

RESPONDING TO A TRANS-GENERATIONAL
ENVIRONMENTAL PHENOMENON

- Topic: Global Warming: Facts, Fictions, Theories, and Catholic
Theology
- Convener: Jame Schaefer, Marquette University
- Presenter: David Quesada, University of St. Thomas, Miami
- Respondents: William French, Loyola University of Chicago
Robert Faricy, Pontifical Gregorian University (Emeritus)

This session aimed to provide a scientific perspective on evidence and predictions of global climate changes and to initiate discussion on sources from the Catholic theological tradition that can facilitate addressing these phenomena. As a prelude to sharing the scientific evidence of global warming, Physicist David Quesada presented some myths about abrupt climate changes that have been popularized in the media and stressed the need to raise the literacy level of the public on this issue. He proceeded to contrast natural climatic cycles with human induced changes and the role of feedback loops (water vapor, carbon dioxide, volcanism, solar cycle, and snow packs on temperature) in this phenomenon. Especially concerned about the public's need to understand the rate at which natural changes in the climate occur, he explained the unique response time to external forcing that systems have and the frustration to a climatic system when changes occur faster than the system's response time. A short term decrease in global temperatures does not contradict a long term increase of temperatures, he explained, since climate changes occur on at least 30 year scales. He underscored the fact that natural cycles alone cannot account for all rates of changes that have occurred in the planet's current warming worldwide, so the probability of human-induced causes must be explored.

During the second half of his presentation, Quesada explained theories and mathematical models used to describe the climate and the weather. He distinguished between scenarios, predictions and forecasting, and he used Florida's coastline as an example of possible connections between warming climates and the future of hurricanes. He concluded his presentation with five major points: (1) Climate prediction is in its infancy, and the best that science can do at this point is to elaborate hypothetical scenarios and analyze the possibilities that a scenario might occur; (2) moving from a "status quo" position on carbon dioxide emissions to the other extreme by which every gram of the gas would be calculated for its effect might discourage attention to other sources of pollution; (3) the current increase in sea level suggests some overestimation in many parts of the globe due to an inadequate transition from global to regional mathematical models that are used in climate dynamics; (4) hurricanes and warming oceans are connected, and the number of hurricanes per season is less important than the amount of energy released by all storms together per season; and (5) the nature of possible feedback loops within the hurricane-global warming connection is far from being understood completely. Questions and comments following this presen-

tation clarified the uncertainties in predicting climate change, the reality of global warming, and the need for taking precautionary measures to avoid a worse-case scenario.

In a theological response, Faricy acknowledged the problem of global warming, insisted that we must do something, and stressed that any set of solutions depends upon how we view and value the planet. That Earth is good and belongs to God is the starting point for a Catholic theological view of the world, and that world view prompts valuing our planet. This is the perspective from which Ignatius of Loyola reflected and subsequently influenced other Jesuits, especially Teilhard de Chardin, Bernard Lonergan, and Karl Rahner. Drawing upon Ignatius's *Spiritual Exercises*, Faricy painted a view of the world as a gift of God through which God is present, dwelling in and working actively for each of us in some mysterious way to provide direction in our lives. Embracing this Christian pantheism is vital to Catholic theologians who are grappling with the phenomenon of global warming.

Bill French offered several approaches to global warming from the Catholic moral theological tradition. Strongly skeptical about waiting for conclusive scientific evidence before taking action to curb the emission of gases that are causing the planet to warm unnaturally, French sees promise in responding to global warming by the following: (1) Daily practices of prudent actions as urged by the U.S. Catholic bishops in a recent pastoral statement; (2) recognizing that reading "the book of nature" is not merely a scientific endeavor but one that is deeply embedded in the Catholic tradition; (3) recovering and ecologizing the natural law tradition by upholding conditions that allow Earth to flourish, self-regulating the human population, and advancing the development of a global environmental ethic in collaboration with other religions; (4) retrieving the intrinsic valuation of Earth to couple with the predominantly instrumental value that we attribute to Earth; and, (5) taking seriously an individual to collective examination of conscience on how to think about and relate to other species and the natural environment.

Participants in this session recognize the work ahead for Catholic theologians if we want to respond constructively to the warming of Earth. The newly-approved Interest Group on Catholic Theology and Global Warming will be engaging in that work for the next three years.

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