Gaia

Gaia ("Earth") is the name of a Greek goddess also called Ge, from whose name words like "geology" and "geography" are derived. The ninth-century B.C.E. Homeric Hymn calls Gaia "mother of all, eldest of all beings," while the *Theogony* of eighth-century B.C.E. Greek poet Hesiod describes the simultaneous birth of Eros ("love . . . breaks the limbs' strength") and "broad-breasted" Gaia, "immovable foundation of all things forever." Gaia immediately began to reproduce, "without any sweet act of love," her children, including the mountains and seas. Her most-beloved parthenogenetic child was Uranus, the sky, with whom she mated to produce Oceanus (ocean), Themis (justice), Mnemosyne (memory), and the other divine beings called the Titans.

Other classical writers offer creation myths in which Earth is not the primary actor. Pliny describes a primordial goddess, Eurynome, who whirled into existence a wind from which she created the serpent Opion, with whom she produced an egg from which the world hatched. Orphic literature calls the primordial mother Nyx ("night"), consort of the wind. But the myth of Gaia was favored by authors including Homer, Euripedes, and Pindar. Such frequent literary use does not prove that the Greeks gave priority to the Earth-goddess as the universal creative matrix; there is little known of Greek rituals to Gaia, who is presumed by some to be a pre-Hellenic divinity barely absorbed into the later pantheons.

Contemporary awareness of Gaia dates to 1969, when physician and inventor James Lovelock, researching with Dian Hitchcock ways of determining from afar the probability of life on Mars, argued that the red planet's atmospheric equilibrium - its elements rarely changing in proportion to each other - showed it unlikely to host life, while Earth's atmospheric signature is disequilibrium. When Lovelock expanded this observation into a vision of the Earth as a self-regulating system, his neighbor and friend, Nobel prize-winning novelist William Golding, named the hypothesis "Gaia." Prominent biochemist Lynn Margulis brought her knowledge to bear on the emergent theory and is now, with Lovelock, generally recognized as its co-founder. The hypothesis has inspired many contemporary theologians and thealogians, its founders remaining aloof from, although not publicly disapproving of, such religious use of their ideas.

The non-mechanical vision of the Earth had been previously suggested by the Scottish founder of geology,

James Hutton, in the eighteenth century, and again by nineteenth-century Ukrainian scientist Vladimir Vernadsky. Like those forebears, Lovelock and Margulis argued that the Earth is understood better as a living being than as a machine. Rock, sea, cloud, tree, animal are, they argued, in continual and complex relation, with each affecting and subtly altering the others. Thus the exchange of planetary atmospheric gasses can be compared to an individual's breath, the water system to the circulation of blood, the ozone layer to the skin. Biota, atmosphere, ocean, and soil interact through feedback loops to maintain conditions conducive to life, a process known as homeostasis.

Both "living Earth" and "great machine" are metaphors that can be, and have been, understood literally. Lovelock and Margulis's use of the ancient goddess' name drew both fame and noteriety: general scientific scorn as well as an enthusiastic (although sometimes misinformed) embrace by nature mystics and citizens concerned about ecological issues. The controversial hypothesis – often stripped of the name of the goddess to become Earth System Science or Geophysiology – has gained increasing respect among some scientists but is derided by others as lacking sufficient scientific rigor.

While scientists debated, spiritual seekers embraced Gaia, often arguing that it descends from a primal religion. Paleolithic and other early human artifacts – especially the tiny but robust figurines called "Venuses" – are described as expressions of early worship of Earth's fecundity. The poetic language of Native American spiritual leaders like Claude Kuwanijuma (Hopi), who said that "The Earth remembers; the stones remember," similarly support contentions that tribal people sustain a connection or "participation mystique" (the term is from French anthropologist Levy-Bruhl) with the Earth. The sense of being part of a universal unity is traditionally associated with religious mysticism, which Evelyn Underhill and William James both describe as an experience of timelessness and a lack of boundary between self and world.

That Lovelock chose the name of a goddess for his living Earth derives from a consistent Western bias toward seeing the Earth as feminine. Under the influence of Greek Orphism, Persian Manicheism and other dualistic sects, "Earth" was set in opposition to "heaven." Other oppositions followed: evil/good, flesh/spirit, dark/light, moon/sun, with the former typically associated with the Earth and the female, the latter with the heavens and the male. The vision of the Earth as feminine attached itself to

essentialist visions of "femininity," so that the Earth was often transformed into a maternal, nurturing being. Some theorists, such as Rosemary Radford Ruether, Carolyn Merchant, and Shirley Nicholson, have turned this dualism on its head, arguing for an ecofeminist view of nature that claims traditionally feminine values (relationship, cooperation) as more natural than those traditionally accepted as masculine (domination, individualism). Rather than domination of the Earth by humanity, Gaian ecofeminists call for a modest recognition of humanity's place within a living Earth system.

The widespread public acceptance of the Gaia hypothesis – even while scientists argued over its merits – led to controversy in established religions, for acceptance of Gaia implies a pantheism or polytheism unacceptable to believers in established monotheisms. Yet some Christian thinkers, notably the Catholic monk Thomas Berry, see no opposition between honoring the Earth and worshipping a transcendent divinity, although such thinkers typically enforce the traditional distinction between "creator" and "creation." Non-theistic Buddhism has had an easier time with the Gaian vision, with the conception of *sangha* (community) easily enlarged to include the community of earthly life and that of *dharma* (duty) embracing ecological responsibility.

Less orthodox religious thinkers have eagerly explored the philosophical possibilities of the Gaia hypothesis; most prominent has been William Irvin Thompson of the Lindisfarne Association, who has articulated a Gaian politics and economics. Many neo-pagan groups in the U.S. and European countries employ Gaian vocabulary, including the Unitarian-Universalist "Gaian Community" of Kansas and the "Gaia House" meditation center in rural Devon, England. Some neo-pagans specifically employ the name of the Greek goddess in their ceremonies, while others, especially the ReClaiming Collective founded by Starhawk and the ReFormed Congregation of the Goddess established by Jade River, make ecological awareness a primary part of their worldview. Finally, a generalinterest, Pagan, ecological magazine bears the name PanGaia and declares itself dedicated to "an Earth-wise spirituality."

Patricia Monaghan

Further Reading

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See also: Berry, Thomas; Environmental Ethics; Epic of Evolution; Holism; Gaia Foundation and Earth Community Network; Gaian Pilgrimage; Lovelock, James; Merchant, Carolyn; Reclaiming; Ruether, Rosemary Radford; Starhawk; Wicca.

P Gaia Foundation and Earth Community Network

The Gaia Foundation (henceforth Gaia), a small international non-governmental organization based in London, is committed to the protection of cultural and biological diversity, ecological justice and Earth democracy. Gaia was established in 1984 by environmental and social innovators, mainly from Southern Hemisphere countries including José Lutzenberger (Brazil), Wangari Mathaai (Kenya) and Vandana Shiva (India), known as Gaia Associates. Their common vision is for a holistic approach to human development, with respect for cultural and biological diversity and the primacy of nature. Gaia, Earth Mother Goddess, is also the name chosen by James Lovelock for the hypothesis that the Earth operates as a living organism. This convergence of mythological and scientific thought is the basis on which indigenous knowledge systems are founded, and one of the underpinning messages of the Gaia Foundation (Gaia).

Gaia was privileged to begin its work in Amazonia through José Lutzenburger and Martin von Hilderbrand (Colombia) where it was initiated into the indigenous world of Earth-centered cosmologies, still intact. Common to all these cosmologies is the recognition that the Earth is part of a bigger universe, all of which is animated by "thought," consciousness, and spiritual force. Each element of the universe has guardian spirits with whom the shaman learns to communicate. Before any activity takes place, such as hunting, fishing, collecting food or medicine, the shaman asks permission from the guardian spirit of the species or the area to ensure the timing is appropriate. One of the fundamental principles which govern relationships within the human community and