—even if, again, less consciousness than in animals. (And if we take Darwin’s idea of the “descent of man” seriously—as we should—doesn’t it make sense that if we are conscious that some of those beings we evolved from would also have some forms of sentience?)
- But what happens if we zoom out even further? What about *bacteria* or a *rock*? Are they conscious?

The further down the tree of life we go, the more difficult it is to find evidence of sentience; but, as Harris writes, **“At some point along the spectrum the answer is yes, and the great mystery lies in why the ‘lights turn on’ for some collections of matter in the universe”** (Harris 5-6).

And for we humans with our advanced consciousness—who are self-reflexively *aware* of our awareness—what have we discovered about sentience in ourselves and others? Well, here’s where it’s helpful that Annaka Harris is married to a neuroscientist, who has also been quite open about experimenting with psychedelics. Let’s start with neuroscience, then move on to psychedelics.

II. Neuroscience

One of the most interesting and challenging discoveries scientists have found through brain scans is that we humans become conscious of events “slightly *after* they have occurred” (25). Let me say more about that. Whenever something happens in the world around you, sense data comes in through your five senses, traveling different distances through your nervous system to your brain at which point “the signals get synchronized through a process called ‘binding’—and only then do they enter your conscious experience (26).

Take, for instance, the example of kicking a soccer ball. At slightly different speeds your brain receives impulses about the:

- sensations from your foot *touching* the ball (that has to travel a relatively long distance from your foot, up the nerves in your leg, and further up through your spinal cord to your brain.
- the popping *sound* of your foot hitting the ball likewise creates sound waves that travel to your ear that then send information to your brain
- your *visual* tracking of the action has a comparatively short distance to travel from your eye to your brain
- there may also be saliva or other *tastes* in your mouth, various *smells* coming in through your nose, or any number of other data.

Your brain collects all those separate pieces of sense data, synchronizes them together, and only then does that that *edited* version enter your consciousness.

Neuroscience invites us to wrestle with the strange truth that we live slightly “in the past”: the brain knows *before* the conscious mind does (26). Our conscious self is only aware of the edited version of what the brain produces. Indeed, multiple brain scan experiments have shown that, **“Researchers can reliably detect the brain activity signaling impending movements [such as the decision to move a finger] about *half a second before* subjects feel they make the conscious decision to move (26-27).**

You might be thinking, what?! That’s some wild stuff with serious implications that are not yet fully understood about the interplay between *our body and our brain* on the one hand and *our mind, our sentience, and our consciousness* on the other. After all, **what does it mean if “another person watching a scan of your brain can know what you’re going to do before you do.”**

If you are interested in learning more there’s a good short introductory chapter in Annaka Harris’s book Conscious. Or you could go straight to a full book-length treatment such as Michael Gazzaniga’s The Consciousness Instinct.

All of this takes us back to those deceptively simple questions with which we began: Who are *you* anyway?! What am *I*? Who are *we* (27)?

Most of us, certainly including myself, often live with this sense of our “self” as floating separately from our bodies and periodically telling our bodies what to do (29).

But neuroscience challenges us to consider that the sense of our conscious will “inhabiting” our head is an illusion akin to thinking that the earth is stationary with the sun rotating around us (30). From our everyday perspective the earth does appear to be still and the sun does appear to rise over us in the East and set in the West.

Despite this illusion, science has shown us that the Earth is actually moving constantly, both rotating on its own axis and revolving around the sun. Or take our current COVID-19 pandemic: to our ancestors such plagues may have seemed like magic or a curse, but science has shown us the bizarre truth that a microscopic virus—invisible to the naked eye—is able to slow our civilization down almost to a halt (1). Reality is weird, ya’ll.

Back to neuroscience, although it may feel like our conscious mind is floating outside our brain and controlling our body, science challenges us that the directionality may be exactly the opposite. For instance, I suspect each of us can think of examples in which you have witnessed *intoxication* (drugs or alcohol), *disease* (such as Alzheimers), or traumatic *injury* impact someone’s brain—or your own brain—such that you or they seemed no longer their ‘self.’ (30, 53). But what does that really mean? The more you pay attention over time, the clearer it is that there is no one persistent ‘self’ for anyone.

III. Meditation

And here we can begin to trace a fascinating intersection between modern neuroscience, psychedelic experiences, and ancient Buddhist meditation practices. On the one hand, some of the neuroscience I’ve been sharing with you can feel disturbing to our sense of self—and rightly so. On the other hand, anyone who has spent a fair amount of time hanging out in the meditation circles may find a lot of those discoveries standard fare: it’s twenty-first century technology like EEGs (electroencephalograms) confirming what meditators have been telling us for millennia: our sense of self is an *delusion*. Don’t get me wrong: it’s a useful delusion, but a delusion nonetheless—not unlike the illusion that the sun is rotating around the Earth, when the reality is something quite different (52).

In the Buddhist tradition, the teaching of “non-self” is one of the three most important insights—often called the “Three Marks of Existence.” One classic metaphor for non-self is a braided rope. This metaphor perhaps helpfully clarifies that it’s less that the braided rope (our sense of self) doesn’t exist; rather, both the rope (and our sense of self) can be *unbraided* into their component parts and/or *rebraided* (through drugs, disease, injury, trauma, aging, other experiences, etc.) into different selves. And this is where we need to bring back in all that stuff we learned earlier about how our brains synchronize and bind all the desperate data from our five senses together *before* passing that edited information to our brains.

A lot of what meditation is about (especially what’s called *vipassanā* or insight mediation) is a simple practice of *noting* all the separate sensations that make up our moment-to-moment experience. And when scientists do brain scans of meditators who have spent many hours doing such practices, they find that when experienced meditators practice meditation, a part of their brains called the default mode network (that contributes to our sense of self) is suppressed. And that’s a very interesting neuroscience correlate to “awakening” or “enlightenment” experiences in which one’s sense of self drops away completely.

IV. Psychedelics

Here’s where the burgeoning field of psychedelic research comes in. Just as longterm meditation can suppress your brain’s default mode network, brain scans of people taking psychedelics show a disruption in a particular circuit in the brain’s default mode network, which causes people under the influence of psychedelics to lose their sense of self (49). Common experiences from using psychedelics include “floating and finding inner peace, distortions in time, and a conviction that the self is disintegrating....”

And don’t miss this particularly important insight: **when people on psychedelics report that their sense of self drops away, “consciousness remains fully present”** (49). Let me say that again: for people on psychedelics: when the sense of *self drops off*, *consciousness* remains fully present. Keep that in mind in conjunction with the neuroscience we consider earlier that “Researchers can reliably detect the brain

activity signaling impending movements [such as the decision to move a finger] about half a second before subjects feels they make the conscious decision to move. Then ask yourself: Who am *I*? Who are *you*? Who are *we*?

If you are interested in learning more, I highly recommend Michael Pollan's excellent book How to Change Your Mind: What the New Science of Psychedelics Teaches Us About Consciousness, Dying, Addiction, Depression, and Transcendence, which *The New York Times* named one of the "10 Best Books of 2018."

At this point, I should state clearly that I am not recommending that anyone break the law; but there is increasingly strong scientific evidence that the laws should be changed to allow for responsible, therapeutic use of psychedelics.

It is also crucial to add that with psychedelics—as well as with meditation—not only can the sense of self drop away, but also a felt, sense can arise of what our UU 7th Principle calls "the interdependent web of all existence of which we are a part" (50-51).

Conclusion: Who Am *I*? Who Are *You*? Who Are *We*?

And here's where we come full circle to that video of the African American astrophysicist Neil deGrasse Tyson advocating to *tear down* all the barriers blocking human beings from doing what they love—and build up systems of collective flourishing in which we are all *free* to pursue what we are passionate about.

Along these lines, one of my favorite terms for what it means to live out of a felt sense of our UU 7th Principle is *ubuntu*, which comes from the Zulu tradition of Southern Africa. I learned it from Desmond Tutu, who was inspired by *ubuntu* to create the South African Truth and Reconciliation Commission. *Ubuntu* has been translated variously as: "I am because we are," "humanity toward others," or "a universal bond of sharing that connects all humanity."

Both spirituality and science invite us to know the deep and profound truth that we are not isolated selves, even if we feel that way sometimes. We are deeply interconnected with one another and with the many other sentient beings on this planet who are at various points on the spectrum of consciousness.

From this perspective, for instance, we can notice that the recent headlines about SpaceX unduly centered our place on this planet. When the news proclaims that the SpaceX crew launched into space to dock at the International Space Station—sure, that’s true in a sense. But it’s also true that we were all already floating in space, and have all *always* been floating in space upon this blue marble we call the Earth. That’s the deeper, more significant truth of the cosmic situation in which we find ourselves.

Just as astronauts learn to slip “the surly bonds of earth,” may we humans get better at learning to slip the surly bonds of *ego* that hold us back from one another. May we *transcend* the historically contingent social constructions of ethnicity and tribe. May we live into a felt sense of global interdependence as we float together on this beautiful and fragile planet. And may we open ourselves more fully, not to “I think there I am,” but to the deeper truth that “**I am because we are.**”

That’s who *I* am. That’s who *you* are. That’s who *we* are. Realizing the truth of our *interdependence* can liberate us to build the world we dream about: a world of peace, liberty, and justice—not merely for some—but for *all*.

May all sentient beings be filled with loving kindness.

May all sentient beings be peaceful and at ease.

May all sentient beings live with an open heart.

May all sentient beings be liberated and free.