

13.7: Cosmos And Culture

The Science Of Unbelievable Things

1:14 pm

December 28, 2009



"Unbelievable" things happen every day. (Peter Macdiarmid / Getty Images)

By KC Cole

For all the talk about science and belief, I often feel one critical perspective is missing -- one that distorts much of the discourse about science in the public eye: What does it mean to say that something is "unbelievable"? Or must be taken "on faith"?

It's complicated. I, for one, do not "believe" (not really) that there are people on the other side of the Earth for whom my "up" is their "down" and vice versa. I may know the Earth is a sphere, but at some level I don't believe it -- any more than I believe that my 800-thousand pound 747 is really going to lift off the runway and FLY! Come on! (It does help to know that a modest-sized cloud can weigh about as much).

Do I believe I evolved from a whole line of bizarro ancestors, many still around, many long extinct, the most ancient single-celled organisms? Not really. It IS unbelievable -- in that, the Intelligent Design argument is correct. For me, at least, watching a flower grow from a seed is always a bit unbelievable, as is watching a baby come into the world -- or a puppy for that matter -- or contemplating the first flickerings of light from a newborn star.

I could go on. Curved space time? Give me a break. All the matter and energy in the universe (not to mention space and time) bursting into being 13.7 billion years ago from some primordial nothing? Don't make me laugh.

So why do I consider all of the above to be true -- most of it beyond dispute. Because, of course, of the overwhelming evidence. I do have enough "faith," if you will, in the ways of science that I trust it. People who don't understand how science works don't always share this faith, so they have a reason to doubt the fantastical tales we tell. WE know that ideas/facts/concepts become "true" in science only when they have been thoroughly explored, come through countless trials and ruthless criticism and continue to be tested ... forever. Faith in science is faith in a process of questioning.

That's the main difference between science and religion in my view. Science is a running argument, and faith in it means having respect for the uncanny power it has to ferret out so many unbelievable things that are, nevertheless, true. Faith in religion more often means not arguing ... taking things, well, on "faith."

I am a person of no faith in some ways, but I am continually awed equally by the flowers in my garden and the insects that eat them -- even though at the same time I find it hard to "believe" that such things can exist. Nevermind love, Bach and chocolate souffle. I am perhaps even more awed that the 3 pounds of slime we have in our heads has been able to come up with tools (science, including its theories, its mathematics, its wondrous "eyes" and "ears") to help us understand why and how all of this came to be.

Religion is more compelling than science, some argue, because it allows people to be simply awed. Also: because it has better stories.

Nonsense. There's no better story than the evolution and existence of life and the universe. And anyone who isn't awed by it is missing the greatest show on Earth.

About 13.7: Cosmos And Culture

Welcome to 13.7, a blog set at the intersection of science and culture. Our goal is to engage in a discussion with each other -- and you -- about how science has shaped culture and how culture has shaped science. Want to know more?