

Light of Science, Light of Christ

Homily by Tim Schumaker, Archdiocese of Milwaukee

*“And God said, Let there be light. And there was light.
God saw that it was good.” (Genesis 1:3-4)*

If one were to bridge the seemingly large gap between faith and astronomy, a good place to start appears to be the first spoken words of God in the Bible, “Let there be light”.¹ The language of light appears in both the world of astronomy, such as the light spectrum, and the world of faith, namely, Christ is the light of the world.² In both cases, there exists a unique relationship between the origin of light and the receiver.

In the year 2025, a new generation of telescopes aimed at the night sky will revolutionize the astronomical sciences. One such telescope, The Giant Magellan Telescope or GMT, has nearly perfected the ability to receive light from the countless stars. Constructed with six 8.4 meter mirrors forming a 24.5 meter optical surface, the GMT will be the largest telescope in the world.³ It takes four years of melting, molding, casting, surface generating and polishing glass to create a single mirror.⁴ A mirror whose sole purpose is to receive as much light of the night sky as possible. Light that is always present, always sharing the mystery and history of the universe, only to be limited by the capacity of the mirror. The larger the mirror, the more light it can receive, the smoother and more polished the mirror, the clearer the image. The entire enterprise of astronomy depends on the ability to create a perfect mirror.

However, not all mirrors are made of glass and not all light is seen by the eye. For the mirror that dwells here, in the chest, is made of flesh and sees the light of Christ. But like the mirror, the heart must be formed to receive this light which God is constantly radiating. A mirror can take four years to perfect, but a perfected heart can take a lifetime. A lifetime of melting hatred, molding prayer, casting virtue, generating relationship and

¹ Genesis 1:3

² John 8:12

³ Giant Magellan Telescope, <https://www.gmto.org/overview/>

⁴ Richard F. Caris Mirror Lab, <https://mirrorlab.arizona.edu/content/overview>

polishing charity to make a heart more perfectly receptive to Christ. As Catholics, we are called to become the perfect mirror of Christ. A mirror devoid of any imperfections for fear that the image is distorted. In this, we may learn two lessons from astronomy.

First, the source of light is the object. Light is merely the messenger, the revealer. The goal of astronomy is to know the star, planet, or galaxy that shines its light. The source of our light is Christ. The goal of Catholics is to know Christ. It is only in knowledge of the source that both science and faith can better learn how to receive light. To know something requires time and effort. The telescope spends weeks looking at a single spot in the sky to know it, we must spend hours in prayer to know Him.

Second, learn from and engage with each other. The source of light in both fields is inexhaustible. To continue to learn and receive light more perfectly, the experience and knowledge of the past and present must be respected. The astronomer stands on the shoulders of Copernicus, Galileo, Hubble, and Lemaitre. The Catholic stands on the shoulders of Peter, Paul, and Mary. An astronomer does not look at the sky alone, he engages with his community. A Catholic does not know Christ alone, they engage in the Body of Christ which is the Church.

The first words spoken by God created light. Light that could be received from both eyes and heart. Whether it takes four years or a lifetime to receive this light is to enter into a mystery much greater than ourselves. Once received, the universal language of light constantly calls for greater receptivity, and as both the astronomer and Catholic receive the light more perfectly, they too see that the light and its source are good.