

ENGLISH 3396

COSMIC NARRATIVES FOR CHILDREN

Barry Wood

Fall 2012, Tues 7-10 p.m.

Course Description

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NW Campus, Compaq Center

[Room # available on first night of class]

Google “cosmic narratives”

Description: A narrative history of the Universe as told in ancient myths and modern cosmic narratives based on the sciences, as presented in recent children’s literature. (Elective course.)

COSMIC NARRATIVES is a term we use for stories humans have told from the beginning of recorded history until the present. **ANCIENT Cosmic Narratives**, more commonly known as myths, were told by pre-civilized and early civilized peoples. They recount the origin of the Sun, Moon, Earth, stars, Milky Way, people, and their cultures. We are most familiar with ancient cosmic narratives told by the Greeks, but hundreds of such stories were told by the Egyptians, Sumerians, Hindus, Chinese, Romans, Vikings, Celts, and Native Americans. These narratives were pre-scientific. They were not based on fact, but they provided emotional satisfaction and social bonding for tribal peoples. **MODERN Cosmic Narratives** derive from the sciences—anthropology, astronomy, biology, chemistry, genetics, geology, and physics. They tell stories of how the Universe began; how galaxies, stars, planets, and Earth were formed; the history of the rise of life; the emergence of humans; and the development of human culture. Together, these stories make up what can be called **The Grand Narrative**—an epic story covering the 13.7 billion-year history of the Universe, the 4.5 billion-year history of Earth, the 200-thousand-year history of *Homo sapiens*, and the 40-thousand-year history of human culture from the cave paintings in Europe to modern art, music, and technology. [For a fuller description of this background, **google “cosmic narratives”** and click on **the Syllabus for COSMIC NARRATIVES**, a core curriculum course offered at UH each semester.]

COSMIC NARRATIVES FOR CHILDREN includes a brief version of the **Cosmic Narratives** course, along with a selection of contemporary children’s books that incorporate modern scientific understandings of cosmic history into stories. Many writers and illustrators have retold not only the ancient myths of early peoples but also the Grand Narrative of cosmic history in beautifully written and lavishly illustrated books.

Assigned Books

In the following list, books assigned for the course are numbered. (Some additional books are named but not numbered; these are not assigned.) The first two books provide a selection of **ANCIENT COSMIC NARRATIVES** (early myths) for children:

(1) *How the World Began* (Lorenz Books 2003) retells 16 creation stories from Egypt, the Middle East, Africa, China, Northern Europe, India, Polynesia, and prehistoric America.

(2) D’Aulaires’ *Book of Greek Myths* (Yearling 1962) retells the stories of all the Greek gods and goddesses who were in charge of Earth (Gaea), the sky (Zeus), Sun (Helios), dawn (Eos), sea (Poseidon), and underworld (Hades), along with those who provided humans with knowledge (Prometheus), poetry (the Muses), and music (Orpheus).

These two books provide a gateway to the pre-scientific, literary world of ancient peoples.

MODERN COSMIC NARRATIVES, or **The Grand Narrative**, are treated in a new book by mathematical cosmologist Brian Swimme, author of *The Universe Story* (Harper 1992):

(3) **Brian Swimme and Mary Tucker, *Journey of the Universe* (Yale 2011)** recounts the whole 13.7 billion-year history of the Universe from beginnings to the “emerging Earth community” today. This assigned book provides a theoretical background for the course in a beautifully written account of cosmic history by renowned scientists. Both timeline and bibliography are superb.

The rest of the assigned books narrate the history of the Universe in language understandable for children and accurate in terms of scientific theory, observation, evidence, and present knowledge. Taken together, they provide not only a meaningful story of the past but a secure foundation for general science literacy.

(4) **Virginia Lee Burton, *Life Story: The Story of Life on Earth from the Beginning up to Now* (Houghton Mifflin 1962)** This early book has text on the left and illustrations on the right, with each painting in the form of a stage drama. Attractive endpapers and spiraling timelines around the text provide an accurate cosmic chronology.

(5) **Karen C., Fox, *Older Than the Stars* (Charlesbridge 2010)** Addressing the young child, this book begins, “You are as old as the universe,” then narrates the many stages of cosmic history in poetry reminiscent of the Dr. Seuss books. The illustrations are bold, bright, and colorful to appeal to the young child.

(6) **Michael Rubino, *Bang! How You Came to Be* (Prometheus Books 2010)** Beginning with the Big Bang, this book includes realistic paintings of life forms from one-celled bacteria to fish, amphibians, mammals, and primates while judiciously skipping dinosaurs which are a diversion from the main developmental line leading to humans.

(7) **Jennifer Morgan, *Born with a Bang: The Universe Tells Our Cosmic Story* (Dawn 2002)** This first volume of a trilogy, reviewed and praised in the pre-eminent journal, *Science*, is spectacularly illustrated with an autobiographical text and an appendix with a precise scientific account, timeline, and glossary.

(8) **Jennifer Morgan, *From Lava to Life: The Universe Tells Our Earth Story* (Dawn 2003)** The second volume of the trilogy, in the same format as the first, carries kudos from several eminent biologists. [Another notable earth history for younger children is found in **Eric Maddern, *Earth Story* (Barron’s 1988).**]

(9) **Jennifer Morgan, *Animals Who Morph: The Universe Tells the Evolution Story* (Dawn 2006)** The third volume in this trilogy brings the evolutionary epic to the present.

(10) Lisa Westberg Peters, *Our Family Tree* (Harcourt 2003) A lavishly illustrated book built around the idea that our family history extends far further than the earliest great-grandfather we can remember; our genealogical roots trace back in time through more than 3 billion years to the earliest forms of one-celled life on Earth.

(11) Kathy Baron, *The Tree of Time (Yosemite National Park 1994)* This story follows a giant sequoia (the famous Wawona Tree in Sequoia National Park) from the falling of a seed to the ground around 300 BCE (when Hannibal was marching across the Alps to invade Rome) through 2,300 years until the ancient tree fell in 1969. (Google “Winona Tree” for the real-life story.) The story of the tree is told on the left; parallel historical events are told on the right. This is one of 3 “tree” stories that stretch children’s imaginations beyond their own limited world: the others are **Holling Clancy Holling, *Tree in the Trail* (Houghton Mifflin 1942)** and **Carol Reed-Jones, *The Tree in the Ancient Forest* (Dawn 1995)**, both linking the life of a tree to several centuries of human history to convey the more extended life cycles of nature.

(12) Audrey Wood, *When the Root Children Wake Up* (Scholastic Press 2002) This story of the progress of the seasons, from spring to winter, is the earliest book on our list. Originally published in German (1906) by Sibylle von Olfers (1881-1916), it provides a colorful personified view of nature’s cycles. [Another work of personified nature is **Joseph Anthony’s *The Dandelion Seed* (Dawn 1997)**, which captures the fear of the drifting seed until it fulfills its destiny—blossoming forth as new dandelion flowers.]

(13) Daniel Loxton, *Evolution; How We and All Living Things Came to Be* (Kids Can Press 2010) While this book is not a literary narrative, it provides an easily accessible explanation of evolutionary theory for the young adolescent, including answers to common questions (“How do we know that evolution happens?” “How could evolution produce something as complicated as my eyes?” “Isn’t the web of life too complicated to have come about through evolution?”). Simple, accurate, and informative, this book conveys a sense of evolution’s “awesome power.”

(14) Dr. Seuss, *The Lorax* (Random House 1971) A children’s book that presents the dangers of industrial expansion to the point of environmental destruction.

The following book for young children is not assigned, but it reveals how extensive “cosmic narratives for children” have become in recent years. **Neal Layton’s *The Story of Everything: From the BIG BANG until now in eleven pop-up spreads* (British Library 2006)** captures the whole cosmic story in a clever pop-up format. Included is a cartoon wall poster and a spiral hanging mobile timeline reminiscent of the chronology in Nigel Calder’s, *Timescale* (1983).

Theoretical books that supplement *Journey of the Universe* (No. 3 above) are numerous. The forerunner course (ILAS 2360 /ENGL 2340: COSMIC NARRATIVES) is supported by books on reserve in the M. D. Anderson library. This archive—the largest reserve collection for any UH course—is available to students in COSMIC NARRATIVES FOR CHILDREN.

NOTE: While readings in the assigned children's books are easy, the Cosmic Narratives on which they are based will require attention, reading, and regular attendance. The course will include regular writing in each class session in a pedagogical style known as "write to learn." Students should not take this course assuming that it will be an easy course. The intention is to develop science literacy for students enrolled in the course, and then to see how this goal has become a part of contemporary children's literature.