



by Jim Wesley, OFS

Early in the morning, when I sit on the front porch and look east, I have a clear view of the distant hills and trees. If I wake up early enough, I watch the sky just above these hills beginning to glow in various shades of yellow, orange, and magenta. A few birds flutter by, and some sit silhouetted in the trees. Even a small hummingbird pauses to watch the new day begin. As time passes, rays of light flare along the hilltops, and Brother Sun slowly appears with a glaring brightness signaling the beginning of a new day. After a short time of quiet reflection, it is time to head back into the house for a little breakfast.

What did I experience? Was it simply the morning sunrise signaling the beginning of a new day, complete with a spectacular light show, or was something else happening that my senses were unable to perceive?

When we refer to the word “day,” we are talking about the amount of time for one rotation of the earth on its axis. The sun doesn’t really rise, because it is at a fixed location at the center of our solar system. The sunrise is therefore, not the sun rising, but the earth rotating. In fact, what I experienced on my front porch was the sun being revealed as the earth rotated eastward. A very convincing illusion witnessed by humans for as long as they have inhabited the earth.

Another interesting fact is that my home is located along the western coast of North America at 35°2’33” north latitude. The circumference of the earth at this latitude is 24,861.5 miles; that is the distance my house travels each day as the earth rotates. If my house travels this distance in 24 hours, a simple mathematical calculation reveals a speed of 1,036 miles per hour. It may seem unbelievable, but it is reality. We don’t perceive this movement because of gravity, and because the atmosphere is also traveling at this same speed. This is similar to the sensation, or the non-sensation, we have on an airplane traveling 500 miles per hour.

There is even more to this perception story. Another scientific fact is that the earth is in orbit around the sun. This revolution, or journey, around the sun, a distance of 92.96 million miles, takes 365.25 days to complete, at an amazing orbital speed of 66,700 miles per hour. Again, we are unable to sense this motion. Yet it is happening. Sister Earth is constantly in motion.

Reality is often difficult to accept. Back in the 1600s, the mathematician/astronomer, Galileo Galilei, faced an interesting dilemma. After gathering and interpreting scientific data, he realized that a fundamental teaching and belief of his time was flawed. Through limited sensory observation, popular beliefs, and established theological teachings, the earth was falsely believed to be the center of our universe. One-hundred years earlier, Nicolaus Copernicus had stated that the sun, not the earth, was at the center of our solar system, and that the earth rotates on its axis. When Galileo scientifically proved that the heliocentric solar system was correct, the Catholic Church of that time considered him a criminal for promoting heresy and sentenced him to house arrest. The popular belief of the time prevailed, and it wasn’t until 1992, 359 years later, that Pope John Paul II finally exonerated Galileo, and in the year 2000, the Church officially apologized to Galileo for not accepting the scientific facts that ultimately corrected popular misinformation of the 1600s.

This little story brings us to the present time. To truly understand God’s creation, we need to look beyond the earth. One suggestion is to visit the Vatican Observatory, one of the oldest active astronomical observatories in the world. You can visit at the following link: <https://www.vaticanobservatory.org/>. Be sure to watch the video: *The Pope’s Astronomer.A*