

Teilhard de Chardin, Thomas Berry,
The Journey of the Universe, and Evolutionary Wonder

I. Introduction

Thomas Berry remains a foundational inspiration for those of us striving to guide humanity into a mutually beneficial relationship with the Earth. One of his principal contributions to rethinking humanity's relationship to the planet is his emphasis on the "new story of the universe." In their biography of Thomas Berry, Mary Evelyn Tucker, John Grim, and Andrew Angyal explain that Berry's life quest was "to articulate an engaging evolutionary narrative that would respond to the overwhelming ecological and social crises facing the human community."¹

In this quest, Berry was heavily influenced by and indebted to the theological vision of the Jesuit paleontologist Pierre Teilhard de Chardin. A president of the American Teilhard Association for many years, Berry learned from Teilhard the centrality of evolutionary theory and the need for "an integrated story that could evoke for humans their role in the arc of Earth and universe time."² Both Teilhard's and Berry's writings are suffused with a sense of awe for nature and nature's ability to mediate the divine. Teilhard and Berry point to a key element of human participation in this cosmic story: the experience of wonder.

In my remarks today, I want to move in three parts: first, a brief overview of two central ideas that Berry absorbed from Teilhard about the story of the universe; second, three key dimensions of Berry's description of the cosmic story; third, how this is expressed in the film and project inspired by Berry's work, *The Journey of the Universe*. Throughout I want to highlight how the human capacity for wonder at this miraculous story is an important legacy of Teilhard's and Berry's work for us today.

II. Teilhard and Berry

Thomas Berry absorbed a vital orientation to his worldview from his study of Pierre Teilhard de Chardin and Teilhard's unique theological interpretation of the story of the universe as it was being described by modern sciences.

From Teilhard, Berry developed two noteworthy commitments: first, that the universe is simultaneously a physical and a psychic reality; indeed, each is implicated in the other. In opposition to a purely materialist and mechanical view of the universe, which separates the physical from the mental, Teilhard viewed the development of the universe as simultaneously physical and psychic. Spirit and mind did not enter the universe simply when human beings arrived. Rather matter and spirit operate together from the very beginning. In this way, Teilhard was instrumental in intensifying Berry's appreciation of the interiority, or the subjectivity, of matter. Already as a young boy, Berry had a sense of the aliveness of the natural world, intuiting that the creatures around him were not just inanimate matter but had their own interiority. As Mary Evelyn Tucker and John Grim explain about Berry, "the allure of the cosmos penetrated his psyche. He understood the interior presence of things."³

A second related dimension of Teilhard's work that influenced Berry is that the human must be understood as part of and integral to the cosmos and to cosmic order. If there is no sharp separation of the physical and the psychic, then human self-consciousness is not an aberration, a sudden latecomer, or even a happy accident. From Teilhard, Berry learned that the human is central to the story of evolution because the seeds of human self-consciousness are integral to the universe itself.⁴

Thus for Berry the journey of the universe, as described by all the major contemporary sciences, is the most important discovery of the twentieth century.⁵ The "epic of evolution," he says, is "our sacred story."⁶ Following Teilhard de Chardin, Berry views evolutionary theory not simply as a scientific fact but as a new condition for humanity's self-understanding.⁷ Just as Copernicus altered humanity's sense of place within the universe, so too did Charles Darwin, Edwin Hubble, and others help to revise our conceptions of time. Mary Evelyn Tucker expands, "For Teilhard and for Berry, then, the perspective of evolution provides the most comprehensive context for understanding the human phenomenon in relation to other life-forms."⁸ The story that humanity tells about itself, including its relationship to God, must be understood within this broader and more encompassing narrative, and this story can then become the basis for social and cultural change. As evident in their writings, Teilhard and Berry believed that the retelling of

the cosmic story must be done in a way that will evoke wonder. As a sacred story, the epic of evolution should occasion awe at the living cosmos around us and our human place in the midst of it all.

II. Cosmic Story

I now turn to Berry's description of the cosmic story, with some attention to how his vision was shaped by Teilhard's thought. Along with his collaborator, physicist Brian Swimme, Berry weaves the scientific data into a singular mythic and revelatory story that possesses the power to transform humanity and our relationship to the Earth.

Here I want to draw out three aspects of the cosmic story: the emergent character of cosmogenesis, its creativity, and its celebration.

II.2.1. Cosmogenesis

First, Berry highlights that the universe is emergent and multiform rather than static and uniform. Following Teilhard, Berry uses the term "cosmogenesis," and this term reveals significant implications that the term "cosmos" may conceal. Cosmogenesis denotes that the universe changes, develops, and emerges over unfathomable stretches of time, even as it appears to our limited human powers of comprehension as stable, solid, and even eternal, as it was for the ancient Greeks. Yet at every level of existence, the universe is marked by change and growth. From the quivering strings that make up subatomic quantum existence to the lingering evanescence of a young star that will reach its life span only over billions of years, the cosmos is active and in motion. Cosmogenesis stresses that the universe is constantly in flux and is shifting in discrete yet unpredictable and novel directions.

Berry owes this critical insight to Teilhard, who did not see the cosmos as "a determined thing in which everything exists"; or as an inert setting for mechanical processes, waiting for human self-awareness to arrive. Rather, the universe is a "dynamic and unfolding process of evolutionary development." Again, the physical and the psychic, matter and spirit, coexist from the very beginning.

Furthermore, cosmogenesis does not merely describe the macrophase process by which the universe functioned in the past, or proceeds now. Teilhard and Berry view cosmogenesis as a

process that takes place within each being; Tucker and Grim explain, “cosmogogenesis became the action of evolution at every moment, in every place, and in every being that exists.”⁹ Teilhard and Berry possessed a sense of “the whole of the cosmos manifest in particular forms of existence.”¹⁰

The term cosmogenesis has further theological significance because it credits the universe for being its own source. Cosmogogenesis does not undermine the classical Christian doctrine of God the creator, God who undergirds creation as its constant source, preservation, and ultimate goal. In using the term cosmogenesis, though, Berry directs our attention back to the power of the universe itself, rather than pointing us beyond to a further, divine source.

Through the process of evolution, the universe transforms itself by self-governing mechanisms over immense spans of time. The universe, Berry claims, “is self-emergent, self-sustaining, and self-fulfilling.”¹¹ The “primordial flaring forth,” which Berry and Swimme use to describe the beginning of the cosmic journey,¹² initiated a process of cosmogenesis that continues even unto now.

The ability of the cosmos to develop into its current state, Berry suggests, is worthy of contemplation and awe. Telling the story of the emergent universe ought to heighten our human appreciation of our place in the cosmos: certainly it might lead us to an awe of what Berry terms “that numinous mystery that pervades all the world”¹³; or what a Christian might describe as praise of the Creator and gratitude for the gift of existence. But cosmogenesis also ought to imbue us with a sense of awe for the mysterious cosmos itself. The power of the cosmos to unfold over time and to stretch in unimaginable directions orients and stimulates our wonder.

II.2.2. Creativity

Second, Berry emphasizes creativity in the emergent cosmogenesis. Creativity lies in the balance between discipline and wildness, the two guiding forces of the universe.¹⁴ Via Teilhard, Berry perceives in the somewhat chaotic process of evolutionary development a sense of order and general progression. In the curvature of space and the force of gravitational attraction, there is a constant interplay of law and chance and therefore the possibility of a creative disequilibrium. For example, the planet Earth represents how an ideal balance between the forces of discipline and wildness allows the possibility of creativity. An excess of discipline results in

the hard rock form of Mercury, with no possibility of fluidity or change, while Jupiter represents too much gaseous wildness, without the chance for stability.¹⁵ Discipline and wildness yield a cosmic process that leads from lesser to greater complexity, and from lesser to greater consciousness, which are the marks of vigorous creativity.

Scientists caution us not to read intentional creativity into this process. The theory of natural selection demands that changes happen unpredictably. Still, in Berry's telling of the cosmic story, the flowering of life on Earth manifests how this self-organizing process of cosmogenesis has clearly been fantastically fruitful, bringing forth manifold instances of novelty and innovation. Creatures of unimaginable color, size, and inclination point to powers of creativity that can only be described as awesome. Again, in a more conventional theological and theocentric framework, one could easily see in this story the traces of divine intentionality and ingenuity. Regardless, the inherent and vehement creativity of the universe to forge something new can and should stimulate our wonder.

II.2.3. *Celebration*

Third, the story of the emergent and creative cosmogenesis is fundamentally a story of celebration.¹⁶ Berry calls us to see the universe in its vastness and through its many transformations as a "single, multiform, celebratory expression." Or again, "Each of the events in the natural world is a poem, a painting, a drama, a celebration."¹⁷ Berry draws on artistic metaphors such as a poem or a drama to describe the universe for a variety of reasons: first, there is the obvious link between the creativity of an artist and the creativity of the universe itself. Second, Berry links the universe's creativity to the wonder and joy that we experience in significant artistic encounters. We celebrate inspiring works of art because of their inherent beauty, because they communicate *joy at being alive*. Berry describes the Earth "as an entrancing celebration of existence in all its alluring qualities."¹⁸ The universe (and more locally and more intensely the Earth) allures, entrances, and enwraps us in its own celebratory movement of existence. A celebration does not exist for further ulterior purposes; a celebration is its own justification, it is its own purpose.

Now, the human role amidst this cosmic celebration is not to discover and to celebrate the wonder of the universe as it presents itself to us. That alone would render us mainly observers, and it would limit the joy of celebrating the universe to human self-consciousness. Given

Teilhard's and Berry's insistence that the physical and the psychic are conjoined, we should say more properly that the human celebration of the Earth's beauty, of the cosmos's beauty, is the human participation in the universe's own preexistent and ongoing celebration. That is to say, celebration did not emerge only when human self-consciousness appears in the cosmic story. It is a feature of the cosmos itself. Celebration is multiform; it encompasses a variety of expressions. Yet it is also singular; it stems from the universe's origins even unto now.

Finally, likening the universe to a poem or a work of art is helpful because art demands an interpretation that appreciates the wider context in which it appears. Berry calls human beings to approach nonhumans as reverently as we might a work of art, and to perceive our own participation in life as one element of the universe's drama. Berry compares cosmogenesis to a symphony: "We need to see the Earth in its sequence of transformations as so many movements in a musical composition." Later musical notes and themes, such as humanity itself, make sense only in the context of what precedes them.¹⁹ Berry calls human beings to understand themselves as part of the drama of life, rather than the sole act. All the world's a stage, but all cosmic creatures are the players.

IV. The Journey of the Universe

For Berry, the story of the universe is a summons: a call to return us to our cosmic identity, an appeal to return our gaze to the stunning beauty of the Earth and the incomprehensibly creative cosmos. Berry and his collaborator Brian Swimme authored *The Universe Story*, which strives to narrate this creative and self-celebratory cosmogenesis in a way that people can appreciate the various transformations of this cosmic symphony. This vision guided the production of the award-winning film, *Journey of the Universe*, produced by Brian Swimme and Mary Evelyn Tucker.²⁰ This film represents the most sophisticated effort to date to bring the new story of the universe into the humanities, and to express the deeply human dimension of this story.

Throughout the film, Swimme as narrator articulates the various phases of cosmic evolution, and at each stage he explains in accessible terms not only what the sciences tell us but also *why this matters* for our human self-understanding. This amazing story places human

identity in full continuity with cosmic development. The essence of the universe story, Swimme tells us, is that “stars are our ancestors.” From them all life emerges.

For example, remarking on the huge pulsating spiral arms that form the Milky Way, Swimme comments “We live in the midst of this intense creativity.” Human creativity, he suggests, is a particular form of an already existing galactic and cosmic creativity. Later, Swimme asks how we might understand the process of photosynthesis. Some might see it simply as an engineering project, perhaps, but Swimme also offers the metaphor of two lovers, who meet in an exchange charged with energy and promise. Similarly, when discussing the development of compassion, Swimme asserts that scientists postulate this began hundreds of millions of years ago in the ocean with ancient fish. Mother fish frightened away predators rather than eat their own young. This was a new behavior. It was taken up and expanded by mammals, where babies are not just protected from predators but are nourished directly by their mothers. Further on, mammals communicated *survival information* to their young, and in some cases this requires years of training. Caring, Swimme concludes, broadened over hundreds of millions of years prior to the arrival of human beings. Creativity, love, compassion: what some might champion as uniquely human traits and capacities, the *Journey of The Universe* film upholds as the result of untold generations of planetary and cosmic development. These are not human traits; human love and compassion are human expressions of cosmic traits, planetary inheritances. “We are not just similar to animals, we have been shaped by them,” Swimme concludes. Rather than diminish our humanity, this link strengthens our human belonging to a wider community. Cosmogogenesis is not inimical or indifferent to human flourishing, but indeed human self-consciousness is an expression of the universe itself. Two of Berry’s most famous quotes are pertinent here: “The universe is a communion of subjects, not a collection of objects.”²¹ “The human is that being in whom the universe activates, reflects upon, and celebrates itself in conscious self-awareness.”²²

The film ends on a note of ambivalence: with the emergence of human symbolic consciousness, human beings begin to take control over the systems of life on Earth, and now we are as powerful as the planet itself. How should we use our unprecedented powers to develop ourselves in a way that enhances the well-being of the planetary community as well? Swimme asks, “Is there any deep wisdom that might help us align our consciousness with the grain of cosmic evolution? Wonder will guide us,” he answers. Our deepest yearning is not to consume

and enjoy the Earth's resources or to control it for our benefit. Rather, it is “for wholehearted participation” in the cosmic story, to experience ourselves as the “mind and heart of the universe.” At the end of the film, Swimme expresses the essence of the universe story in poetic terms, evoking the kind of wonder he hopes can guide us: “Over the course of 14 billion years, hydrogen gas transformed itself into mountains, butterflies, the music of Bach, and you and me.”

Brian Swimme and Mary Evelyn Tucker continue the work initiated by Pierre Teilhard de Chardin and Thomas Berry, which is now a pressing task for all religious communities and for the human family as a whole: narrating the story of the universe in a way that expresses its beauty and inherent goodness; and that articulates our human purpose within this universe so that we might reorient our cultures in a way that is sustainable. An indispensable part of this story, I propose, is *wonder*: wonder at the immensity of time and space in the universe's story, wonder at the universe's countless creative developments, wonder at our deep continuity with these cosmic processes, and wonder at our capacity to embody and to express this awe on behalf of the universe itself.

I'd like to conclude with the words of Thomas Berry, who voices this sense of wonder at our shared cosmic story in a brief poem in which he asks various beings what he should say about them:

*“I asked the moon what should I say and the moon said “Tell them my story”
And I asked the wind what should I say and the wind said “Tell them my story”
And I asked the clover out on the lawn, what should I say and the clover said “Tell them my story.”
My story, the mountain story, the river story, your story, the indigenous story, the great story.....²³*

¹ Tucker/Grim/Angyal, *Thomas Berry: A Biography*, xvii.

² Tucker/Grim/Angyal, *Thomas Berry*, 221.

³ Tucker/Grim/Angyal, *Thomas Berry*, 119.

⁴ Tucker/Grim/Angyal, *Thomas Berry*, 208.

⁵ Berry, *Great Work*, 163.

⁶ Berry, *Great Work*, 31.

⁷ Matthew Fox comments that evolution was in some ways a vocation for both Teilhard and Berry, such that Berry's work is a "journey with evolution and its profound and meaningful gifts to our sense of the whole." Matthew Fox, "Some Thoughts on Thomas Berry's Contributions to the Western Spiritual Tradition," in *Thomas Berry, Dreamer of the Earth*, ed. Ervin Laszlo and Allan Combs, 16–31 (Rochester, VT: Inner Traditions, 2011), 20.

⁸ Mary Evelyn Tucker, "An Intellectual Biography of Thomas Berry" in *Evening Thoughts: Reflecting on the Earth as Sacred Community*. San Francisco: Sierra Club Books and Berkeley: University of California Press, 2006: 163.

⁹ Tucker/Grim/Angyal, *Thomas Berry*, 210.

¹⁰ Tucker/Grim/Angyal, *Thomas Berry*, 206.

¹¹ Berry, *Great Work*, 190.

¹² Thomas Berry and Brian Swimme, *The Universe Story* (New York: HarperCollins, 1992).

¹³ Berry, *Dream of the Earth*, 106.

¹⁴ Berry, *Great Work*, 52.

¹⁵ Berry, *Great Work*, 52.

¹⁶ Celia Deanne-Drummond faults Berry for his excessively rosy estimation of the evolutionary development of life, in particular for his insufficient appreciation for the violence, suffering, and death it requires. Celia Deane-Drummond, *Eco-Theology* (Winona, MN: Anselm Academic, 2008), 42. I make a similar criticism of Catholic social thought and Thomas Berry, and I draw on James Nash to propose a model of the human as the creative and altruistic predator. See "Co-Creator or Creative Predator? James Nash's Contributions to Catholic Social Teaching on Ecological Ethics," *Worldviews: Global Religions, Culture, and Ecology* 18, no. 2 (2014): 99–121. Still, I think such a critique is valid only in the context of the overarching primacy of the cosmic story and the need for humanity to view it as good and to incorporate their own self-understanding within it. Thus the criticism is a valid addition and correction to Berry's cosmocentric worldview, but it does not replace it.

¹⁷ Berry, *Great Work*, 17.

¹⁸ Berry, *Great Work* 61

¹⁹ Berry, *Great Work*, 27.

²⁰ The Journey of the Universe is a project that includes not only the film but also a book, *Journey of the Universe* (New Haven: Yale University Press, 2014), and recorded conversations with multiple leading thinkers. See <https://www.journeyoftheuniverse.org>. In this paper I will focus on the film.

²¹ Berry, *Evening Thoughts*, 17.

²² http://thomasberry.org/assets/attachments/Berry_Twelve_Principles.pdf

²³ Nancy Stetson and Penny Morrell, *Thomas Berry: The Great Story*. Bullfrog Films, 2009.