

How Do The Arts Feature in the “Big History” of Human Development?

Conversation with Cynthia Brown, Ph.D.

Cynthia Brown, author of the book *Big History: From the Big Bang to the Present* (New York, 2007), devoted the her opening remarks to explaining the term "Big History." Coined by David Christian (*Maps of Time: An Introduction to Big History*, Berkeley, 2004), the term refers to the study of the history of human beings and the natural world on the largest possible scale—from the universe’s origins in the “Big Bang” 13.7 million years ago to the present day. This “panoramic scale” cannot replace the more detailed study of human events on a smaller scale, but is a powerful supplement to more detailed study, because it reveals things that one wouldn’t notice on a smaller scale and prompts questions that one might not otherwise ask. Looking at human history on a large scale, for example, one notices that agriculture began simultaneously and independently in several different places, whereas industrialization began in England and spread through imitation of the English model. These facts and the contrast between them beg for explanation. Studying history on a panoramic scale also reveals trends that otherwise might not appear as clearly—that, for example, the complexity of human societies, the amount of energy in “human systems,” and the rate of extraction of natural resources have increased over time.

As for the contours of Big History, Dr. Brown divides it into eight chapters, each of which corresponds to the crossing of a “threshold”: (1) the Big Bang, (2) the birth of stars and galaxies, (3) the death of stars and the creation of the elements, (4) the formation of our solar system, (5) the emergence of life, (6) the emergence of *homo sapiens*, (7) the emergence of agriculture and civilization, and (8) the burning of fossil fuel and industrialization. Dr. Brown noted that the study of Big History is not a new idea—it has been attempted for at least a century under the heading, “universal history” – but has been considerably advanced by recent improvements in dating techniques. As a field, however, it is still being invented. Its presence in university curricula is slight, and Dr. Brown and colleagues of hers are writing a textbook that they hope will make it easier to teach Big History on the university level.

On the question of art’s importance in human development, Dr. Brown noted that attempts to distinguish human beings from other animals with reference to our capacity to make and use tools have been refuted by Jane Goodall’s studies of tool-making in chimpanzees. The most convincing attempts to distinguish us from other animals now refer to the high level of our linguistic communication and our capacity to make music and art. Cockatoos move rhythmically to music, chimpanzees can be made to paint on pieces of paper (which they will continue to paint until the colors become muddy unless the pieces of paper are taken away), and the bower birds of Papua New Guinea decorate their nests with red berries—but the creation of art on the level and scale of human beings seems to be unique and may be the result of uniquely human cognitive capacities.

The discussion between Dr. Brown, Michele Delattre, and members of the audience raised several points:



(1) Michele Delattre pointed out that one of art's functions is to portray the future, which means that many artists try to grasp and represent how human civilizations will cross the kind of thresholds that Big History uses to demarcate phases in the development of the universe and of human history. Frida Kahlo's 1948 painting, *Love Embrace of the Universe* (left), exemplifies this: it shows "Mother Earth" in the context of "Mother Universe" and thereby captures the transition to "global thinking" in our own time. In their use of the imagination to see how events in their own lifetimes are connected with the larger trends of Big History, artists like Frida Kahlo also resemble scientists, who often arrive at theoretical breakthroughs in the course of daydreams.

(2) On the one hand, it seems as if more and more people lack the training necessary to look at art in a sophisticated way, and yet on the other hand this problem may be solved by the extent to which our culture has become more visual, as can be seen by the ever-increasing interest in watching videos.

(3) Dr. Brown reiterated that evolution is not progressive, as Darwin knew. Big History is simply a description of change. The idea of *progress* was added to concepts of evolution in the nineteenth century.



(4) Teachers of history who want to incorporate art should remember that art "communicates and transforms," and that images have had important historical consequences. As an example, Michele Delattre cited a 1968 photograph of the Earth by Apollo 8 astronaut, William A. Anders (left). It was the first popularized image from space and resonated with her generation. Unlike maps of the world that signified the ambitions and successes of imperialist powers, this image made the Earth seem fragile and small, and it became a catalyst of the environmental movement. Our next threshold of imagining our place in the universe might similarly be suggested by the [Hubble telescope images](#) of the cosmic physics.

(5) Images like a series of photographs of Manhattan imagined through time ([Mannahatta Project](#)) can also be used to illustrate the pace of historical change.

Summarized by Simon Grote.