

THEOLOGY AND SCIENCE

Anne Clifford and Christopher Mooney each gave a presentation on the relationship of theology to cosmology. Their presentations were followed by a brief discussion period.

Anne Clifford focused on some of the reasons why theology has abandoned cosmology during the modern period. Particularly, twentieth-century Christian theology, in its following the Kantian turn to the subject, has had a strong anthropocentric focus. One of the results of this bias has been theology's neglect of the cosmos. The cosmos has in a sense been removed from the realm of the sacred and rendered "godless." The turn to the subject was theology's response to the challenges of Enlightenment science. However, now that classical Newtonian thought no longer provides the script for what counts as science, scientific cosmology has been renewed.

Because of recent advances in physics and astronomy the origin and structure of the universe now leave us with a much different picture of the cosmos from that presupposed by previous theology. Therefore, Anne Clifford proposes that theologians now need to take seriously the fresh developments in scientific cosmology. She sees cosmology not simply as a substitute for theology's usual emphasis on anthropology and history, but as part of a new synthesis of recent insights into the human person and human history within an expanded theological horizon. Put simply, theology needs to retrieve the universality of its task. Today, perhaps more than ever before, a rapprochement between theology and scientific cosmology is possible and also needed for many reasons. The most pressing of these is the current environmental crisis.

Christopher Mooney discussed the implications for theology of the so-called "anthropic principle." The weak anthropic principle simply restates the fact that in interpreting scientific observations it is essential to take into account the limitations of one's measuring apparatus. Hence any conclusions that humans reach regarding the nature of the universe are inevitably biased by an all-embracing self-selection effect: their own existence. Even this weak and relatively uncontroversial version of the anthropic principle is of consequence. For it implies that any observed properties of the universe that initially appear improbable or arbitrary can only be seen in their true perspective when recognized as necessary prerequisites for the evolution of observers.

The strong anthropic principle, on the other hand, insists that the presence of intelligent observers *requires* that the laws of physics and the fundamental constants of nature be exactly as they are, because if they were otherwise such observers would obviously not be here. Scientifically speaking, the status of this principle is dubious. But when looked at from the point of view of Christian faith it provides valuable data totally lacking to, but significant for, theology which has

always affirmed God's cosmic design for human life. Theology has never had any knowledge of precisely how God carries out the designing process in the realms of matter and energy. The strong anthropic principle is thus a tool that enables scientific data to supplement, confirm and amplify the very sparse data of theology regarding the physical world and its relation to human persons.

The discussion following the presentations was unified by a shared sense among the participants that the renewal of theology, in its encounter with the intellectual component of our culture, must include at its very center a new integration of cosmology and theology.

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