SCIENTIFIC AGNOSTICISM

When flailing about for a meaningful topic for my ever-looming presentation to the fellowship, I happened upon a review of a book intriguingly titled "When God is Gone, Everything is Holy: The Making of a Religious Naturalist", in an issue of UU World. After reading the review and a few others, I knew that I had found my topic!

So, armed with my newly-purchased, very accessible, user-friendly book, and a case full of flag-type post-it notes, I set to work. My strategy was to mark a few particularly-meaningful passages as I read, that I would later easily compile into an overview of the book. Oh, how naïve I was. This is where that flagging strategy led me. Either I'm not selective enough or this guy is really profound.

I found so many passages that I wanted to remember when writing an overview of the book, and I wanted to do Dr. Raymo's message justice.

Dr. Raymo's message struck a chord with me on several levels. We each approached spirituality after being imprinted in the Catholic religious tradition, moving away from traditional beliefs toward more science-based perspectives. I recognized his name immediately, as the author of an astronomy book that I used as a reference when I taught an after-school nature journaling class for elementary school students. For me, just a quick glance into the night sky has long instilled a sense of wonder and an appreciation for the fact that my world is vaster than my imagination and that I am a small part of a universe or universes beyond my understanding. There has never really been fear in that acknowledgement of my ignorance, but rather a sense of reverence, amazement, and a desire to learn more, no matter how tiny my dent in the knowable. Talk about shock and awe! A camping trip one summer with my brother, our families, and a telescope in the Badlands of South Dakota made an indelible impression as we viewed planets, their moons, nebulae, and another galaxy.

Admittedly, for me, this wonder at the universe has been a small part of how I spend my days. By contrast, Raymo has spent his entire career observing,

contemplating, researching, teaching, and writing about these concepts. And his life's work has much to contribute to both the worlds of science and spirituality.

In the book, Raymo quotes heavily from the collective wisdom of philosophers, scientists from many disciplines, poets, and priests, including among others, Lao Tzu, Charles Darwin, Pierre Teilhard de Chardin, and E. O. Wilson.

This book tracks his journey over half a century from faith-based Catholicism to "scientific agnosticism", which he also refers to as "religious naturalism". Though he (curiously) considers himself a Catholic, he admits that it is because he is from that academic tradition and by the accident of birth, and it is not Catholicism as the church presently defines itself.

He grew up in the Bible-thumping south, where signs posted on telephone poles warned of being prepared for the day of reckoning. But his parents read books and loved ideas, his Dominican nun teachers taught him to value the life of the mind, and his studies at the University of Notre Dame gave him an education in science that made no reference to religion. "In science", Raymo says, "I was introduced to a way of knowing that transcends accidents of birth".

Now in his 70's, Raymo states that he is "cautiously willing to use the G-word for the mystery I find there, and unembarrassed to use the word "prayer" for attending with reverence to what I see". Though he admires atheistic biologist Richard Dawkins, he disagrees with Dawkins's belief that it is a sham for an agnostic to use the language of traditional religion. This brought to mind an alternate-Sunday discussion earlier in the year, in which Verleen mentioned that she felt sheepish or disingenuous in using the words "God" and "prayer" when talking with people from more traditional belief systems. Raymo would tell Verleen that she should not surrender the venerable and evocative language of praise to traditional theists.

His credo is this: "I am an atheist, if by God one means a transcendent person who acts willfully within the creation. I am an agnostic in that I believe our knowledge of "what is" is partial and tentative—a tiny flickering flame in the overwhelming shadows of our ignorance. I am pantheistic in that I believe

empirical knowledge of the sensate world is the surest revelation of whatever is worth being called Divine. I am Catholic by accident of birth."

I was talking with my daughter Aisha a couple of weeks ago (ah, the wonders of science that brought us Skype), about a recent conversation that she had with a friend. He told her that he was an atheist, and asked about her beliefs. She told him that she believed in God, and that she had been raised as a Unitarian. His response was, "Unitarians drive me crazy; they know that they're really atheists, but they're too cowardly to admit it." I propose that perhaps atheists are too cowardly to admit that they don't really know.

Raymo states that the three little words "I don't know" may be science's most important contribution to human civilization. He uses Charles Darwin as an example of a scientist who admitted what he didn't know. Though Darwin's contemporaries were quick to attribute features of the natural world to the work of a supernatural Creator (with a big "C")... no mystery...God did it...Darwin had this to say regarding the mystery of existence "... I feel most deeply that the whole subject is too profound for the human intellect. A dog might as well speculate on the mind of Newton. Let each man hope and believe what he can."

The physicist Heinz Pagels wrote that when, centuries ago, people abandoned the search for absolute truth, and began to ask how things worked, modern science was born. Physician/essayist Lewis Thomas wrote that "The greatest of all the accomplishments of 20th century science has been the discovery of human ignorance." Raymo believes that the essence of wisdom is born of ignorance, in the willingness to say "I don't know". As long as answers to questions about the natural world invoked gods or supernatural agents, no reliable public knowledge was possible. Recognition of ignorance is a prerequisite of scientific discovery.

The book even introduces the origin of the term "agnosticism", coined by Thomas Henry Huxley in 1869. When Huxley began to ask himself whether he was atheist, theist, pantheist, materialist, Christian, or free-thinker, he realized that he was more free-thinker than anything. People in the other groups all had something in

common—that they had attained a "gnosis" or knowledge of hidden mysteries, a sense that they had solved the problem of existence, while he was sure that he had not. It came to him "as suggestively antithetic to the "Gnostic of Church history, who professed to know so much about the very things of which I was ignorant." In another source, I read that Huxley said that he originally used the term at a dinner party—clearly, I'm not going to the right parties.

Raymo writes that science is the attempt by skeptical and curious people to gain consensus knowledge of the world, minimizing cultural biases of religion, politics, ethnicity and gender and allowing nature to have its say.

Throughout the book, Raymo makes reference to a sculpture depicting the goddess Isis "Nature Unveiling Herself to Science" by Louis Barrias, while quoting the ancient Greek philosopher Heraclitus..."Nature loves to hide." Poets and pundits throughout time have warned of the dangers of lifting the veil.

Knowledge comes with responsibility...eating the fruit of the Tree of Knowledge in the Garden of Eden, opening Pandora's box, developing the theory of relativity, unraveling the secrets of DNA..."will what we find make us the equal of the gods, or will our hubris bring us low?"

Raymo discusses the writings of Indian philosopher Meera Nanda, who "champions the universality of science as a remedy for cultural fragmentation". She proposes that, considering the prevalence of religious and ethnic hatred around the world today, an empirical, secular way of knowing that makes no reference to gods or accidents of birth is a gift beyond price. The preference of cultural authenticity over scientific objectivity plays into the hands of religious and cultural nationals who sow seeds of violent reaction, whether Christian dominionism in the US, Hindu nationalism in India, or Islamic jihadism.

Raymo frequently mentions the accident of birth, that no child is born a believer of a particular religion; we are all indoctrinated into a faith. He discusses the dangers of righteousness, which comes from presuming knowledge when no reliable way of knowing exists. Righteousness forcibly imposes on others what we think they want or need. Righteous flies airplanes into buildings, publicly burns a Koran, and avenges the latter act with murders of innocent people halfway

around the world. Raymo proposes that we can rid ourselves of ancient superstitions and tribal gods and still cultivate a sense of the sacred—when we are content to admit that we do not know what lies beneath nature's veil, everything in creation becomes an object of reverence and respect. He believes that "the evolutionary story of creation is a satisfying ground for spirituality."

Raymo writes that the itch for God is universal, and wonders if the longing for divinity is nothing more than "an electrochemical firestorm in our neurons". In the course of our history, we have invented tens of thousands of religions, many of which are considered "divinely-revealed True Faith" by their adherents. Atheism is an anomaly, yet even the word "atheism" has God lurking within it.

The psychologist William James set out nearly a century ago to account for the universality of faith. He believed that psychological experiences rather than particular tenets or practices were the essence of religion. Underlying the particulars of the various faiths were shared "states of consciousness". He concluded that we sense there is something wrong about things as they stand and we are saved from that wrongness by making transcendent connection with higher powers. However, he was unable to conclude whether these universal states of consciousness were innate or culturally transmitted. This question of whether certain human behaviors are influenced more by nature or nurture has long been asked.

In October, in her talk titled "Why Do We Believe?", Janelle had addressed the idea of whether this "itch for God" was hard-wired into our genes. Raymo also discusses the work of some of the same scientists that Janelle had mentioned, among them, geneticist Dean Hamer. Hamer believes that he has confirmed what James suspected—though the beliefs and practices of religion are learned, a tendency towards religious belief is in our genes. In his book, "The God Gene: How Faith is Hardwired into our Genes", Hamer chronicles his quest to discover why humans believe. Hamer has identified a gene that correlates with a personality trait named self-transcendence, as measured on a standard test called the "Temperament and Character Inventory". Hamer randomly selected a thousand subjects, administered the test to them, and then sequenced DNA

samples from them, looking at nine genes known to code for chemicals involved in brain activity...and Voila! He found a common C variant of gene VMAT2 among study subjects. Raymo points out that it is not "the" God gene but "a" God gene that Hamer has identified. Self-transcendent people may not necessarily believe in God. Self-transcendence does appear, however, to be a universal trait—showing no significance related to race, ethnicity, or age. It does appear related to gender, with women scoring significantly higher than men. Raymo believes that Hamer's work is too slim a thread to support the assertion that faith in God is hardwired into our genes. "But", he writes, "ropes are made of twisted threads, and where Hamer has led others will follow."

I believe that I may have found evidence that faith is peculiarly human. While working on writing this presentation, I misspelled many words. Almost always "spell-check" caught and corrected my slipups. Not so with the word "faith". My computer just didn't recognize faith.

Raymo does not embrace what he calls the "militant slash-and-burn atheism" of Richard Dawkins's *The God Delusion* or Sam Harris's *The End of Faith*. He believes that they "throw out the bath water with the baby". Raymo's "bathwater" is "the mind-stretching, jaw-dropping, in-your-face wonder of the universe". His "baby" is a personal God, in our own image, with the human attributes of justice, love, will, etc. Ancient people invested everything in nature with personhood—stars, rocks, trees. To the scientific agnostic, a personal deity who acts willfully in the world is the ultimate idolatry. So, Dr. Raymo urges us to toss the "baby", but keep the "bathwater"—the "beautiful and terrible mystery that soaks creation as water soaks a rag," and that is "diminished by any name that we give it". He acknowledges that the term "agnostic" does not do justice to the celebratory aspect of his view, and also notices that his use of the term "creation" hints at an anthropomorphic creator.

He is not averse to being called religious. His "response to the natural world is one of reverence and humility in the face of a mystery that transcends empirical knowing—now, certainly, and perhaps forever." He believes that "the smallest insect is more worthy of our astonishment than a thousand choirs of angels. The

buzzing business of a single cell is more infused with eternity than any disembodied soul." He is appreciative that we no longer feel the raw terror that our ancestors may have felt when they witnessed a meteor shower. He appreciates their grandeur and beauty, as well as the power of the human mind to grasp the laws that nature loves to hide.

Of religion, Raymo writes that any religion worthy of mankind's future should have these characteristics:

It must be ecumenical, not imaging itself truer than any other religions.

It must be ecological, considering the planet and all its creatures.

It will embrace the scientific story of the world as the most reliable cosmology, not necessarily as truth with a capital "T", but truer than the ancient stories that currently give shape to the world's religions. It will see divinity in the wonder of creation, not in miracles or the supernatural.

He envisions a religion that espouses "a love for the world as we empirically find it, and a sense that everything in it is holy."

I'll close with these words, directly from Chet Raymo, author, professor of astronomy and physics, and scientific agnostic:

"Let it only be said that the world is shot through with a mystery that manifests itself no less in what is revealed by science—the universe of the galaxies and the eons, the eternally weaving DNA, the electrochemical flickering that is consciousness—than in the creations of novelists, poets, visual artists and musicians. So we stumble forward, trying to avoid the dogmas of blind faith or scientism. We try to make ourselves worthy of a universe of which we are an infinitesimal part. We will not all agree on what worthiness consists of. For the religious naturalist, it is a mix of cautious skepticism and celebration."