The Gaian Synergy of Science and Ecological Myth in Vedic Literature and the Upanishads

Asish Kr. Charan and Tanu Gupta

Abstract

Modern science often dismisses myths as superstition, but some myths have been utilised as scientific tools for ecological awakening. James Lovelock's Gaia hypothesis suggests that a mythic imagination is essential for understanding science. Gaia is a ground-breaking concept that integrates scientific knowledge with mythic imagination to address ecological issues, potentially reshaping various disciplines. The Gaia hypothesis, referring to ethical holism, emphasises the importance of whole entities and spiritual aspects in understanding Earth as a living organism. This idea of Gaia is compatible with Vedic literature, which demonstrates how humans and nature coexist peacefully. This study explores how the Vedas and Upanishads instruct us to perceive the world as an interconnected and cooperative enterprise where interdependency is the defining characteristic of life. We examine the similarities between the Gaia Hypothesis, Vedic literature, and the Upanishads in terms of interconnectedness and living organism-environment relationships, and highlights fundamental differences.

Keywords: Gaia hypothesis, Vedic literature, Upanishads, ecology, mythic imagination, scientific outlook, interconnectedness

Introduction

If human beings can solve ecological problems through recourse to basic human traditions, beliefs, and myths with a scientific outlook, it will provide realistic and lasting results. The holism and magical atmosphere of mythology keep us engaged in doing the right thing for ecology. When science was not developed in ancient times, mythological stories gave each of the earth's natural components—trees, sky, clouds, sun, and moon—godlike characteristics with supreme power. Thus, sacredness was ascribed to the forest, tree, mountain, water, and animals on the basis of this concept, and myths served as a guide for how society should interact with the environment. So, in order to create ecological balance and adapt to climate change, it is therefore vital to combine mythology with science. Robert Bringhurst emphasises the significance of myth in science, stating that "myth is a theorem about reality,"¹ expressed in animate narrative form rather than in algebraic symbols or abstractions. He also proclaims that:

myth is ... an alternative form of science ... an alternative form of investigation ... It aims, like science, at perceiving and expressing ultimate truths, but the hypotheses of

Asish Kr. Charan is a research scholar at the Department of English, Chandigarh University. Tanu Gupta is a Professor and Head at the Department of English, Chandigarh University. Email: tanu.e9349@cumail.in.

¹ Robert Bringhurst, *Everywhere Being Is Dancing: 20 Pieces of Thinking* (Berkeley: Counterpoint Press, 2008), p. 64.

myth are framed as stories, not as equations, technical descriptions, or taxonomic rulesa story so perceptive of reality that it might be rediscovered, like any law of nature, in almost any culture at any time.²

Therefore, if ecological myth and science come together, they can have an impact on a wide population, inspiring them to care for the Earth, as there is only one Earth. Additionally, it is possible to fulfil the interdisciplinary approach of sociology, education, cosmology, ecology, and mythology. According to Joseph Campbell, myths serve four main purposes: the cosmological function, which explains the structure of the universe; the sociological function, which upholds and validates social order; and the pedagogical function, which instructs people how to live in any situation.³ Van Peursen also asserts that the creation of a behavioural model and the provision of a religious experience are the two key purposes.⁴

Gaian Synergy of Science and Ecological Myth

Most famously, myth and science come together in James Lovelock's Gaia Theory, also known as "Earth System Science."⁵ The Gaia hypothesis was created by scientists James Lovelock and Lynn Margulis using the ancient Greek Gaia myth. According to Greg Garrard, Lovelock and Margulis' theory, which is based on thermodynamics, is as follows: the "hypothesis was that the Earth could be described as a self-regulating system, analogous to a living organism ... Lovelock took the argument a stage further, asserting that the planet has been so thoroughly altered physically and chemically by living things that the Earth itself has to be seen as a kind of superorganism."⁶ Despite the Gaia hypothesis being rejected by the scientific community, it has acquired enormous public support due to the philosophical idea of hylozoism,⁷ which believes that all matter, including the Earth, has a living entity and value. Gaia, which means Earth in Greek, stood for the divine feminine spirit and the mother of all things. The idea behind this word is founded on our sacred link with the Earth and all living things.

Though some of his scientific peers have criticised him for using a mythical name for the earth, Lovelock is unconcerned about this. He says, "I know that to personalise the Earth System as Gaia... irritates the scientifically correct, but I am unrepentant because metaphors are more than ever needed for a widespread comprehension of the true nature of the Earth and an understanding of the lethal dangers that lie ahead."⁸ The term Gaia was suggested by the novelist William Golding, who felt it was appropriate for his rediscovery of something that the ancestral mind had intuitively known. Michael Ruse, a philosophy professor at Florida State University, explains this unusual phenomenon, tracing the underlying causes of this gap back to Plato and two schools of thought that originated with the ancient Greeks.⁹ He demonstrates

² Bringhurst, *Every Being is Dancing*, p. 64.

³ Joseph Campbell, *The Power of Myth* (London: Doubleday, 1988)

⁴ Lauri Honko, "The Problem of Defining Myth," in *Sacred Narrative: Readings in the Theory of Myth*, ed. Alan Dundes (Berkeley: University of California Press, 1984), p. 51; and Mircea Eliade, *Myth and Reality* (London: Harper & Row, 1963), p. 8.

⁵ Tim Lenton, "A Philosophical Look at Gaia," *BioScience*, vol. 64, no. 5 (2014), pp. 455–456.

⁶ Greg Garrard, *Ecocriticism* (London: Routledge, 2004)

⁷ Lenton, "A Philosophical Look at Gaia," pp. 455–456.

⁸ James Lovelock, *The Revenge of Gaia* (New York: Basic Books, 2006), p. 188.

⁹ Michael Ruse, The Gaia Hypothesis (Chicago: University of Chicago Press, 2013).

how deeply the past has shaped our way of thinking today. Lovelock has emphasised the earth mother's dark aspect more and more. His most recent book, The Revenge of Gaia, is a warning to humanity that we will probably not survive the impending ecological catastrophe, that it might be best for the earth to take revenge if we do not care about her, and that Gaia can reclaim her equilibrium. Lovelock has made several attempts to explain the significance of mythology to human understanding, including the belief that the Earth is alive and was worshipped as a goddess. He is trying to make clear to fellow scientists and the general public the disastrous consequences of the way we are polluting and plundering the earth. The core principle of the Gaia hypothesis is the interconnectedness of life and the environment. This principle was illustrated by Lovelock and Andrew Watson in a model of "Daisyworld,"¹⁰ a simplified ecological model. It focuses on the impact of two species of daisies, black and white, on the planet's temperature regulation through their reflective properties. While white daisies have white petals that reflect more sunlight and make the planet cooler, black daisies have dark petals that absorb more sunlight and make the planet warmer. The temperature affects the growth and reproduction rates of black and white daisies. As the sun gets hotter, black daisies thrive due to their ability to absorb more heat, while white daisies struggle due to their ability to reflect excess heat. Eventually, a balance is reached, with white daisies thriving if the star's radiation decreases and Daisyworld cools.

This model serves as a pedagogical tool to explain the principles of self-regulation and feedback mechanisms proposed by the Gaia Hypothesis, demonstrating how life can influence climate. The Daisyworld model illustrates how simple organisms, like daisies, can regulate the environment to maintain stable conditions. It also highlights negative feedback loops, where changes in one component counteract changes in another, and the interconnectedness of life and the environment. Though the Daisyworld model is useful for illustrating complex ecological concepts in a simplified hypothetical scenario, it does not fully represent real-world ecosystems or the Gaia Hypothesis, which remains a subject of scientific debate.¹¹ By focusing on Gaia's mythical importance as a compelling symbol of divinity, eco-spirituality emphasises the ritual of goddess worship. The sacred link between Gaia and the environment is seen by Charlene Spretnak¹² in all of its forms. Anthony Weston notes the similarity between deep ecology and the Gaia theory, presenting what deep ecologist Arne Naess refers to as a "total field"¹³ notion, which sees humans as simply one species among many in the broad scope of the Earth's activities. We, as humans, are only able to understand ourselves in this capacity as components of a much older and more complete life process. Because of this, we perceive the destruction of the earth. Because of this, we are more empathetic and, consequently, more likely to oppose the destruction of the earth due to our deep connection to Gaia. The Gaia theory, however, most strikingly updates the mythology of the goddess-worshipping primitive tribes

¹⁰ Andrew J. Watson, and James E. Lovelock, "Biological Homeostasis of the Global Environment: The Parable of Daisyworld," *Tellus 35B: Chemical and Physical Meteorology*, vol. 35, no. 4 (1983), pp. 286–289.

¹¹ Watson and Lovelock "Biological Homeostasis of the Global Environment," pp. 286–289.

¹² Charlene Spretnak, "Ecofeminism: Our Roots and Flowering," in *Reweaving the World: The Emergence of Ecofeminism*, eds Irene Diamond and Gloria Freeman Orenstein (San Francisco: Sierra Club Books, 1990) pp. 3-14.

¹³ Arne Naess, "The Deep Ecological Movement: Some Philosophical Aspects," in *Deep Ecology for the Twenty-First Century*, ed. George Sessions (Boulder: Shambhala, 1995), pp. 64-84.

in a scientific manner. In ancient cultures, the earth was seen as the great mother, a living being that creates and sustains all forms of life on earth, both physical and spiritual.

Vedic Literature

The Gaia hypothesis represents Earth as a living organism, but Indian Vedic literature places Earth as not only alive, but also gives her the highest position as the great mother of goddesses. In terms of Indian tradition, Prithivi has been the mother of mothers since the time of the Vedas. Indians developed an emotional attachment to Prithivi. There are several legendary tales in the Vedas and Puranas that clearly substantiate these feelings. Numerous mythical stories describe Prithivi as the daughter of emperor Prithu, Prithivi as the mother of Sita Devi, the Earth Goddess as Bhu Devi and Vasundhara, Vasumati, Earth Mother, as Bana Durga or the Tree Goddess in Bengal, the Aranyani figure in the Rigveda,¹⁴ and Bonbibi in the Sundarbans. All these figures are similar in essence to the goddess Gaia, the personification of Earth, in Greek mythology. Vijaya Nagarajan also says, "Bhu Devi was referenced both as the physical earth, a large living being with a soul, and as the particular soil at a woman's feet in a particular village, town, or city."¹⁵ Many civilisations revere the earth, also known as Prithvi, Bhumi, or Dharti, as a mother goddess for supporting and nourishing various living forms on its surface. Every morning, many devoted Hindus pray to the ground and ask for her pardon for having stepped on her. Lovelock also asserts that "in times that are ancient by human measure, as far back as the earliest artefacts can be found, it seems that the Earth was worshipped as a goddess and believed to be alive. The myth of the great Mother [sic] is part of most early religions. The Mother is a compassionate, feminine figure; spring of all life, of fecundity, and of gentleness. She is also the stern and unforgiving bringer of death... At some time not more than a few thousand years ago, the concept of a remote master God, an overseer of Gaia, took root."¹⁶

One of the main goddesses, Basumata, is said to reside underground. She is the primary deity revered at all festivals. The ritual of Ambuvaci is practiced in Bengal to honor the earth's fertility. According to popular belief, this is when the earth menstruates and restores her fertility. All agricultural work, including sowing and ploughing, has been put on hold since the land needs this time to relax. Each year, the earth goddess is invoked in preparation for shifting cultivation in order to ensure a plentiful harvest. By doing Kolam rites (south Indian rituals) in the morning, one can "exercise the memory of the debt felt to the earth goddess, who bears all human and nonhuman actions on her surface," which is a way to thank the Earth Goddess for her continuing tolerance and care.¹⁷

Many hymns in the Vedas are dedicated to Prithvi, and one of the greatest hymns in the *Atharva Veda*, the "Prithvi Sukta," affirms unequivocally that the Land is the mother of the entire biosphere. Indian ancestors knew this to be true and declared it: "O Prithivī, thy centre

¹⁴ Stephanie W. Jamison and Joel P. Brereton (eds.), *Rigveda* (Oxford: Oxford University Press, 2020), "Hymn 146," 10th Mandala.

¹⁵ Vijaya Nagarajan, "Rituals of Embedded Ecologies: Drawing Kōlams, Marrying Trees, and Generating Auspiciousness," in *Hinduism and Ecology: The Intersection of Earth, Sky and Water*, eds Christopher Key Chapple and Mary Evelyn Tucker (Cambridge: Harvard University Press, 2020) pp. 453-468.

¹⁶ Tim Lenton, "Gaia and Natural Selection," Nature, vol. 394 (1998), pp. 439–447.

¹⁷ Nagarajan, "Rituals of Embedded Ecologies," p.150.

and thy navel, all forces that have issued from thy body Set us amid those forces; breathe upon us. I am the son of Earth, Earth is my Mother. Parjanya is my Sire; may he promote me."¹⁸

The mother is she who conceives, produces, feeds, teaches, and empowers her offspring. She is called an offspring of the ocean's waters. She is the creator and sustainer of the universe. There is a prayer in the *Atharva Veda* that emphasises ecological balances and how the earth, like Varuna, upholds the moral order. She is a symbol of fecundity, much like the river goddess. She is supported by morality and the truth. She is the mother of the past and the future and the source of the vast and wild realm of human existence; "Truth, high and potent Law, the Consecrating Rite, Fervour, Brahma, and Sacrifice uphold the Earth. May she, the Queen of all that is and is to be, may Prithivī make ample space and room for us."¹⁹

She is referred to as Mother Earth because of her lofty heights, level terrain, reach to the sea, and bearing of herbs with varying degrees of strength. On her, food and crops grow, and animals roam who receive fertilisation from Indra in the sky. "In whom the sea, and Sindhu, and the waters, in whom our food and corn-lands had their being, in whom this all that breathes and moves is active, this Earth, assign us foremost rank and station!"²⁰ The following lines from the *Atharva Veda* praise the earth's rains as the son of the earth, pleading for protection, purification, amity, sweet words, and kindness from the snowy mountains and forests. It also requests harmony with heaven. Humanity says:

I am the son of the earth, the rains are my father, let him, the Lord of the rain, fill the Earth for us. Oh Earth, protect us, purify us. Let people milk her with amity. Oh Earth, give us sweet words. The snowy mountain heights and thy forests, Oh Earth, shall be kind to us and we to them. O Earth, my Mother, set thou me happily in a place secure. Of one accord with Heaven, O Sage, set me in glory and in wealth.²¹

The Gayatri Mantra, found in the *Rig Veda*,²² is a highly regarded mantra that addresses Om (the entire cosmos) as the mother figure to be enlightened. All four parts of the universe are worshipped: Bhur (Earth), Bhuvah (atmosphere), Suvah (Heaven), and Savitur (sun).

"Om bhur bhuvah suvah Tat Savitur varenyam Bhargo devasya Dhimahi Dhiyo yo nah pracodayat."²³

Gaia is the term Lovelock gave to the entirety of the earth, its atmosphere, and all life forms that coexist together to form a self-regulating entity. He didn't want to give the appearance that this self-regulating thing was a sentient being, but once it had a name, it also got a face. However, the Samkhya school of Indian philosophy proposes the union of Purusha (the male,

¹⁸ Ralph Thomas Hotchkin Griffith (trans.), *The Hymns of the Atharvaveda* (New Dehli: Gyan Publishing House, 2021), Book 12, Hymn. 1.

¹⁹ Griffith, *The Hymns of the Atharvaveda*, Hymn 1.

²⁰ Griffith, *The Hymns of the Atharvaveda*, Hymn 3.

²¹ Griffith, *The Hymns of the Atharvaveda*, Hymn 1.

²² Jamison and Brereton, Rigveda, Mandala 3.62.10

²³ Jamison and Brereton, Rigveda, Mandala 3.62.10

formless metaphysical consciousness) and Prakriti (the feminine, material manifestation in Nature), both of which are living entities on the earth. Vandana Shiva observes: "Contemporary western views of nature are fraught with the dichotomy or duality between man and woman and person and nature. In Indian cosmology, by contrast, person and nature (Purusha-Prakriti) are a duality in unity. They are inseparable complements of one another in nature, in woman, in man."²⁴ According to Hindu mythology, Prakriti is Mother Nature, the dynamic component of being. The idea of a self-regulating biosphere, the idea of homeostasis, and chemical imbalances in the biosphere are all conceptualised as anthropomorphic beings.

Gaia self-regulates to keep the surface of the Earth favourable for life,²⁵ ensuring homeostasis until an internal conflict or outside force shifts it to a new stable state.²⁶ In order to maintain a stable and habitable environment. Earth's homeostasis, like that of a living creature, controls environmental factors including temperature, atmospheric composition, and the nutrient cycle.²⁷ The Gaia hypothesis suggests Earth's stability is maintained through feedback mechanisms, involving interactions between living organisms and their environment. Lynn Margulis emphasises symbiotic relationships and cooperation among species, highlighting mutual dependency in life evolution. The pantheistic perspective of nature developed and modernised in their stories is supported by the ancient Indian Sankhya philosophy's theory of the cosmos as consisting of male and feminine principles, namely Purusha and Prakriti. Purusha, the masculine principle in Sankhya philosophy, is the concept of pure consciousness, and Prakriti, the dynamic principle embedded in nature, is the concept of creative matter. Prakriti is the aspect of dynamism and change, and it symbolises the nourishing, self-regulating part of the biosphere. Together, they represent Gaia in both her benevolent and destructive guises. The cosmology alludes to the prakriti-based primal womb from which the entire universe was conceived. In fact, the incredible variety of life forms, including terrestrial, arboreal, and aquatic ones, as well as the physical forms of vast plains, undulating hills, unconquerable ranges and peaks, meandering rivers, deserts, and forests, as well as natural phenomena of circadian rhythms, rain, hail, earthquakes, and volcanic eruptions, are all seen as the play of Prakriti and ultimately return to it. All life forms are considered to be a part of Prakriti, which is a nurturing mother.

The Gaia Hypothesis and Vedic literature are two distinct perspectives on the relationship between life and the environment. The Gaia Hypothesis, a scientific concept, emphasises the interconnectedness of life and the Earth's ecosystem, treating it as a self-regulating living organism. On the other hand, Vedic literature, a collection of ancient Indian texts, focuses on spirituality, ethics, cosmology, and the pursuit of liberation. Though Gaia suggests that Earth's ecosystems self-regulate to preserve a stable environment for life, it does not prescribe a specific purpose or goal. Vedic texts often emphasise the spiritual potential of humanity and its role in upholding *dharma*, coexisting peacefully with nature, and making spiritual growth.

²⁴ Vandana Shiva, *Staying Alive: Women, Ecology, and Development* (London: Zed Books, 1989).

²⁵ Lovelock, The Revenge of Gaia, p. 162; and Lenton, "Gaia and Natural Selection," pp. 439-447.

²⁶ David M. Wilkinson, "Is Gaia Really Conventional Ecology?," *Oikos*, vol. 84, no. 3 (1999), p. 533–536; and James Lovelock, *The Ages of Gaia: The Biography of Our Living Earth* (Oxford: Oxford University Press, 1988), p. 13.

p. 13.
²⁷ Lynn Margulis, *The Symbiotic Planet: A new Look at Evolution* (New York: Basic Books, 1998), p. 123; and Lenton, "Gaia and Natural Selection," pp. 394-439.

Vedic literature acknowledges the interconnectedness of all living things and holds a belief in a universal consciousness (Brahman) that governs everything, especially in works like the Upanishads. The Gaia Hypothesis suggests Earth's ecosystems can self-regulate, aligning with Vedic literature's emphasis on ethical, sustainable living and harmony with nature through dharma and karma. Vedic literature encourages reverence and respect for nature. The Gaia Hypothesis also strengthens a deeper understanding of the Earth as a living thing that needs to be respected and protected. It emphasises the significance of natural cycles and reciprocity in how Earth's systems work to control the planet's climate. The cyclical nature of life, death, and rebirth is also discussed in Vedic literature, which emphasises the reciprocal relationship between the laws of karma and reincarnation. Literally, karma means deed or act, but it also broadly refers to the cause-and-effect principle that controls consciousness. Reincarnation means to be born again if one performs good deeds, and the karma and reincarnation of Hinduism maintain the life cycle of people.

The Upanishads

The Gaia Hypothesis and the Upanishads are philosophical and spiritual teachings that emphasise interconnectedness and sustainability. The Gaia Hypothesis promotes ecological balance through self-regulating systems, while the Upanishads focus on the ultimate reality or universal consciousness, Brahman, as the foundation of existence, offering a comprehensive worldview. The relationship between the individual (Atman) and the universal (Brahman) is explored in the Upanishads. The Upanishads also suggest that people can achieve inner peace and freedom from suffering by realising that they are one with Brahman, the source of all spiritual harmony and balance. With an emphasis on dharma (righteousness) and ahimsa (nonviolence), Upanishadic philosophy encourages people to live in harmony with nature.

Ecosystem ecology, population and evolutionary ecology, and a wide range of other sciences interested in the structure and function of the biosphere can all be unified under the Gaia hypothesis. Similar to this, the Upanishads have a long heritage of presenting the frame of integrity of everyone. Ecosystem ethics and ecosphere (or Gaian) ethics are frequently referred to "as ethical holism since they are seen as emphasising the value of entities that are generally perceived as wholes."²⁸ In the Upanishads, this concept of totality is beautifully expressed. The self, a being, or the Absolute Brahman, which is a representation of Mother Earth, is the perception of all things as one. The Gita mentions: "The world is a living whole, a vast interconnectedness, a cosmic harmony inspired and sustained by the One Supreme."²⁹ The three fundamental sound alphabets—A, U, and M—represent the three states of absolute reality, which are referred to as supremacy (aum), universality (tat), and reality (sat). According to Radhakrishna Rao,³⁰ this sound, AUM, is the primordial sound that gave rise to the universe and all other planets. It is also the source of all human evolution. In the *Maitrayaniya Upanishad* (6.22), it is said that sound and silence are the only two absolutes. As one enters the Absolute-that-is Silence, the Absolute-that-is Sound envelops them.

²⁸ Warwick Fox, *Toward a Transpersonal Ecology: Developing New Foundations for Environmentalism* (Boulder: Shambbala, 1990), p. 177.

²⁹ Vyasa, *The Bhagavad Gita*, trans. William J. Johnson (Oxford: Oxford University Press, 2008).

³⁰ Radhakrishna Rao, "Concept of ecology in Vedic literature," *Mazingira*, vol. 6, no. 4 (1982): pp. 68-79.

According to Fritjof Capra, the Hindus were able to create evolutionary cosmologies that are remarkably similar to our current scientific theories because they perceived the universe as an organic, rhythmically moving system.³¹ For millennia, the Rishis of ancient India concentrated on both the self and the entirety of the cosmos. They eventually came to the understanding that the universe is an integral part of the Self (Atma) or vice versa. The Corporal Self is a tangible substance, but the Absolute Self is not only incorporeal but also undeniable. The four elements of 'Prithvi' (Earth/Land), 'Ap' (Water), 'Tejas' (Light), 'Vayu' (Air), and 'Akasa' (Space), as well as other elements, were regarded as the main contributors to the creation of the corporeal self and corporeal universe. As stated in the Maha Upanishad (6.72), "For those who live magnanimously, the entire world constitutes but a family"³² (Udaracharitanam Vasudhaiva Kutumbakam), and further elaborated in the *Hitopadesha*. "The Upanishad describes the Sky as father and the Earth as mother, which is how the entire world is a family and we are all brothers and sisters. The concept of the Father-Sky and Mother-Earth is one that has been around for a very long time. This myth serves as a guide for how people should act." For this reason, human marriage is seen as a replica of the cosmic hierogamy. In the Brihadaranyaka Upanishad (6.4, 20), the spouse declares, "I am Heaven, and thou art Earth."³³ After the child is born, the husband speaks into the child's ear, 'I put the earth into you; I put the sky into you, I put heaven into you, I put the whole of the earth, sky, and heaven into you'.³⁴ Here, the sacred wedlock of oneness represents the newly-born baby as a form of oneness, accumulating everything into it. The most subtle element is ether (Akasha), which is frequently impossible to separate from consciousness. Nothing else is possible without it (from the Brihadaranyaka Upanishad). We all have an earthly entity that controls the world within ourselves (Self) and outside ourselves (materialistic world) unknowingly. But the Upanishads remind us to do so consciously and make the earth a living entity in the form of 'OUM', 'Absolute Brahman', and 'Self'.

Conclusion

The growing popularity of literature around mythology attests to the reality that its greatest value may lie in the way it encourages us to think about the world in fresh, challenging, and inspiring ways. In the end, the question of whether the theory is true is less important than whether it enables us to connect justice and peace with the integrity of all creation. Gaia's synthesis of science and myth, however, can assist us in creating this still fragile but essential nexus, so long as we are conscious of both its evocative potential and its serious drawbacks. The Gaia hypothesis provides a brief outline of the environmental themes that have been found in Vedic literature and practices, with special emphasis on the ritual worship of sacred places, trees, plants, and animals. In India, most of the environmental movements are led by the sacred mythical beliefs of people, such as the Chipko Movement and the Silent Valley Movement. The idea of Mother Earth is a category of spirit that still exists in great beliefs. In the thoughts of ancient mankind, the Earth has always been the generator and nourisher par excellence (the

³¹ Fritjof Capra, *The Tao of Physics* (Boulder: Shambhala, 1991), p. 198.

³² Swami Nirmalananda Giri, 108 Upanishads (India: Gita Society, N.D.), p. 645, 1.3.71.

³³ Mircea Eliade, *The Sacred and the Profane* (San Diego: Harcourt Brace Jovanovich, 1959), p. 146.

³⁴ Giri, 108 Upanishads, p. 351, VI-iv-25.

Gaia of the Greeks). In a later book Rupert Sheldrake wrote enthusiastically about Gaia stating "Mother Nature is reasserting herself whether we like it or not. In particular, the acknowledgment that our planet is a living organism, Gaia, Mother Earth, strikes a responsive chord in millions of people; it reconnects us both with our personal, intuitive experience of nature and with the traditional understanding of nature as alive."³⁵ Thus when combined with science, ecological mythology plays a crucial role in resolving various social-ecological problems. O. P. Dwivedi says that "environmentally sound foresight based on a holistic approach to problem-solving is required and entails bringing the secular, socioeconomic, cultural, religious, and traditional domains together."³⁶ The message of ecological integrity could be conveyed to the illiterate population if we remythologise the earth with a holistic viewpoint and an integrated lifestyle because myths do not always require reasoning. Mythologies may convey the political and moral values of people through the task of cultural reconstruction.

³⁵ Ruse, *Gaia Hypothesis*.

³⁶ O. P. Dwivedi, "Dharmic Ecology," in *Hinduism and Ecology: The Intersection of Earth, Sky and Water*, eds Christopher Key Chapple and Mary Evelyn Tucker (Cambridge: Harvard University Press, 2000), pp. 3-22.