The Fault in Our Stars

Sunday, January 5, 2020 Federated Church, Fergus Falls, MN Matthew 2:1-12

For generations unnumbered, human beings have searched the night sky for meaning. Our ancestors discerned the forms of animals, heroes and gods in clusters of stars. Some went even further, imagining that the alignment of stars and planets on babies' birthdays somehow hinted at what their lives would be like. That's very likely what caused the Magi, ancient astrologers, to journey to Judea.

Our enduring fascination with the starry heavens could soon be endangered, though. The culprit: *light pollution*. Astronomers now cope with encroaching artificial light from car headlights, streetlights, and advertising signs. Astronomers must locate observatories on barren mountaintops in remote locations, far from the nighttime glow of urban and suburban sprawl, to minimize light pollution.

Nowadays, there are dark-sky preserves at remote locations around the world, even in the United States. Some of America's national parks now bear this designation, including parts of Grand Canyon, Death Valley, and Joshua Tree. For urbanites, perpetually dazzled by the glare of streetlights and headlights, traveling to one of these starlit locations is a revelation.

But now, even the most remote telescopes may have difficulty scanning the heavens, and dark-sky preserves could become a thing of the past. The problem is still artificial light: but now the light is coming from a different place: not from the earth, but from the sky itself.

Starlink or Star block? The SpaceX company is launching not just single satellites into orbit, but great orbiting arrays. Last summer, the company launched an array of sixty 500-pound satellites into orbit. Eventually it plans to place thousands of these mini-satellites into the night sky. The plan is to bounce radio signals off them to improve Internet access on Earth. Unfortunately, radio signals are not the only thing that bounce off these satellites. Each satellite is powered by solar panels, and these panels not only collect sunlight for their photovoltaic cells, they also reflect that light back to Earth.

Amateur stargazers can already glimpse these new workhorses of the Internet, trudging like a pack train across the night sky, sometimes blocking the view of familiar constellations. The SpaceX people even brag that their handiwork is a new constellation.

They call it Starlink. Starlink satellites are tiny, of course, compared to the size of real stars — many of which are larger than our own sun – but they're a lot closer. A 500-pound satellite in low Earth orbit can appear brighter than a gas giant thousands of light years away. Astronomers and amateur stargazers are not amused, and they are rallying to oppose these new plans.

Astronomers routinely discard photos taken through their telescopes because a satellite or even the International Space Station enters the frame, rendering the photo useless. Now, though, as hundreds and possibly thousands of mini-satellites show up in their field of view, they fear it will be impossible to snap a photo of the natural sky. They believe it will no longer be possible to see the real stars because so many artificial ones get in the way.

Astronomer Kelsey Johnson warns, "With populations swelling and demands for lighting increasing, the global amount of artificial light at night has been growing by at least 2 percent per year. At this rate the amount of light pollution originating from Earth-based sources alone will double in less than 50 years."

Johnson points out that artificial light endangers not only human health and our environment, but that it also extorts a philosophical cost: "I think there is even an existential cost. A dark night sky, unpolluted by artificial light and thousands of artificial satellites, serves as a visceral reminder that we are part of something unfathomably large, that our petty differences on this tiny speck of a planet are ultimately insignificant. In the face of the universe, human arrogance is absurd."

Endangered Awe. Elon Musk, SpaceX's founder, defends his company's plans as being "for the greater good," supplying Internet access all over the world, but some astronomers are asking, *Whose* greater good? "Who has the right to decide that?" asks Dr. Tyler Nordgren, one of the astronomers questioning the SpaceX plans. The night sky has the power to make people feel awe, he points out: "A star-filled night sky reminds us that we are part of a much larger whole, that we are one person in a world of people surrounded by the vast depths of the visible universe."

It is the same feeling the ancient Psalmist expresses: "When I look at your heavens, the work of your fingers, the moon and the stars that you have established; what are human beings that you are mindful of them, mortals that you care for them?" (Psalm 8:3-5). It is the feeling experienced by the magi: "Where is the child who has been born King of the Jews? For we observed his star at its rising, and have come to pay him homage."

We know little about the Bethlehem star and what sort of astronomical configuration it was. But surely, we don't need to understand the science behind the phenomenon to grasp the luminous feeling of awe that spills over to our earthly spirits as we contemplate the heavens.

We've just come out of a Christmas season filled with glowing distractions of all kinds: all the trappings of the secular holiday we know so well. These lesser constellations in the night sky of our faith are not bad things, but we all know they have the potential to turn our gaze away from things that truly matter. The lights and the dazzle of Christmas can be just as distracting as the mini-satellites orbiting earth: light pollution obscuring the True Light, the Light of the World. We do well to keep our field of view unobstructed, our vision pure and focused on the True Star we seek.

The French Christian philosopher Simone Weil, writing in *Gravity and Grace*, celebrates the spiritual importance of attention: "Attention, taken to its highest degree, is the same thing as prayer. It presupposes faith and love. Absolutely unmixed attention is prayer. If we turn our mind toward the good, it is impossible that little by little the whole soul will not be attracted thereto in spite of itself."

Way back in 1959, the great Jewish scholar, Abraham Joshua Heschel, had a foreboding of what was to come. In *Between God and Man*, he warns: "The awareness of the grandeur and the sublime is all but gone...We teach our children how to measure, how to weigh. We fail to teach them how to revere, how to sense wonder and awe. The sense for the sublime, the sign of the inward greatness of the soul is now a rare gift. Yet without it, the world becomes flat and the soul a vacuum. Here is where the Biblical view of reality must serve as our guide."

To remain spiritually healthy, we must pay close attention to what we're seeing. We must preserve our access to the visions that inspire awe in our hearts.

The Fault in Our Stars is the title of a 2004 film about a couple of teenage cancer survivors pursuing life and love. Hazel, one of the pair, refers Gus as her "star-crossed lover." It's a famous phrase from Shakespeare's Romeo and Juliet, of course, and the idea is that the lovers' tragic fate was somehow written in the stars.

In a memorable scene from the film, Gus confesses to Hazel: "I am in love with you. And I know that love is just a shout into the void, and that oblivion is inevitable, and that we're

all doomed. And that one day all our labor will be returned to dust. And I know that the sun will swallow the only earth we will ever have. And I am in love with you."

We like to think the love we share with others on this earth is just as enduring, but considering our lot realistically, we know it to be otherwise. Take a walk through an old graveyard, one with epitaphs on the stones, and you will see expressions of love from people who haven't breathed this earthly air for decades, even centuries. Their sentiments, carved in stone, live on, even though their love itself has long since been swallowed up by the greater and eternal love of God.

As fascinating as the biblical account of the Bethlehem star is, and as awe-inspiring as are the constellations above a dark-sky preserve, it is not the stars we seek. The Magi weren't seeking the stars, either, at least not ultimately. They valued their special star merely as a pointer to the child born King of the Jews.

Friends, there is a fault in our stars, and not just in that blinking sky-train of satellites that is the Starlink array. The fault in our stars is whatever turns our attention from the True Star, the True North Star — he who is the source of everything good in our lives: Jesus Christ. At the start of this new year, let us seek Jesus Christ above all others!

Prayer: Jesus, You are the Light of the World. Shine Your light in me today. Chase away the darkness of sin, the darkness of fear and doubt and despair. Fill me with the light of Your truth, Your Word. Produce in me the fruit of righteousness: the evidence that Your Holy Spirit lives in me and works in me and works through me. Teach me what is pleasing to You. Make me a shining example of Your amazing grace, redeeming love, and life-changing power. May others be drawn to You through me. Amen.

Sources:

- Dark-Sky Preserve. Wikipedia.com.
- Hall, Shannon. "After SpaceX Starlink launch, a fear of satellites that outnumber all visible star images of the Starlink constellation in orbit have rattled astronomers around the world," *The New York Times*, June 1, 2019. nytimes.com. Retrieved August 19, 2019.
- Heschel, Abraham Joshua. Between God and Man (Simon & Schuster, 1959), 37.
- Johnson, Kelsey. "Is the evening sky doomed?," *The New York Times*, August 17, 2019. nytimes.com. Retrieved August 19, 2019.
- The Fault in Our Stars, Fox 2000 Pictures, 2004. imdb.com. Retrieved August 19, 2019.
- Weil, Simone. *Gravity and Grace.* (Putnam, 1952).