

## The Universe Story and Planetary Civilization

Mary Evelyn Tucker and Brian Thomas Swimme

As we see our present interconnected global challenges of widespread environmental degradation, climate change, crippling poverty, social inequities, and unrestrained militarism, we know that the obstacles to the flourishing of life's ecosystems and to genuine sustainable development are considerable.

In the midst of these formidable challenges we are being called to the next stage of evolutionary history. This requires a change of consciousness and values—an expansion of our worldviews and ethics. For the evolutionary life impulse moves us forward from viewing ourselves as isolated individuals and competing nation states to realizing our collective presence as a species with a common origin story and shared destiny. The human community has the capacity now to realize our intrinsic unity in the midst of enormous diversity. And, most especially, it has the opportunity to see this unity as arising from the dynamics of the evolutionary process itself. We have for the first time a scientific story of the evolution of the universe and Earth that shows us our profound connectedness to this process. We are still discovering the larger meaning of the story.

***Thus the integrated story of the origin and development of the universe, of Earth, and of humans could become an inspiring vision for our time. This is because this story is giving us a sense of common evolutionary heritage and shared genetic lineage.***

***Beyond world wars and the cold war, there beckons the sense of a larger planetary whole—an emerging, multi-form, planetary civilization. It is in participating in this transition moment that we will fulfill our role as humans on behalf of future generations.***

Our sense of the whole is emerging in a fresh way as we feel ourselves embraced by the evolutionary powers unfolding over time into forms of ever-greater complexity and consciousness. We are realizing too, that evolution moves forward with transitions, such as the movement from inorganic matter to organic life and from single celled organisms to plants and animals that sweep through the evolutionary unfolding of the universe, the Earth, and the human. All such transitions come at times of crisis, they involve tremendous cost, and they result in new forms of creativity. The central reality of our times is that we are in such a transition moment. This is not an easy moment as already human suffering and environmental loss are widespread. It is not a guaranteed transition, as it will require tremendous human creativity, emotional intelligence, and spiritual strength.

Surrounding this moment is an awakening to a new consciousness that is challenging older paradigms of the human as an

isolated being in a random, purposeless universe. Paul Raskin has called this the Great Transition while Joanna Macy has named it the Great Turning. Our consciousness is shifting from valuing hyper-individualism and independence to embracing interdependence and kinship on a vast scale. The Enlightenment values of life, liberty, and the pursuit of happiness are being reconfigured. Thus life now includes the larger life of the Earth, individual freedom requires responsibility to community, and happiness is being defined as more than material goods. A sense of a larger common good is emerging—the future of the planet and its fragile biosphere.

In this spirit we are in a transition from an era dominated by competing nation states to one that is birthing a sustainable multicultural planetary civilization. This birth is occurring within the context of our emerging understanding of the universe story.

Over the past century, science has begun to weave together the story of a historical cosmos that emerged some 13.7 billion years ago. The magnitude of this universe story is beginning to dawn

on humans as we awaken to a new realization of the vastness and complexity of this unfolding process.

At the same time that this story is becoming available to the human community, we are becoming conscious of the multidimensional environmental crisis and of the rapid destruction of species and habitat that is taking place around the planet. Just as we are realizing the vast expanse of time that distinguishes the evolution of the universe over some 13.7 billion years, we are recognizing how late is our arrival in this stupendous process. Just as we are becoming conscious that Earth took more than 4 billion years to bring forth this abundance of life, it is dawning on us how quickly we are foreshortening its future flourishing.

We need, then, to step back to assimilate our cosmological context. If scientific cosmology gives us an understanding of the origins and unfolding of the universe, philosophical reflection on

scientific cosmology gives us a sense of our place in the universe. And if we are so radically affecting the story by extinguishing other life forms and destroying our own nest, what does this imply about our ethical sensibilities or our sense of the sacred? As science is revealing to us the particular intricacy of the web of life, we realize we are unraveling it, although unwittingly in part. Until recently we have not been fully conscious of the deleterious consequences of our drive toward economic progress and rapid industrialization.

As we begin to glimpse how deeply embedded we are in complex ecosystems and dependent on other life forms, we see we are destroying the very basis of our continuity as a species. As biology demonstrates a fuller picture of the unfolding of diverse species in evolution and the distinctive niche of species in ecosystems, we are questioning our own niche in the evolutionary process. As the size and scale of the environmental crisis is more widely grasped, we are seeing our own connection to this destruction. We have become a planetary presence that is not always benign.

It can be said that this new moment for science involves three intersecting dimensions: understanding the evolution of the universe and the Earth with the best scientific methods, integrating the evolutionary narrative as a whole (cosmic, Earth, human), and reflecting on the story with a sense of our responsibility for its continuity. From this there emerges a new integration of scientific facts, story and meaning.

Environmental ethicists and scholars of the world's religions are also being called to contribute to this understanding of the universe story. The challenge for religion and ethics is both to revision our role as citizens of the universe and to reinvent our niche as members of the Earth community. This requires reexamining such cosmological questions as where we have come from and where we are going. In other words, it necessitates rethinking our role as humans within the larger context of universe evolution as well as in the closer context of natural processes of life on Earth.

What is humankind in relation to 13.7 billion years of universe history? What is our place in the framework of 4.6 billion years of Earth history? How can we foster the stability and integrity of life processes? These are critical questions underlying the new consciousness of the universe story. This is not simply a dynamic narrative of evolution; it is a transformative cosmological story, which engages human energy for a future that is sustaining and sustainable.

The goal of the universe story, then, is to tell the story of cosmic and Earth evolution drawing on the latest scientific knowledge, in a way that makes it both relevant and moving. What emerges is an intensely poetic story, which evokes emotions of awe and excitement, fear and joy, belonging and responsibility.

This universe story is a dramatic one. Throughout billions of years of evolution, triumph and disaster have been only a hair's breadth

apart. Violence and creativity are pervasive. The ability of matter to organize and re-organize itself is remarkable—from the formation of the first atoms to the emergence of life. We are coming to realize that the energy released at the very beginning has finally become capable in the human of reflecting on and exploring its own journey of change. Simple hydrogen has become a vibrant living planet, with beings that now are able to investigate how this has happened and imagine a life sustaining future.

Waking up to our fundamental relationship with the cosmos will be a means of re-engagement with life. The universe story enables us to connect more deeply with the universe and the Earth of which we are a part. In doing this, we will appreciate the need for a sustainable human presence on the planet.

Thus the integrated story of the origin and development of the universe, of Earth, and of humans could become an inspiring vision for our time. This is because this story is giving us a sense of common evolutionary heritage and shared genetic lineage. This new understanding of kinship of humans with each other and with all life could establish the foundations for rediscovering our past and sustaining the future.

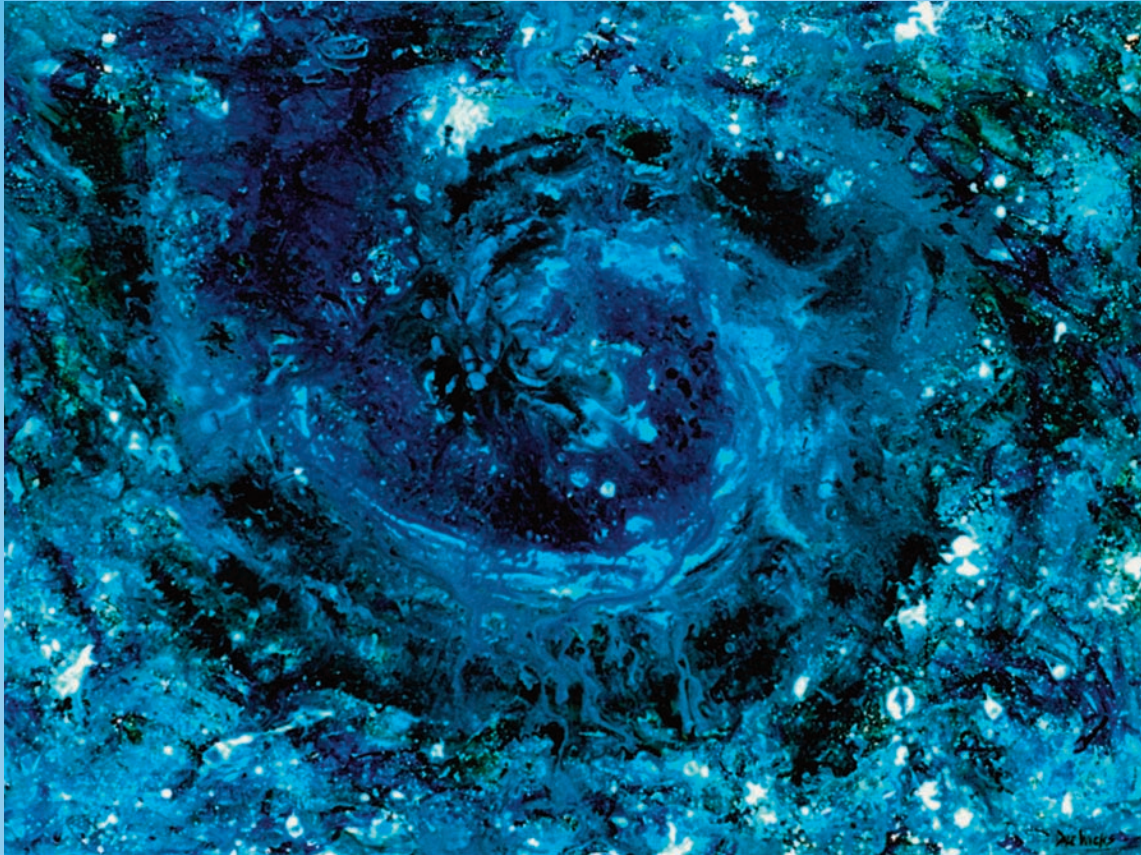
We can indeed be inspired by this view of nested interdependence—from galaxies and stars to planets and ecosystems—so that we sense how personally we are woven into the fabric of life. We are part of this ongoing journey. From this perspective we can see that our current destructive habits towards the environment are unsustainable. In an evolutionary framework the damage we are causing is immense—indeed cataclysmic. We can thus recognize ecological, economic, and social change as not only necessary but inevitable.

A great transition is indeed upon us. Beyond world wars and the cold war, there beckons the sense of a larger planetary whole—an emerging, multiform, planetary civilization. It is in participating in this transition moment that we will fulfill our role as humans on behalf of future generations. It requires a profound change of consciousness and values—both an expanded worldview of the universe story and a comprehensive global ethics that embraces the Earth community. In this way we will indeed become citizens, not simply of nation states, but of a planet that beckons us with beauty, mystery, and grace.

Note: This is an edited version of an article published in *Moral Ground*, Kathleen Dean Moore and Michael P. Nelson eds., Trinity University Press, August 2010.

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**Brian Thomas Swimme** is a professor at the California Institute of Integral Studies in San Francisco. He received his Ph.D. from the Department of Mathematics at the University of Oregon for work in gravitational dynamics. Swimme is the author of *The Hidden Heart of the Cosmos* and *The Universe is a Green Dragon*. He is co-author of *The Universe Story*, which is the result of a 10 year collaboration with the cultural historian, Thomas Berry.



milky way rain art

Just as the Milky Way is the universe in the form of a galaxy, and an orchid is the universe in the form of a flower, we are the universe in the form of a human. And every time we are drawn to look up into the night sky and reflect on the awesome beauty of the universe, we are actually the universe reflecting on itself.

And this changes everything.

— Journey of the Universe

a film | a book | a DVD educational series

## Journey of the Universe

### The Inspiration Behind Journey of the Universe

*"We have a new story of the universe. Science has given us a new revelatory experience. It is now giving us a new intimacy with the Earth."*

— Thomas Berry, *Dream of the Earth*

At its heart, *Journey of the Universe* celebrates the collective inspiration of a lively and prolific 30-year-friendship between three visionaries in the fields of science, evolutionary philosophy and world religions—Thomas Berry, Brian Thomas Swimme and Mary Evelyn Tucker.

Deeply inspired by Berry's article titled "The New Story," which observed how humans are in between stories—creation stories of the world's religions and the scientific story of the evolution of the universe—both Brian and Mary Evelyn joined forces to create and co-write this epic narrative film and book that translates our wondrous connection to the cosmos to a broader audience.

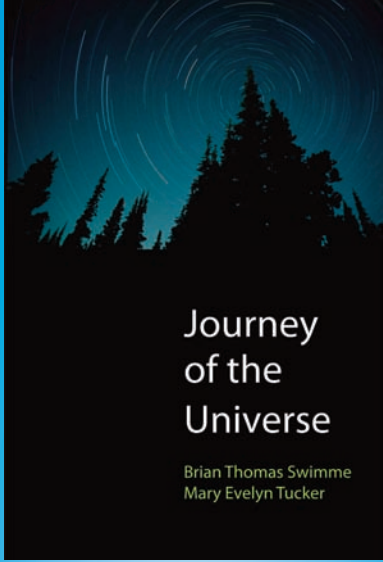
The film's message shows how we are not just a part of this astonishing process, we are at the very edge of evolution, a primate species that has found in its language and symbols the power to take over the very evolutionary process itself. But this control that we now exercise comes with a responsibility; and viewers of *Journey of the Universe* will not only be imbued with a sense of astonishment at all that has taken place, they will also come to feel the excitement in learning that now we live in a time when the human species is being asked to play a central role in activating the flourishing powers of Earth's living systems.

We live in a universe of remarkable creativity that has evolved over some 14 billion years. The goal of *Journey of the Universe* is to tell the story of cosmic and Earth evolution drawing on the latest scientific knowledge, in a way that makes it profoundly relevant and deeply moving to the viewer. What emerges is an intensely poetic story, which evokes emotions of awe, excitement, fear, joy and belonging.

This story told in *Journey of the Universe* is a dramatic one. Throughout billions of years of evolution, triumph, and disaster have been only a hair's breadth apart. Violence and creativity are pervasive. The ability of matter to organize and re-organize itself is remarkable—from the formation of the first atoms to the emergence of life.

One of the aims of this project is to use the art of storytelling to capture the grandeur and drama of this epic of the universe—from the Big Bang, to where we are today in a moment of great transition. The *Journey of the Universe* will show us how the lineage of stardust can shape the way we feel about our own planet, so that we might better cherish and protect what gave us life and nourishes us still.

The film, the book (published by Yale University Press) and the DVD series will be available in June 2011. For more information see: [www.journeyoftheuniverse.org](http://www.journeyoftheuniverse.org)



*above to below*  
book cover; Brian Thomas Swimme;  
Mary Evelyn Tucker; image from the  
film



"The great discovery of contemporary science is that the universe is not simply a place, but a story—a story in which we are immersed, to which we belong, and out of which we arose....this is such a comprehensive story that it challenges our understanding of who we are and what our role might be in the universe. Are we here by chance, by necessity, by serendipity, or on purpose?"

— Journey of the Universe



Our role is to provide the hands and hearts that will enable the universe's energies to come forth in a new order of well-being. Our destiny is to bring forth a planetary civilization that is both culturally diverse and locally-vibrant, a multiform civilization that will enable life and humanity to flourish.

— Journey of the Universe

## gallery | climate change in our world

Gary Braasch



chinese kids playing in dry rice field

Cultural selection has overwhelmed natural selection. That is, the survival of species and of entire ecosystems now depends primarily on human activities. We are faced with a challenge no previous humans even contemplated: How are we to make decisions that will benefit an entire planet for the next several millennia?

— Journey of the Universe

**Gary Braasch** is a world caliber environmental photojournalist who creates remarkable images and documentation about nature, environment, biodiversity and global warming. His images and assignment articles have been published by Time, LIFE, Discover, Smithsonian, National Geographic, Scientific American and the United Nations among many others. He received the Ansel Adams Award from the Sierra Club and the Outstanding Nature Photographer citation from the North American Nature Photography Association. In 2010 he was named as one of the Forty Most Influential Nature Photographers by Outdoor Photography magazine. Gary Braasch is author of *Earth Under Fire: How Global Warming is Changing the World*, which Al Gore calls "essential reading for every citizen." An exhibit of giant prints and educational images, "Climate Change in Our World," premiered at the American Association for the Advancement of Science, Washington DC, in November 2009. Photographs in this gallery are from that exhibit. [www.braaschphotography.com](http://www.braaschphotography.com)





Bangladesh village edge 2005

Our systems of housing, transportation, agriculture and commerce are intertwined and are constructed without significant reference to the patterns of organic life of the enveloping ecosystems. With billions of humans hooked into this vast machine, material production rises but the cost is self-destructive.

— Journey of the Universe



Great Barrier Reef threatened by ocean warming

It is in the nature of the universe to move forward between great tensions, between dynamic opposing forces. If the creative energies in the heart of the universe succeeded so brilliantly in the past, we have reason to hope that such creativity will inspire us and guide us into the future.

— Journey of the Universe