



COSMOLOGY AND ECOLOGY IN *LAUDATO SI'*

by Mary Evelyn Tucker & John Grim

The enormous problems we face as a human community with regard to environmental degradation and social inequity are highlighted throughout *Laudato si'*. The sense of our destiny as linked to that of Earth and all creation is noted in many passages as well. Our larger cosmic story is in the background of this encyclical, while our wanton destruction of nature is in the foreground. Related to this interface of cosmology and ecology are influences on the encyclical coming from such major Catholic thinkers as Teilhard de Chardin and Thomas Berry. Teilhard is directly cited in footnote 53 of the encyclical. Thomas Berry's influence comes into the encyclical through the works of Leonardo Boff and Sean McDonagh, theologians who have been inspired by Berry (as well as Teilhard) and contributed to the drafting of *Laudato si'*. ...

The encyclical confirms the understanding of Pierre Teilhard de Chardin—a Jesuit paleontologist and geologist—that our fate is bound with nature and the story of our emergence from the deep time of the universe. Both Teilhard and *Laudato si'* seek to ignite human energy toward creating a flourishing future (LS 83, note 53). *Laudato si'* expresses a profound wonder at creation and tremendous sorrow at what is being lost in this moment in the natural world and thus in the human psyche. The encyclical asks, how can we find our way forward? ...

COSMOLOGICAL AND EVOLUTIONARY PERSPECTIVES ON CREATION

[There are] echoes in the encyclical of the thought of Teilhard de Chardin and of Thomas Berry. Both saw something akin to Benedict's "grammar of nature" as reflecting an evolutionary unfolding of a deep patterning in Earth's ecosystems directly related to the larger evolution of the universe. This included an interiority that Teilhard called "consciousness" and an inner patterning of things he described as spirit-matter. Along with what Teilhard called his metaphysics, he was also prescient in seeing how emergent properties and self-organizing dynamics led to greater consciousness and complexification in evolution.





Teilhard's thinking about evolution led to his critique of the biblical Genesis story as explanatory of evolution. Teilhard explored ideas describing cosmogenesis, namely, an emerging universe expressing ever-new patternings of spirit-matter. When an early writing developing these ideas was submitted to conservative Vatican officials, Teilhard was urged to leave France for research in China in the early 1920s. This absence of tolerance for his cosmological thought led to his sustained exile from Europe to China beginning in the late 1920s. Teilhard's ideas were nevertheless influential, and of particular import is Teilhard's understanding of the human phenomenon as arising from and deeply

connected to the dynamic, unfolding universe.¹ Teilhard felt that if we don't sense this connection, we lose our way and our purpose for living. In his words,

Humans have every right to be anxious about their fate so long as they feel themselves to be lost and lonely in the midst of the mass of created things. For it will denote in them not a critical sense but a malady of the spirit if they were doubtful of the value and the hopes of an entire world. But let them once discover that their fate is bound up with the fate of nature itself and immediately, joyously, they will begin again their forward march.²

In *Laudato si'*, Pope Francis draws on the same notion to describe a dynamic cosmological and ecological relationship between humans and, indeed, all life:

As part of the universe, called into being by one Father, all of us are linked by unseen bonds and together form a kind of universal family, a sublime communion which fills us with a sacred, affectionate, and humble respect. ... God has joined us so closely to the world around us that we can feel the desertification of the soil almost as a physical ailment, and the extinction of a species as a painful disfigurement. (LS 89)

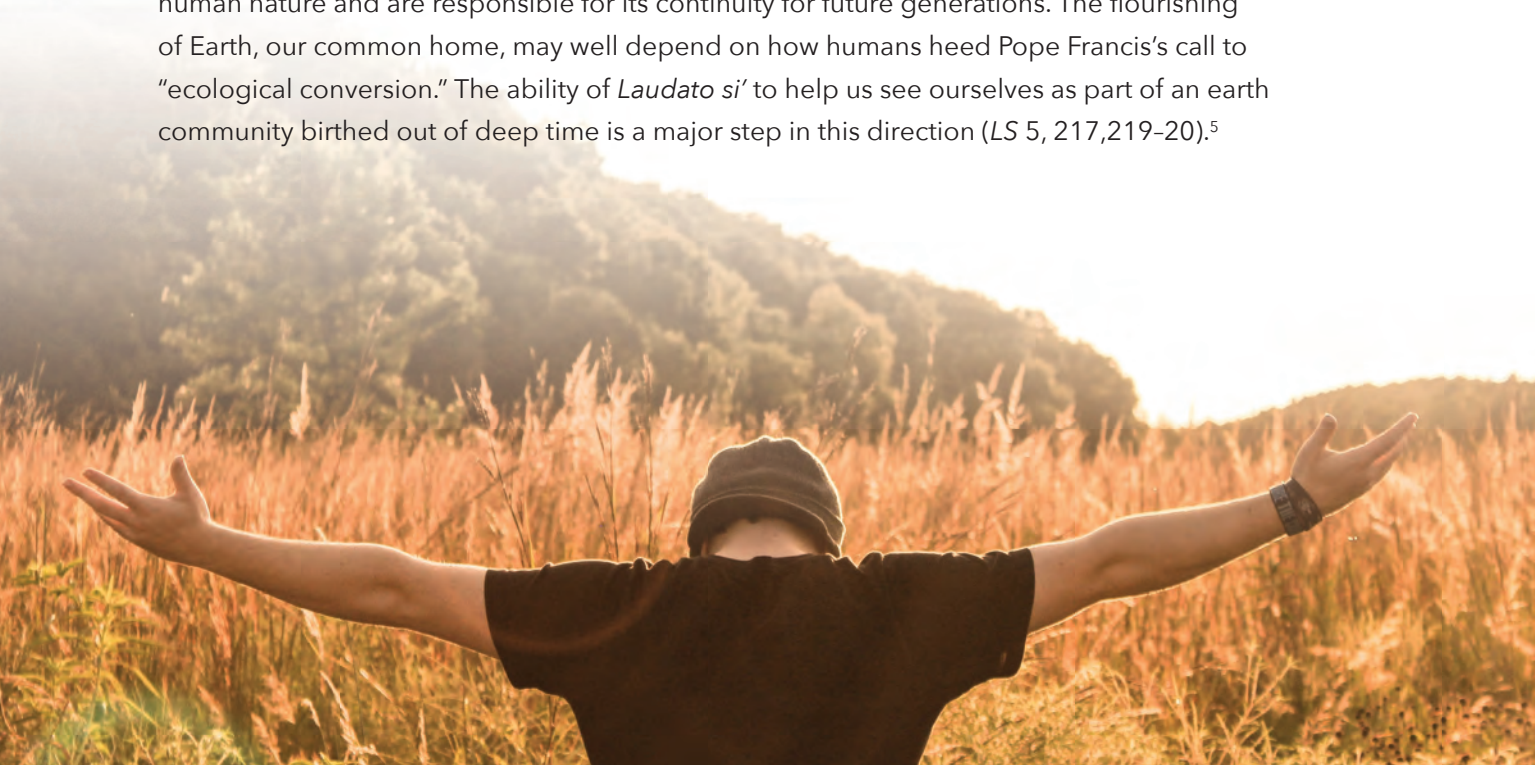


In this passage from Pope Francis, there are also echoes of Thomas Berry, who, following Teilhard, situated the human as arising from and dependent on this long evolutionary journey. He wrote that the loss of a species was the loss of a divine voice. He notes that “at such a moment [as the present], a new revolutionary experience is needed, an experience wherein human consciousness awakens to the grandeur and sacred quality of Earth processes. This awakening is our human participation in the dream of Earth.”³ From this cosmological perspective, Berry—like Pope Francis—calls on humans to participate in the “great work” of ecological transformation: building new ecological economics, educational and political systems, and religious and spiritual communities that are aligned with Earth’s capacities and limits.

This integrated perspective of a change of consciousness and conscience for humans could have a rippling effect on the contemporary climate debate. Without this integrated sense of mutually enhancing human-Earth relations in an evolving universe, climate discussions can become simply business as usual amid policy proposals, market-based schemes, and technological fixes. Animated by a broader cosmological spirit, *Laudato si’* calls on communities and individuals to awaken to the beauty of creation and engage in action for climate justice. This actively illustrates the heart of integral ecology, where people and planet are seen as “interconnected” (LS 70, 138, 240).

CONCLUSION

The publication of *Laudato si'* offers a unique opportunity to scale up and move forward the work to link cosmology and ecology by providing a renewed moral force and shared ethical commitment regarding environmental issues, especially climate change.⁴ In particular, *Laudato si'* highlights the fact that humans have a special kinship with non-human nature and are responsible for its continuity for future generations. The flourishing of Earth, our common home, may well depend on how humans heed Pope Francis's call to "ecological conversion." The ability of *Laudato si'* to help us see ourselves as part of an earth community birthed out of deep time is a major step in this direction (LS 5, 217,219-20).⁵



This article is an excerpt from "Cosmology and Ecology in Laudato si' ," by Mary Evelyn Tucker and John Grim, in All Creation Is Connected, edited by Daniel R. DiLeo (Winona, MN: Anselm Academic, 2018), 64-79. Copyright © 2018 by Anselm Academic. All rights reserved. www.anselmacademic.org.



Mary Evelyn Tucker (PhD, Columbia University) and John Grim (PhD, Fordham University) have appointments in the Yale School of Forestry and Environmental Studies as well as the Divinity School and the Department of Religious Studies.

1. Teilhard de Chardin, *The Human Phenomenon*.
2. Pierre Teilhard de Chardin, *Hymn of the Universe* (New York: Harper & Row, 1965), 109.
3. Thomas Berry, "Reinventing the Human at the Species Level," in *The Christian Future and the Fate of Earth*, ed. M. E. Tucker and J. Grim (Maryknoll, NY: Orbis, 2009), 123.
4. This is also the work of the Forum on Religion and Ecology at Yale University, <http://fore.yale.edu>.
5. It is important to highlight Francis's acknowledgment that his call for "ecological conversion" was first made by Pope John Paul II. See LS footnote 5, citing *Catechesis*, January 17, 2001.