Ultimacy

BY URSULA GOODENOUGH

Editor's note: Ursula Goodenough, Epic board member and professor of biology at Washington University in St. Louis, provided the morning chapel reflections at last summer's annual conference of the Institute on Religion in an Age of Science. Ursula's reflections throughout that week derived in part from her 1998 book, The Sacred Depths of Nature (Oxford University Press). There she eloquently draws out of her scientific understanding the passionate aesthetic and sense of the sacred inherent in her version of "religious naturalism." On the sixth and final day of the IRAS gathering, Ursula spoke on the theme of ultimacy. Here are

extracts from that talk, adapted for this publication.

Belden Lane is a Christian theologian at St. Louis University (a Jesuit institution), and he preaches sometimes at my Presbyterian church. His brilliant sermons are redolent with passion and meaning and a deep belief in God and the divinity of Christ. When he asked to read my book on religious naturalism, and then to have breakfast so we could talk about it, I was pretty nervous. How could my efforts at personal theology offer enough common ground for constructive conversation with this man's overpowering faith?

But Belden arrived jubilant, the margins of the manuscript filled with scribbles and exclamation points. For two hours we worked through the science—"Do I understand it right that a gene is such and such? Tell me more about neurons! Can you explain again what bricolage means?" It was all fantastic, but what was especially fantastic was what else was going on. Every time he'd really get something, see the world in a whole new way, he'd throw back his head with a huge smile and say something like "Isn't it astonishing what God has done?"



And I'd say "Isn't it astonishing?" As we became aware of this interplay, we also became deeply excited about its meaning. In the end, the God part was added on to our shared experience of wonder. Belden could add it, I couldn't, and it didn't matter to either of us, didn't matter that that part was different. The point was that we were rejoicing in the story in exactly the same way.

Of all the spiritual reflections that I offer in my book, the paragraphs that conclude the first chapter seemed to me least likely to work for Belden. In fact, however, those were paragraphs that he particularly liked. (So much for my understanding of theists!) Throughout the book I use the reflections sections to move beyond the science into personal meaning. In this first reflection, I begin with a story:



I've had a lot of trouble with the universe. It began soon after I was told about it in physics class. I was perhaps 20, and I went on a camping trip where I found myself in a sleeping bag looking up into the crisp Colorado night. Before I could look

around for Orion and the Big Dipper, I was overwhelmed with terror. The panic became so acute that I had to roll over and bury my face in my pillow.

- All the stars that I see are part of but one galaxy.
- There are some one hundred billion galaxies in the universe, with perhaps a hundred billion stars in each one, occupying magnitudes of space that I cannot begin to imagine.
- Each star is dying, exploding, accreting, exploding again, splitting atoms and fusing nuclei under enormous temperatures and pressures.
- Our Sun too will die, frying the Earth to a crisp during its heat-death, spewing its bits and

pieces out into the frigid nothingness of curved spacetime.

The night sky was ruined. I would never be able to look at it again. I wept into my pillow, the long slow tears of adolescent despair. And when I later encountered the famous quote from physicist Steven Weinberg—"The more the universe seems comprehensible, the more it seems pointless"—I wallowed in its poignant nihilism. A bleak emptiness overtook me whenever I thought about what was really going on out there in the cosmos or deep within the atom. So I did my best not to think about such things.

But since then, I have found a way to defeat the nihilism that lurks in the infinite and the infinitesimal. I have come to understand that I can deflect the apparent pointlessness of it all by realizing that I don't have to seek a point. In any of it. Instead, I can see it as the locus of Mystery: the Mystery of why there is anything at all, rather than nothing; the Mystery of where the laws of physics came from; the Mystery of why the universe seems so strange.

Mystery. Inherently pointless, inherently shrouded in its own absence of category. The clouds passing across the face of the

deity in the stained-glass images of Heaven.

The word God is often used to name this mystery. A concept known as Deism proposes that God created the universe, orchestrating the Big Bang so as to author its laws, and then stepped back and allowed things to pursue their own course. For me, Deism doesn't work because I find in the end that I can only think of a creator in human terms, and the concept of a human-like creator of muons and neutrinos has no meaning for me. But more profoundly, Deism spoils my Covenant with Mystery. To assign attributes to Mystery is to disenchant it, to take away its luminance.

I think of the ancients ascribing thunder and lightning to godly feuds, and I smile. The need for explanation pulsates in us all. Early humans, bursting with questions about Nature but with limited understanding of its dynamics, explained things in terms of supernatural persons and person-animals who delivered the droughts and floods and plagues, took the dead, and punished or forgave the wicked. Explanations taking the form of unseen persons were our only option when persons were the only thing we felt we understood. Now, with our understanding of Nature arguably better than our understanding of persons, Nature can take its place as a strange but wondrous given.

The realization that I needn't have answers to the Big Questions, needn't seek answers to the Big Questions, has served as an epiphany. I lie on my back under the stars and the unseen galaxies and I let their enormity wash over me. I assimilate the vastness of the distances, the impermanence, the fact of it all. I go all the way out and then I go all the way down, to the fact of photons without mass and gauge bosons that become massless at high temperatures. I take in the abstractions about forces and symmetries and they caress me, like Gregorian chants, the meaning of the words not mattering because the words are so haunting.

Mystery generates wonder, and wonder generates awe. The gasp can terrify or the gasp can emancipate. As I allow myself to experience cosmic and quantum Mystery, I join the saints and the visionaries in their experience of what they called the Divine, and then I wander back 26 centuries to embrace Lao Tzu and the first chapter of the Tao Te Ching:

The Tao that can be told is not the eternal Tao.

The name that can be named is not the eternal name.

The nameless is the beginning of beaven and earth.

The named is the mother of ten thousand things.

Ever desireless, one can see the mystery.

Ever desiring, one sees the manifestations.

These two spring from the same

source but differ in name; this appears as darkness.

Darkness within darkness. The gate to all mystery.

When we encounter ultimacy we become mute, we put down our paint-brushes and our telescopes and gasp. And then we take up our telescopes and our paintbrushes and continue, with prayers of thanksgiving for the gift of being able to do so.

The gift of being.



Let me close with an allegory.

Imagine that you and some other humans are in a spaceship, roaming around in the universe, looking for a home. You land on a planet that proves to be ideal in every way. It has deep forests and fleshy fruits and surging oceans and gentle rains and cavorting creatures and dappled sunlight and rich soil. Everything is perfect for human habitation, and everything is astonishingly beautiful.

This is how the religious naturalist thinks of our human advent on Earth. We arrived but a moment ago, and found it to be perfect for us in every way. And then we came to understand that it is perfect because we arose from it and are a part of it.

Hosannah! Right here, right now, this.

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