To the Ends of the Earth

Philip Gibbs SVD

In Psalm 104 we pray, “You created the moon to mark the months; the sun knows the time to set.” Yet in Antarctica, at least during the austral “summer,” the sun never sets. I experienced sunlight twenty-four hours a day during my month-long stay in the Antarctic in January 2010. For many years, priests from New Zealand have taken turns serving as Catholic chaplains in Antarctica. I was fortunate to be one of them. While I was in Antarctica, Divine Word Missionaries were serving on all seven continents of God’s creation.

Antarctica is the world’s fifth largest continent, bigger than Europe and Australia. It is very different from the North Pole. The North Pole lies below three kilometers of ocean. By contrast, the marker for the South Pole lies atop three kilometers of ice and rock. Antarctica is the windiest, highest, driest, coldest place on earth. In many ways, it is literally the “ends of the earth”!
The Antarctic Treaty reserves the region for peaceful purposes and encourages international cooperation in scientific research. In the spirit of the treaty, the National Science Foundation (NSF) funds and manages the United States Antarctic Program which supports research in astrophysics, biology, medicine, geology, geophysics, glaciology, and ocean and climate systems. As a priest, I worked together with a Protestant chaplain to serve the spiritual needs of people working for the NSF and other programs. During the austral summer season between November and February, McMurdo Base hosts over a thousand workers and researchers, while some two hundred and fifty people live eight hundred miles away on the Scott-Amundsen Station at the South Pole.

It was a challenging mission to be chaplain in Antarctica. Most people are from the United States and, when they are at home,
they regard church attendance as normal activity in the context of their family and neighborhood. Life at a research base in Antarctica is not "normal" and it is very far removed from the environment and culture to which they were accustomed. The "Ice" can be a new "wilderness" where one may be tempted to set aside one's Christian identity. In fact, more people come to yoga sessions than to Mass. We tried to make the "Chapel of the Snows" and its activities a welcoming place for everyone. Some responded; others did not. I was present for a medical evacuation and a medical worker informed me that, if the person died, they would call for me. I could not help wondering how many think the priest is the one to call only when someone is dead or dying. I would hope that our faith has much to do with life in its fullness (Jn. 10:10).

As part of the Antarctic Geological Drilling program, scientists have set up drill rigs on the ice to drill down through the vast ice shelves and the sea below and then into the sediment of the ocean floor. In this way, they can drill "back in time" through the Antarctic marine sediment to recover information on the history of climatic change going back seventeen million years.

The layers of Antarctic ice have a significant impact on global climate, influencing the amount
of solar radiation reflected back into space; the exchange of heat between the polar oceans and the atmosphere; and the amount of freshwater entering the sea. The Antarctic ice holds seventy percent of the world's fresh water, so research in Antarctica into climate change is very important. Researchers continue to find new ways of extracting data from ice cores about atmospheric composition, temperature, solar activity, volcanic eruptions, and other types of information. Pockets of air trapped as microscopic bubbles in the layers of ice have become tiny, atmospheric time capsules in the compressed ice.

Research done at the astrophysics center at the South Pole reaches back even further by sensing primordial waves of energy from distant galaxies going back thirteen billion years! “You spread out the heavens like a tent...” This phrase from Psalm 104 has new meaning for me now as I become more aware of Antarctica's role in climate research.

One day as I sipped a drink of water, a doctor (who also happens to be a Catholic deacon) told me how the water we drank came from melted ice from five hundred feet below the surface. At the rate of snowfall and the freezing
and pressure over the centuries, ice five hundred feet below the surface would come from snow that fell about two thousand years ago. In other words, I was drinking water from snow that fell from the heavens around the time of Jesus!

While in Antarctica, I reflected on how I could understand the Word in a land so different from what I was used to. Living in such a place, hardly affected by humans, I developed a strong sense of the sacred in the immensity of the natural environment. Could its magnificence hide secrets of the cosmological beginnings of space, matter, and time? The opening words of the Prologue to John’s Gospel link the Word as Logos to the primordial beginnings. In the silence of the icy continent, the creative Word continues to call forth life in so many ways as it has done for eons. Time is relative, and through my experience in Antarctica, I realized more deeply that we share in the love of God which is timeless. ✝