"human family" does not in this case trace itself to Adam, yet there is in the theistic context of Hinduism an understanding of the presence of the divine reality in the totality of interconnectedness. In response to Julian, Clooney commented on the fact that the body itself is to be reflected on carefully, in the physical, since the spiritual presence is held there in a mysterious way. Discussions of the importance of the body are found in the Ayurvedic literature and in the Tantric traditions. Kundalini yoga and Tantrism are just two of the ways in which Hindus attempt to be in touch with the body as a means of activating spiritual power located in the body. Similarities and differences were discussed, and the respondent concluded with the observation that, despite clear differences, both traditions possess a specificity in their attentiveness to the body as it opens the human person to transcendence, regardless of how that transcendence is identified.

Discussion and questions from the twenty persons present at the session were lively, and covered a wide range of topics, from process metaphysics and the theme of interconnectedness to the importance of embodiment as encompassing the physical and spiritual in different methods of healing. While there were some questions purely for clarification, the majority of the questions provoked a wideranging and lively discussion of disparate thoughts and issues triggered by the theme of the session and the specific points made by both speakers. Comments were made about the fact that the collaboration between the two groups was fruitful for reflection raised various ideas worthy of further discussion.

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## THEOLOGY AS A COLLABORATIVE PROJECT

Topic: Teleology in Contemporary Science and St. Thomas:

Is a Conversation Possible?

Convener: Jack Bonsor, Santa Clara University Presenters: Robert Barron, Mundelein Seminary

William R. Stoeger, S.J., Vatican Observatory Research Group, University of Arizona

Robert Barron began with reflections on St. Thomas's cosmological teleology. Under the influence of the cosmological speculations of the pseudo-Dionysius, Thomas Aquinas developed, in the course of his career, a richly textured teleological theology. Barron presented five motifs that emerge clearly in the theological cosmology of Thomas.

- 1. Circularity. As is well known, Thomas structures his major systematic works along an exitus-reditus pattern, the procession of all things out from God and the ordered return of those things, elevated and perfected, back to God. This method reflects his conviction that the universe moves, not so much cyclically or linearly, but circularly. Thus Thomas can observe in his commentary on Divine Names: "there is manifested a kind of circle in existing things, for they have the same beginning and the same end." An implication of this circularity is that the universe is anything but static or fixed. Thomas frequently invokes the image of the army directed by the general to its end as a model for God's direction of the disparate elements of the cosmos to their common end in the divine. Here the very active sense of the Latin perficiere and perfectus comes to the fore: to be perfect is to be completely made or brought to fulfillment through time and motion.
- 2. Unity of the World. What follows as a consequence of this circular view of the universe is the radical unity and interdependence of all creatures. Because the grounding efficient cause and the alluring final cause of the cosmos are one, the cosmos, despite its variegated multiplicity is essentially one. Again, in the commentary on the Divine Names, Thomas asserts, "all creatures are joined together in a common bond of friendship." We are dealing, not with a universe of disconnected events and isolated objects, but rather with an organic cosmos, each part of which relates to the totality much as a particular organ relates to the whole of the body.
- 3. God as Artist. One cannot read through the cosmological texts of Aquinas without being struck by Thomas's frequent, almost obsessive, use of the metaphor of God as artist. God creates the wildly complex cosmos so as to show forth the fullness of his beauty, and he draws this complexity to its final end, producing thereby a consonantia that is supremely beautiful. Among created things, that which God loves the most, says Thomas in the Summa contra gentiles, is the order of the universe, the completion of the cosmic artistic project.
- 4. Cosmic Animism. What is perhaps most surprising to our "modern" ears is the characteristically Thomist assertion that all things, even inanimate objects, in a certain sense "desire" their good and hence indirectly yearn for the source of all good which is God. Thomas argues that all creatures, inasmuch as they mirror the dynamism of the divine being, love the good of the whole and are thus bound to each other and to God by desire. What God awakens and lures is precisely this universally shared craving of all things.
- 5. The Uniqueness of the Divine Causality. A final theme is the modal difference between divine causality and the causality of finite things. Because God is not one being among many, God is not one cause among many. Rather, as creative ground of the very to-be of the universe, God is implicated in everything, but in a noncompetitive way. To inquire, with regard to some particular event, to what degree God is involved and to what degree finite causes are involved is to forget this modal difference that makes it possible to say that God is totally

implicated and secondary causes are totally implicated. Thus, in his direction of the entire cosmos toward its end, God is ubiquitous and all-influencing and altogether capable of using the whole integral nexus of secondary causality.

William Stoeger then took up the issue of teleology in science. In contemporary research and writing in the natural sciences teleology has been carefully avoided, and has played no explicit role. However, at the same time there has been considerable ambiguity and misunderstanding by scientists and by philosophers of science about 'teleology' and final causality. Thus, these issues have been treated extensively in the philosophy of science literature—particularly in the philosophy of biology.

It is certainly true that there is no clear way of introducing goals, aims and purposes as distinct from efficient causes into the procedures of the natural sciences. They deal exclusively with efficient causes, and with material and formal causes, which are never referred to as "causes." Furthermore, there are three moves by scientists and philosophers of science which serve to isolate teleological considerations from the domain of the natural sciences: (1) limiting "the teleological" to "the consciously intended"; (2) discounting as "teleological" any goal-directed behavior which is the result of the action of "the laws of nature"—any "automatic" goal-directed behavior, such as gravity; and, more generally, (3) attempting to reduce any "teleological" cause to the operation of efficient causality. (2) is special case of (3).

Nevertheless, teleological questions have reemerged within the natural sciences in two different contexts: (1) the cosmological and global, via the anthropic principle (the apparent fine tuning of the characteristics of the universe for life and consciousness) and more pervasively through the recognition by physicists and some biologists that there is certainly a directionality in the processes of nature, including evolution; and (2) the specific and the local in functional biology through the realization that in evolutionary development, there are many, many cases which have a bona fide teleological explanation-for example, wings developed for flying, eyes for seeing, etc.—even though such teleological behavior is mediated through the processes of natural selection. In this second case, this teleological element is being taken very seriously by leading researchers such as Francisco Ayala, even though conscious purpose is not directly indicated. Other evolutionary biologists and philosophers of biology tend to downplay this teleological element-not successfully, in my opinion. In the first case, the anthropic principle, and directionality of "the laws of nature," really do not function within cosmology or physics themselves, but rather only in the philosophy of these disciplines, and then as interesting and suggestive observations of uncertain philosophical weight.

An essential characteristic of teleological explanation is that it must account for the existence of a certain feature of a system (e.g., wings or gravity) on the basis of that feature's effects on the capabilities of the system (flying, or bring massive objects together). The explanation for the existence of wings, or the gravitational interaction, must be shown to be so that the bird can fly, or so that

massive bodies will be systematically attracted to one another. In the functional biological case, this can be substantiated via the natural selection: flying confers an advantage on some organisms in certain environments and so wings sometimes develop to enable the creatures to fly. In the cosmological context, this is much harder to do, scientifically. But it cannot be ruled out either. Teleological explanations for the laws of nature are consistent with what is given scientifically, but not by any means indicated by the scientific data. From a philosophical or theological perspective they may be so indicated. But then we are beyond what the natural sciences can give.

Given the rich and complex nature of the presentations, most of the discussion concerned clarification.

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## MISSION AND MISSION THEOLOGY

Topic: The Humanum in Christian Theology and in Various Cultures:

An Exercise in Theological/Cultural Anthropology

Convener: Carl F. Starkloff, S.J., Regis College, Toronto

Moderator: Lou McNeil, Georgian Court College, Lakewood, New Jersey

Presenter: Michael Steltenkamp, S.J., Wheeling Jesuit College

Michael Steltenkamp offered a challenging paper on Nicholas Black Elk, the Oglala Sioux holy man and Catholic catechist. Steltenkamp is a cultural anthropologist who has spent a considerable amount of time not only as an anthropological observer but also as a friend and missioner among native peoples (Oglala Sioux). His recent book, *Black Elk, Holy Man of the Oglala*, has received wide attention. His presentation centered on Black Elk studies and the interplay of native religion and Christianity in Black Elk's life.

Broad respect and interest developed late in North America for the traditions and experiences of the native peoples. An early example of this was the publication in 1932 of John Neihardt's *Black Elk Speaks*. Largely forgotten until the 1960s, the book has since received very wide attention. When Neihardt's book came to the attention of a much wider public, it also brought renewed attention as well to Joseph Brown's book, *The Sacred Pipe* which was written in 1953.

Steltenkamp's work in the 1980s and its publication in 1993 has attempted to bring a balance to the scholarship involved in Black Elk studies, and more broadly Native American religious traditions and Christianity. This latter is seen, more or less, in Nick Black Elk, who early in his life was an unambiguous leader in Oglala Sioux religion. Not uncommon for his generation, however, Nick Black