

Earth Day 2021: The Gathering

Psalm 24:1-2

I went to the boundary waters for vacation. I didn't have all the gear I needed, so I borrowed a few things. The boundary waters can be hard on gear, something I had not really thought about until we were in the wilderness. When I got home, I pulled out the borrowed gear to look over it carefully; I didn't want something to happen to gear that wasn't mine.

The Earth is the Lord's, the psalmist says. We live here, but it doesn't belong to us. That's probably a new thought for some. Sometimes learning new things can be fun; sometimes learning something new can pull the rug out from under us. A "rug pulling" moment happened in 1633: the rug puller was named Galileo.

Galileo was a brilliant, outspoken mathematician and astronomer. Stephen Hawking, said "Galileo, perhaps, more than any other single person, was responsible for the birth of modern science."¹

He was a faithful Catholic and a personal friend of Urban VIII, who was elected Pope in 1624. Galileo had three children, two daughters and a son. His daughters, Marina and Antonia, were placed in a convent near Florence when they were twelve and thirteen.² A sign of their father's devotion, if not their own.

But the reason we know about Galileo is that in 1609 he learned of a new invention, the telescope. He began to construct telescopes of his own. And early in 1610, Galileo turned the telescope to the night skies. What he observed was "rug pulling." In those days, the moon was believed to be perfectly smooth, but Galileo recognized that it had craters and mountains much like earth. Galileo noted that Jupiter had moons that orbited the planet. Most significantly of all, he believed he found evidence supporting the theory that had been advocated by Copernicus who had lived 75 years earlier.³

It was Copernicus who theorized that rather than the earth being the center of the world, it was the sun, and that the earth orbited the sun.

We look back and it seems so simple, doesn't it? Galileo was right. The voice of science was right. We ask ourselves, how could it be that the leaders of the church in Galileo's day could be so blind to the instruction of science? What's to challenge?

But this was more than just a story of science verses religion. This is more than just a battle between truth we know from a telescope and truth we know from scripture. This was more than just a conversation between a scientist and a Pope. We see here what happens when science or anything else causes us to understand our world anew. It doesn't matter what the science is; if it calls on us to rethink our entire understanding of the world,

¹ . Stephen Hawking, **A Brief History of Time** (1988) p. 179

² . Wade Rowland, **Galileo's Mistake** (2001) p. 87

³ . Copernicus lived from 1473-1543.

then that rethinking does not come easily. We are facing some required rethinking today, and it is a battle.

My first experience of entrepreneurship was when I was in sixth grade. I would walk Woodley Road in Montgomery, Alabama between Bear Elementary School and the Union 76 Station. I picked up discarded bottles. In those days, soda, which we called Coke, came in bottles. If you found a Coke bottle that someone had tossed in the ditch, a not infrequent occurrence on Woodley Road, you could return the bottle and get a nickel a bottle. I walked the road collecting the bottles and making a little money. But I also knew that I was doing something for the environment. As a kid I learned that pollution was a problem. This earth, which belongs to God, was being dirtied. I collected bottles to clean up one little spot.

But in time the scientists made it clear that pollution--- the dirtying of things--- was no longer a big enough category. It isn't just that things are dirty; the fundamental balance of the planet that sustains all varieties of life, including human life, is shifting. The climate is warming.

But my eyes were not open to this; I was old school—I still believed that pollution could be repaired by cleaning up. But my personal Galileo spoke to me in 2004. Jack Daily, a former elder here at Village who is now in glory, invited me to lunch. He said a professor from KU was going to speak. I was less excited when I learned he was a professor of electrical engineering. UGH.

Dr. Gogineni was part of a team that developed a radar to measure the thickness of the ice at the polar caps. He stated without question that glaciers that rim the Amundsen Sea in Antarctica---a sea approximately the size of Texas --- were discharging 60 percent more ice than they accumulate from snowfall. That was in 2004. The pace and volume was greater than had previously been understood. This results in the rising of oceans levels. *Science shows it clearly, the ice caps are melting.* I had barely finished my chicken salad when I felt the rug pulled out from under me.

I could site expected effects of climate change, but you know them. Storms increase in frequency and intensity. Weather patterns shift, causing droughts in some places resulting in food shortages, and flooding in other places, like along the Missouri River. Warmer temperatures accelerate species extinction—we don't get them back. Warming oceans bleach coral reefs, stressing major food sources for ocean fish and other creatures. You know the list. There's a story about it in our news every day now.

There are some who continue to attribute the warming to cyclical causes. They will speak of aberrations in the sun that increase heat on the earth. Or they will point to the impact that volcanic eruptions alter the warming capacity of the atmosphere.⁴

The significance of these explanations is that they compare the warming of the planet to things we have witnessed before. The planet has experienced shifts in climate. After all, we know there have been shifts to bring the earth in and out of perhaps as many as five ice ages. The earth's temperature is not a constant thing through history. When the carbon in the atmosphere drops to say 180 ppm, we get an ice age. The last one was about 20,000 years ago. The carbon rose to about 280 ppm to pull us out of the ice age and made earth livable for human beings. But just as reduced carbon can make the earth ice over, too

⁴ . The Browning Newsletter draws this conclusion. Browning is a climate Newsletter for Investors.

much carbon can cause too much heat. Ten years ago, the first time I preached on climate change, the measurement was about 375 ppm. I looked at NASA's website this week and it has climbed to 412.

As scary as this may be, some voices tell us not to overreact; there's nothing we can really do about this. Pay attention to pollution; keep turning in our Coke bottles. But the climate is out of our hands.

But the overwhelming majority of scientists from a wide area of study... not only those who study climate, but also scientists who study rivers, or oceans, or insects, or ice or fish or birds or pollen (I didn't even know there were scientist who study pollen)... they all say the climate is warming. Oh, I know there are scientists who question it, but there is no field of science that questions it. Among them all there is an overwhelming consensus that this is not something we have seen before. It won't fix itself.

Dr. Bill Brown, a colleague of Rodger's at Columbia Seminary, spoke to us at Village a few weekends ago. He quoted Bill Nye the science guy. Nye said, I didn't mind explaining photosynthesis to you when you were 12, but you are adults now. This is an actual crisis... our planet is on fire.

There are at least two factors which contribute to this crisis. One is the growth in human population.

It took the history of the human family from cave dwelling days until 1800 to reach 1 billion people on earth. But that first billion grew to two billion in only 123 years (1923). In the last 100 years, we have grown to approximately 7.9 billion, with the last billion arriving in the last ten years.

More people consume more resources, not equally you understand. The more we drive and eat and plug in, the more carbon is added to the atmosphere.

If this is true, then what we are experiencing is not a normal reoccurring climate cycle that will work its way through, but rather a dramatic change in the way the planet is working.

I am not a scientist. But I can tell that when this rug pulling truth is challenged, it's not often challenged with science. You don't have to be a professional scientist to trust science.

I had a seventh-grade teacher named Mr. Dunning. He took a basketball and spun it on his finger. Then he got the basketball wet and did it again, and drops of water flew from the surface. He said the earth spins like that basketball and the reason you don't fly off in the general direction of Venus is because of gravity. It pulls us down.

I don't understand it. But I trust it.

We cannot afford to mistrust what is true.

As Michele Stowers said in her creation care video, when we know better, we can do better.

I am no scientist. I am an amateur theologian and I think there is a word from our faith that is on target here.

In Genesis, the creation story is that God fashioned Adam (it's the Hebrew word for humankind), out of the earth. Both are creatures.

All creatures share this in common: creatures are finite. People, Adam, all have a beginning and an end. Stars are born and stars die; they have an end. The earth is creature; it is finite. It had a beginning, and it will have an end.

Science is telling us we are accelerating the conditions that make it no longer possible to sustain the human population on the planet.

When Galileo stood before the church, the people who determined the truth of the world, and Galileo said, we know something new now, he was summoned before the Inquisition. The Inquisition physically tortured people for challenging the truth we had always assumed we knew.

There is no Inquisition today, thanks be to God, but there is tremendous suffering... and it will be paid by our children and their children.

It will be hard to explain to them, for unless we change our ways, they will look back at us with the same head scratching wonder that we view those in Galileo's day.

The first time I preached about this subject, my son, then in high school, said great sermon dad. That's not something he usually says. I said thanks. He said, you didn't tell us what you are going to do about it. Eat your lunch.

That day we stayed at the table and talked about some options. We decided to change our diet, as food is a significant factor in releasing carbon into the atmosphere. It hasn't changed the world, but it has changed me.

We have made other changes, some small, but still significant. I am so proud that there is a full array of solar panels on the Child and Family Development building at the Meneilly Center. I am so proud our kids, like Erin O'Neal, for planting milkweed to create habitat for Monarch butterflies. I am grateful that we invite Bill Brown to teach us how faith guides us in these matters. I am grateful for the sustainable garden at the Meneilly Center, fresh produce for our food pantry. I am grateful that we are investigating motion sensor lighting for this campus. I dream that someday we will have solar panels on this building too. I am grateful for all the things that we do, but we as a church will need to do more.

Someday we are going to stand before the God who breathed us to life and gave us this world in which to live. We want to be able to tell her that we took care of this which belongs to God. The earth is the Lord's and all that is in it.