

# ***JOURNEY OF THE UNIVERSE:*** **THE LINEAGE OF A NEW STORY**

Mary Evelyn Tucker

*Journey of the Universe* narrates the 14 billion year story of the universe's development, from the great flaring forth at the universe's inception to the emergence of simple molecules and atoms to the evolution of galaxies, stars, solar systems, and planetary life of greater complexity and consciousness. This is a story that inspires wonder, as we begin to understand such complexity through science and appreciate such beauty through poetry, art, history, philosophy, and religion. It also awakens us to the dynamic processes of evolution that are chaotic and destructive, as well as creative and life-generating.

The *Journey of the Universe* is a cosmology, although not just in the scientific sense of a study of the universe. Rather, it is a cosmology in the sense of being an integrated story that explains where both humans and life-forms have come from. All cultures have had such stories. We now have the capacity to tell a comprehensive story drawing on astronomy and physics to explain the emergence of galaxies and stars, geology and chemistry to understand the formation of Earth, biology and botany to envision life's evolution, and anthropology and the humanities to trace the rise of humans. *Journey of the Universe* draws on all these disciplines to narrate a story of the universe, Earth, and human evolution that is widely accessible. This is the first such telling of the story in film, and, no doubt, there will be other expressions, both scientific and artistic.

*Journey of the Universe* weaves science and humanities in a new way that allows for a comprehensive sense of mystery and awe to arise. This is in alignment with the call of environmental ethicist J. Baird Callicott to ‘reintegrate science and its epistemology into the wider culture by expressing the new nature of Nature as revealed by the sciences, in the grammar of the humanities’. Such an approach expands a human perspective beyond an anthropocentric worldview to one that values life’s complexity and sees the role of humans as critical to the further flourishing of the Earth community. Thus, *Journey of the Universe* does not rely on reductionistic scientism, which tends to see the universe and Earth as simply composed of mechanistic processes.

It does however recognize that evolution is governed by natural laws discoverable by scientific methods and empirical observation. The self-organizing dynamics of evolutionary processes are part of the remarkable creativity of evolution, which humans are discovering. While humans are gifted with the creativity of symbolic consciousness, we know that different kinds of self-organizing creativity abound in the universe and Earth – the formation of galaxies and stars, the movement of tectonic plates, the chemistry of cells, the biological complexity of photosynthesis, the migrating patterns of birds, fish, turtles, and caribou. Creativity is also closely aligned with chaos and destruction, as the universe unfolds on the edge of a knife.

*Journey of the Universe*, then, is a cosmological story of the unfolding of the universe and Earth in which life and humans emerge. This story is told in a poetic manner while relying on our best knowledge from modern science. Scientific facts and poetic metaphors are interwoven so that viewers of the film or readers of the book can understand how they arose from these creative processes and participate in them. This weaving is in the spirit of Loren Eiseley, the American anthropologist and nature writer, whose books and voice are a major influence on *Journey of the Universe*.

Such a cosmological perspective is both ancient and modern – embedded in certain aspects of world philosophies and religions and revealed anew in the scientific story of the universe. Thus science, along with philosophy and religion, help us to recognize ourselves as participating in a larger integrated whole. Humans are the microcosm of the macrocosm – they are the mind and heart of the vast evolving universe.

In this spirit, images and metaphors from the wisdom traditions of the world religions and philosophies are woven into *Journey of the Universe*. Indeed, there are numerous affinities between the world religions and *Journey of the Universe*, some of which are described in the talks that were delivered at the Chautauqua Institution conference on Our Elegant Universe in June 2013.<sup>1</sup> A conference at Yale University, in November 2014, drew over 400 people to explore the topic of *Living Cosmology: Christian Responses to Journey of the Universe*.

Indeed, the extensive work of the Forum on Religion and Ecology at Yale University is a complement to *Journey of the Universe*, since both these projects are concerned with our growing ecological crises.<sup>2</sup> As such, they are trying to awaken humans to recognize our dependence on nature's remarkable intricacy and to find a way forward amidst the unravelling of ecosystems. This work began with ten conferences at Harvard University and ten resulting volumes in which some 300 scholars illustrated that the religions of the world have theoretical and practical contributions to make to our ecological crisis. In this spirit, our culminating book, *Ecology and Religion* (Island Press, 2014), illustrates how religious ecologies and religious cosmologies have woven humans into nature and the cosmos both historically and at present.

### *Functional Cosmology and the Great Work*

*Journey of the Universe* is more than an awe-inspiring story, it is a functional cosmology, as cultural historian Thomas Berry suggested. This is because it harnesses the energy of awe and wonder for the multiple efforts of humans to contribute to the flourishing of the *Earth Community*. This is what Berry called the 'Great Work' in which humans will become a mutually enhancing presence for Earth's systems and societies. He felt this work would assist in the transition from the Cenozoic era to what he termed a life sustaining Ecozoic era. Many geologists, such as Paul Crutzen, are naming our present period the Anthropocene because of the immense effect of humans on Earth's ecosystems.

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1 Chautauqua Institution, Conference: Our Elegant Universe, June 2013 <[www.journeyoftheuniverse.org/conference-at-chautauqua/](http://www.journeyoftheuniverse.org/conference-at-chautauqua/)>.

2 The Forum on Religion and Ecology, Yale University, <<http://fore.research.yale.edu/>>.

There are hundreds of thousands of people around the planet who are participating in this transformative work for the environment, energy, agriculture, economics, education, the arts, sustainable cities, and improved racial relations. Many of these specialists are inspired by the comprehensive perspective of *Journey of the Universe*, and some are interviewed on their work in the 20 part educational series of *Journey of the Universe Conversations*.<sup>3</sup>

To participate in this transformative work, we are not suggesting that it is necessary to be informed by the *Journey of the Universe*. We are, however, noting that many people are moved to action by seeing themselves as part of a larger whole, namely a vast evolving universe. Indeed, some environmentalists, such as Australian rain forest activist John Seed, have been reinvigorated because of the perspective found in the *Universe Story* and *Journey of the Universe*.

In the field of education, Montessori teachers draw extensively on this evolutionary story, relying on books by Jennifer Morgan, who in turned had learned the narrative from Thomas Berry. Both Thomas Berry and Brian Thomas Swimme have spoken at Montessori teacher conferences and encouraged nature-based education as a way to tell the story. Thomas Berry was a major source of inspiration to Richard Louv in his environmental education for children, especially in its outdoors components. This is because all of Berry's writings reflect a profound understanding of the natural world and our participatory role in it.

### *History of the Journey of the Universe*

*Journey of the Universe* is a project that is more than three decades in the making. It is in the lineage of Thomas Berry's call for a 'New Story' that appeared in an article that he wrote in 1978. Berry felt that we needed to bring science and humanities together in an integrated cosmology that would guide humans into the next period of human-Earth relations. Ten years later, 'The New Story' was included in his *Dream of the Earth*. In 1992, cosmologist Brian Thomas Swimme collaborated with Berry to produce their book, *The Universe Story*.<sup>4</sup>

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3 *Journey of the Universe Conversations*, <[www.journeyoftheuniverse.org/ed-series-previews/](http://www.journeyoftheuniverse.org/ed-series-previews/)>.

4 Thomas Berry, 'The New Story', *Teilhard Studies 1*, New York: The American Teilhard Association for the Future of Man, Winter 1978; Thomas Berry, *Dream of the Earth: The Universe Story*, San Francisco: Sierra Club Books, 1988; Brian Swimme and Thomas Berry, *The Universe Story: From the Primordial Flaring Forth to the Ecozoic Era*, San Francisco: Harper, 1992.

Our film, *Journey of the Universe*, is the first time this story has been told in cinema.

Collaborating with scientists and scholars from the humanities for over a decade, Brian Thomas Swimme and I wrote the *Journey of the Universe* film script and book.<sup>5</sup> We organized several week-long summer workshops with scientists and humanists on Whidbey Island in Washington State (USA) to discuss these ideas. After completing the script, we made three trips to the Greek Island of Samos to film it with the director, David Kennard, who had been part of the *Cosmos* series team with astrophysicist Carl Sagan. We then worked closely with director Patsy Northcutt to edit the film. Cinematographer Neal Rogin's contributions with images were indispensable. Catherine Butler assisted in the editing, as well as in creating the *Journey of the Universe* website and bringing the film to the Public Broadcasting Service (PBS). Composer Chris Ward wrote an original music score, and John Grim, a co-producer, was an advisor to the film, along with Thomas Berry.

The film was completed in 2011 and premiered at a conference in March at the Yale University School of Forestry and Environmental Studies. This conference brought together scientists and humanists to reflect on the cosmological implications of *Journey of the Universe*. Since that time, the film has been shown at film festivals, museums and universities, as well as at religious and community organizations. It premiered on KQED television in San Francisco in June 2011 and has since been broadcast on 77 per cent of the national PBS stations. In June 2012, *Journey of the Universe* won an Emmy in Northern California for best documentary film. It has been shown on every continent with further showings being planned in India, China, Europe, and Latin America. In one year on Netflix it was rated by over 64,000 people.

The accompanying *Journey of the Universe* book was published by Yale University Press in 2011. The *Journey Conversations* are a series of twenty interviews with scientists and environmentalists hosted by Mary Evelyn Tucker, completed in 2012. A curriculum that unites the trilogy is posted on the Journey website, along with an annotated

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5 Brian Thomas Swimme and Mary Evelyn Tucker, *Journey of the Universe*, New Haven: Yale University Press, 2011; idem, *Journey of the Universe*, dirs. David Kennard and Patsy Northcutt, KQED-PBS, 2011.

bibliography.<sup>6</sup> These can be used for discussion or teaching. Further detailed curriculum and workshops are being planned for secondary school and college teachers. Translations of the film and book are underway along with international distribution. The film has been translated into Spanish, and the book into French, Italian, Chinese, Korean, Turkish, and Russian.

*Journey of the Universe*, then, is in a thirty-five year lineage of the ‘New Story’, first expressed by Thomas Berry. It affirms the value of a science-based evolutionary narrative that is woven with philosophical and religious insights in a poetic style. It welcomes further reflection on this narrative as a means to activate a global ethics like the Earth Charter (2000), as well as to encourage place-based environmental ethics in bioregions and watersheds around the world. It is certainly a film and book that awaken awe and wonder in nature itself as has been demonstrated in showings around the world.

**Mary Evelyn Tucker** has appointments at Yale University in the School of Forestry and Environmental Studies as well as in the Divinity School and in the Department of Religious Studies. She also teaches in the joint M.A. program for religion and ecology. With her husband, John Grim, she directs Yale’s Forum on Religion and Ecology. Along with Brian Thomas Swimme, she created a multi-media project called *Journey of the Universe*, which includes an Emmy award-winning film, a book, and a DVD series of 20 interviews that she did with leading scientists, educators and environmentalists, titled *Journey Conversations*. Her Eportals can be accessed through <<http://fore.yale.edu>> and <[www.journeyoftheuniverse.org](http://www.journeyoftheuniverse.org)>.

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<sup>6</sup> *Journey of the Universe*, curriculum <[www.journeyoftheuniverse.org/curriculum/](http://www.journeyoftheuniverse.org/curriculum/)>, bibliography <[www.journeyoftheuniverse.org/bibliography/](http://www.journeyoftheuniverse.org/bibliography/)>.