COSMOS

A sermon by Galen Guengerich Senior Minister, All Souls NYC April 14, 2024

I've always been mesmerized by the night sky. Especially on a dark night in a dark part of the world, my contemplation of the cosmos leaves me feeling awe and humility— feelings that lie at the heart of experiences we call religious. At its best, our contemplation of the cosmos beckons us toward an experience I describe as divine. A stunning photograph of the Andromeda Galaxy has pride of place on the wall in my study here at All Souls — to remind me continually of this elemental reality.

Most of the stars we can see at night with the naked eye are part of our home galaxy, a commonplace constellation of stars and planets in a nondescript part of the universe we call the Milky Way. Even so, the Milky Way Galaxy is vast beyond comprehension, home to several hundred billion stars and at least that many planets.

Beyond our home galaxy lies the rest of our cosmic neighborhood, which astronomers call the Virgo Supercluster. It's scattered across more than one hundred million light years of space and contains nearly 30,000 galaxies and more than 500 trillion stars. There are eighty such superclusters within a billion light years of Earth. This accounts for one-quarter of one percent of the universe.

What lies among and between these galaxies may be even more amazing. In Pulitzer Prize-winning science writer Natalie Angier's book titled *The Canon*, which is about what she calls "The Beautiful Basics of Science," she writes, "In between astronomical objects is lots and lots of space, silky, sullen, inky-dinky space, plenty of nothing, nulls within voids. Just as the dominion of the very small, the interior of the atom, is composed almost entirely of empty space, so, too, is the kingdom of the heavens. Nature, it seems, adores a vacuum."

Here's one way to visualize her point. If an atom were the size of this sanctuary, its nucleus would be the size of a grain of rice located here in the center, and its electrons, vastly smaller than the nucleus, would be whizzing around up on the roof or down in Reidy Friendship Hall. To illustrate the same point in a different way, if you removed all the empty space from all the atoms in all the human beings on the planet, you could fit the entire human race into the space of one sugar cube.

The universe is similarly empty. If our solar system were sized to fit into this sanctuary, the earth would be a grain of sand, as the poet William Blake once put it, and the sun would be the size of an orange. On that scale, you wouldn't reach the next stars – the Alpha Centauri triple star system – until somewhere just west of Omaha, or the star after that until the foothills of the Rockies. In between lies empty space – and that's in a populated part of the universe.

Our universe is unimaginably vast and contains an almost-indescribable infinity of stars and galaxies, yet it's filled almost completely by an inconceivable emptiness. It's a wonder that we're here at all, much less living, breathing, and worrying about what's for brunch. It's a wonder.

Once in a while, the cosmos manages to break through our earth-bound narcissism and remind us that we are part of a vastly greater whole. The solar eclipse on Sunday was one of those times — even for those of us who don't live within the path of totality. Everyone who saw the eclipse or some portion of it seemed instinctively to know that something extraordinary was happening.

Eleven-year-old Sebastian Pelletier from Houlton, Maine tried to do justice to his experience by putting an extraordinary monetary value on it. He declared, "I would pay a million dollars to see that again." The good news for Sebastian is that it needn't cost him a million dollars to see another eclipse. He just needs to wait until he's 31 years old — or wait two years and buy a plane ticket to Iceland.

Others chose to mark the occasion by making an extraordinary commitment. More than two hundred couples in Russellville, Arkansas chose, as the event planners put it according to the New York Times, to "Elope at the Eclipse." As the eclipse approached totality, the couples exchanged vows, saying: "I promise to cherish you like this rarest of events, treasuring each moment as if it were a fleeting or shooting star. The galaxies of our dreams, hand in hand, heart to heart, until the end of time. For in my world, you are my sun, my moon and all my stars."

As someone who has officiated at more weddings than I can count, I rank these vows as among the best for their imagination and aspiration. Besides, the vows get to the heart of how we map the world of our experience.

Just as a solar eclipse occurs when a certain relationship develops among the Earth, the moon, and the sun, so our lives develop by establishing relationships with the people and world around us. Cosmic relationships are governed by the internal qualities of each celestial object, its distance from other objects around it, and the gravity that transcends the emptiness between.

In a similar way, our identity as individuals is relational as well. The essence of a person is the relationship among the various internal elements that make us up as individuals in space and the connections that develop between us and the people and world around us over time. Like the cosmos, we are constituted by relationships.

In the celebrated American poet Walt Whitman's sprawling poem "Song of the Open Road," Whitman depicts life as a journey. His focus isn't a destination we may or may not eventually reach, but rather the relationships that develop along the way — what we see and feel, whom we meet, and what we discover. The poem includes these lines, which are often used as a reading in wedding ceremonies:

Afoot and lighthearted, take to the open road, Healthy, free, the world before you, The long brown path before you, leading wherever you choose. Say only to one another: Camerado, I give you my hand! I give you my love, more precious than money; I give you myself before preaching or law: Will you give me yourself?

The goal of this shared journey, according to Whitman, is to learn what he calls "the profound lesson of reception." Whitman explores this lesson further in his poem "Song of Myself," which is perhaps his best-known poem. I find myself returning to it often, because it captures precisely and poetically the character of life on planet Earth. Its opening stanzas include these lines:

> For every atom belonging to me as good belongs to you. My tongue, every atom of my blood, form'd from this soil, this air, Born here of parents born here from parents the same, and their parents the same, I, now thirty-seven years old in perfect health begin, Hoping to cease not till death.

Whitman begins this song of himself by saying that he is made of atoms, which were thought in his day to be the most fundamental units of matter. Certain atoms had been drawn from the soil and the air by previous generations of human beings, who had structured them in a distinctive way to yield the self of whom Walt now sings. These atoms are part of the story, but they are not the whole story.

"Song of Myself" is a poem of 1,346 lines, and Whitman refers to himself by name only once, when he refers to himself as "Walt Whitman, a cosmos." The opposite of chaos, a cosmos is an orderly, harmonious self-inclusive system — hence the reference to the entire universe as an orderly, harmonious whole.

This reference to himself as a cosmos explains Whitman's statement that "every atom belonging to me as good belongs to you." Whitman's central insight is that the self exists in a system where everyone is who they are by virtue of their relationships to everyone and everything else. Whitman writes:

> And these tend inward to me, and I tend outward to them, And such as it is to be of these more or less I am, And of these one and all I weave the song of myself.

While I believe Whitman is correct in describing how we become who we are, I also believe he partly gets the why wrong. His apparent narcissism, for which he has

been widely and rightly criticized, continually gets in the way. "I weave the song of myself," he says. "I ask not good-fortune," he says, "I myself am good-fortune."

In my experience, that's not how things happen. Whitman's outdated view that we are self-made as individuals, that we single-handedly engineer our own development and destiny ("leading wherever you choose..."), doesn't describe the world as most of us experience it. We become whatever we become, in large measure at least, because of how we respond to forces and circumstances beyond our control, including the circumstances of our birth, the vicissitudes of the natural world, and the kindness or callousness of the people we encounter in our journey through life. Over time, we are constituted by these relationships — how they develop and how we respond to them. This lesson at least is written in the stars.

There is another lesson written in the stars as well — a lesson the cosmos teaches us every day. Our movement through time as human beings imitates the motion of the Earth, which moves through space in three distinct ways. The Earth turns on its axis about once every 24 hours, and the daily rising and setting of the Sun upon our horizon establishes an elemental rhythm of waking, eating, working, and sleeping.

The Earth also orbits the Sun once every 365 and one-quarter days, the tilt of its axis occasioning our journey through the four seasons. This annual sweep around the Sun paces the human march toward more distant goals. We catalogue in years the milestones in our lives: birth, childhood, adolescence, graduation, adulthood and a vocation, sometimes marriage or union, perhaps parenthood, eventually retirement, and inevitably death.

There is yet a third way the Earth moves through time and space. For fifteen billion years, the universe as we understand it has been expanding. Though our knowledge of the distant future is fragmentary and continually in doubt, the universe will likely continue to expand for many trillions of years into the future. There is no apparent cycle to this movement, no daily rotation or seasonal repetition. In the cosmic sense, the Earth's journey is unique, never to be repeated. It will not pass this way again.

The same is true of our lives as human beings. It turns out that the daily and yearly cycles of time are mostly illusory: none is the same as those that have gone before. Each marks the increments by which we measure the inexorable march of time. Our journey, too, is a unique one: we will not pass this way again. We are given this day only once and never again.

To make the most of this day and every day, we need to heed the lesson of the stars. We become who we become, and we collaborate in creating our own future, by virtue of the connections that constitute us — connections with our own minds and bodies, with the people around us, and with the planet and cosmos we call home.

At its heart, the work of creating and strengthening these connections is divine work. If we are open enough and attentive enough, we can sometimes feel the intimations of a deep connection to everything: all that is present in our lives and our world, as well as all that is past and all that is possible — an experience I call the experience of God. Whether called forth by the cosmos, an eclipse, or some other revelation, it's an experience worth treasuring always.