

Cosmologies of the Ancient World

The mysteries of the universe have intrigued humankind since ancient times. **Cosmology** is the branch of philosophy that deals with the origin and the structure of the universe.

Over time, cosmologies have evolved according to the developments we've made in other areas, such as astronomy and mathematics.

Early cosmologies were often based upon the belief that the universe was created by a deity. One of the earliest of these beliefs is that the goddess Gaia and her daughter Themis established order out of chaos and created the earth and its inhabitants. In the ancient empires of Babylonia and Assyria, the god Marduk, shown at right, was believed to have created the world after halving the chaos-monster Tiamat, from whose two halves sprang the earth and the heavens.

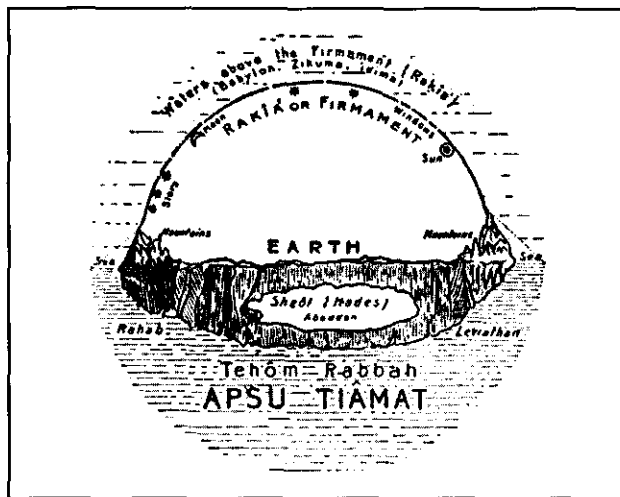
Today we know that the sun is a star and that the moon is a satellite, but in ancient times, the technology required to know these things was nonexistent, and the features of the universe were often represented as people or as animals. For example, in ancient Egypt, the earth was seen as a human figure reclining beneath the floating sun, enclosed by the heavens in the form of a starry woman. In ancient India, Akupara, the tortoise, supported elephants that, in turn, supported the earth, as shown below right. All were surrounded by a snake that represented eternal birth and rebirth.

For more on cosmology, see vignettes 6, 11, 12, 16, 26, 41, 42, 59, and 91. ★

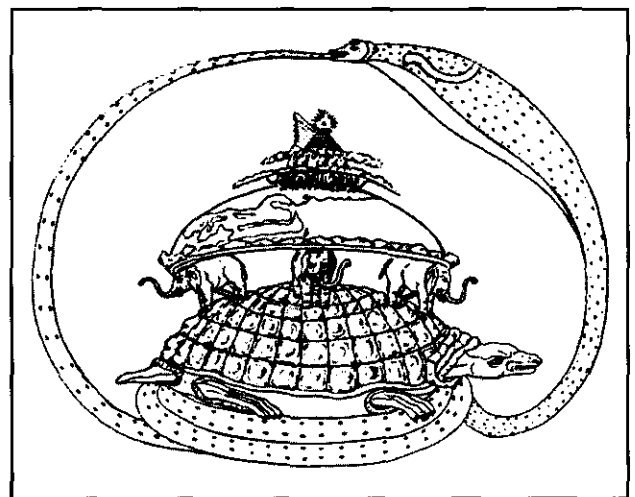


The Assyrian-Babylonian god Marduk, as represented on a wall carving from Nineveh, the ancient capital of Assyria (now in Iraq).

Ancient Hebrew cosmology



Ancient Hindu cosmology



Activities

1. Read about the important contributions the Babylonians and the Assyrians made to the early development of observational astronomy. How did those developments affect the way these early civilizations understood the universe?
2. Compare the cosmological ideas of ancient Egyptian scientists with those of medieval scientist **Hildegard von Bingen** and Renaissance astronomer **Galileo Galilei**. What astronomical and mathematical concepts did each rely upon to come to their understanding of the universe?
3. Explore some of today's theories about the origins of the universe.

Related Reading

Alic, Margaret. *Hypatia's Heritage*. Boston: Beacon Press, 1986.

Hawking, Stephen. *A Brief History of Time*. New York: Bantam Books, 1988.

Moeschl, Richard. *Exploring the Sky*. Chicago: Independent Publishers Group, 1989.

Scarre, Chris (ed). *Timelines of the Ancient World*. New York: Dorling Kindersley, 1993.

Tauber, Gerald E. *Man's View of the Universe*. New York: Crown Publishers, 1979.