Jainism and Ecology

Nonviolence in the Web of Life

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The Living Earth of Jainism and the New Story: Rediscovering and Reclaiming a Functional Cosmology

CHRISTOPHER KEY CHAPPLE

In various chapters of this book, several authors have asserted that the Jain practice of nonviolence provides a firm foundation for the development of an environmental ethic. Citing the examples of appropriate livelihood, strict vegetarianism, and holistic logic as found within the Jain tradition, Padmanabh Jaini, Sadhvi Shilapi, Kim Skoog, John Koller, and others have seen parallels between the Jain concern for not harming life in all its various forms and the ethos of environmental protection.

In this chapter, I want to take a somewhat more metaphysical (or perhaps physical or biological) approach to interpreting Jainism in light of ecological exigencies. Jain history and sociology have demonstrated for centuries an unusually tenacious commitment to a very rigorous ethical system. It seems important to examine closely the underlying worldview from which the Jain practices of nonviolence, truthfulness, and so forth, arise. Specifically, this chapter will focus on two primary aspects of Jain teachings in light of three contemporary Western ecological thinkers. The first aspect of Jainism to be discussed is its unique cosmology, which will be compared to the cosmological insights of contemporary science as presented by Brian Swimme. The second aspect of Jainism to be explored is the Jain assertion that the seeming inert, nonsensate world abounds with sensuousness. The Jains posit that all the myriad living beings, from a clod

close attention to the role of the senses. As life-forms complexify, of dirt or a drop of water to animals and humans themselves, possess polysensate view of the world and by exploring the underlying motithey add additional senses. By examining the implications of this also develops an elaborate biological systemization of life that pays populated with infinite life-forms in a wide range of manifestations, world" perspective will be discussed in light of Thomas Berry's call of diff of a way the capacity for tactile experience. This "living one commonality: the capacity for tactile experience. This "living one commonality: the capacity for tactile experience. This "living one commonality: the capacity for tactile experience. an appreciation for the natural world. ogist and philosopher who extols the role of the senses in developing will be compared with the writings of David Abram, a phenomenolthe Jain commitment to nonviolence might be gained. This approach thy of our respect and care, a glimpse into the emotionality underlying vations for perceiving the world as suffused with life, and hence wortion of objects." Furthermore, Jainism, in addition to positing a world for understanding the earth as a "communion of subjects not a collec-

context of philosopher David Abram's appeal for a deeper appreciation of human reciprocity through the senses with the things of the sensuousness and vitality of Jain philosophy will be discussed in the tivity, and communion. In a third and final section, the very tivity to the earth community, as embodying differentiation, subjecity will be juxtaposed with Thomas Berry's plea for increased sensi-Swimme. The implications of the Jain panpsychic vision and sensibildynamism as summarized by contemporary cosmologist Brian strength" will be compared with the scientific view of the universe's the elements themselves, contain "touch, breath, life, and bodily The Jain perspective that the manifold parts of the world, including

between the body, consciousness, and the world in an attempt to culticontemporary thinkers because they raise issues of the relationship achieves release. However, I introduce the deliberations of these three view of repeated rebirth, according to the laws of karma, until one integration of body, mind, and landscape does not parallel Jainism's cern, this does not match up, point by point, with Thomas Berry's call and condition and purification of the human soul as its primary concosmology does not fundamentally share the same story as that put for increased subjectivity. Additionally, Abram's philosophy of the forth by contemporary science. Though Jainism emphasizes the status The method that I employ here is one of creative juxtaposition. Jain

> verse. They also raise questions of relationship to and responsibility maintain relevance in the modern world, such points of dialogue as tivate a respect for nature, and as traditions such as Jainism seek to rary world seeks to understand traditional indigenous values that cultant from the nonviolence advocated by the Jains. As the contempoof awareness, care, and protection—an ethical stance not too far disfor the natural order that call for the development of an ethical stance vate greater sensitivity to the larger order and intricacy of the unipreserving and respecting all forms of life. intercultural understanding, but also to advance the shared goal of posed in this volume and in this essay might be helpful, not only for

Jain Cosmology: A Universe Permeated with Life

sun; the mind was correlated with the moon; breath with the wind; world itself in its great immensity: eyes were said to correspond to the Rgveda, the person, or purusa, was regarded as a reflection of the social and physical realities. In ancient India as articulated in the They explain the place of the individual within the larger context of Stories of cosmology ground the human person within the world. reflective of and relating to body functions, one sees oneself not as an tween the microphase and the macrophase; by seeing the universe as feet with the earth. This particular cosmology asserts a linkage beoped a parallel story of the structure of the cosmos, complete with the isolated unit but as part of a greater whole. The Jain tradition develwhat vague about the place of individual life force in this process, However, whereas the texts of the early Vedic tradition remain someimage of a great female whose body symbolizes the entire system. pared and contrasted with Brian Swimme's explication of contempowhich dates from the early centuries of the common era, will be comdeity, and ultimately responsible for its own destiny. In this section of rary cosmological science. the chapter, Umāsvāti's explication of traditional Jain cosmology. force (soul, or jīva), which is said to be eternal, not created by any Jainism develops an intricate accounting for the journey for each life

place of the human person within the continuum of the universe. late a comprehensive worldview or cosmology that integrates the Jainism provides one of India's most thorough attempts to encapsu-

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Umāsvāti's system is accepted by both major branches of Jainism, the Digambara and the Svetāmbara. It attempts to explain the place of the human being in a great continuous reality. It further, as mentioned above, emphasizes hierarchy and vitality within its vision of the cosabove, emphasizes hierarchy and vitality within its vision of the cosabove.

particular animal, depending upon the offense committed. form, or descend into one of the hells, as a suffering human being or a realm, take rebirth as a human or animal or elemental or microbial Depending upon one's actions, one can either ascend to a heavenly clivities of karma generated and accrued during the previous lifetime the body dies, the jīva seeks out a new site depending upon the proforce, or jīva, that occupies and enlivens the host environment. Wher round of birth, life, death, and rebirth. Each living being houses a life cies of life-forms exist.2 These beings are part of a beginningless According to Umāsvāti's Tattvārtha Sūtra, 8,400,000 different spewell according to spiritual precepts can this final abode be gained from the heavenly or hellish realms; only through a human birth lived through the release of all karmic bondage. One cannot attain this state seven hells. Above earth, eight heavenly realms are arrayed. The ultiincluding humans, can be found there. Below the earth can be found sists of three continents and two oceans. Animals (as listed below), male figure. The earthly realm, or middle world (manusya loka), con-Human beings who have successfully led a religious life achieve this the cosmic person, consists of the state of liberation, the siddha loka. mate pinnacle of the Jain system, symbolized at the top of the head of Jain cosmology describes a storied universe in the shape of a fe-

The taxonomy of Jainism, which will be discussed in greater detail in the next section of this chapter, places life-forms in a gradated order starting with those beings that possess only touch, the foundational sense capacity that defines the presence of life. These include earth, water, fire, and air bodies; microorganisms (nigoda); and plants. The next highest order introduces the sense of taste; worms, leeches, oysters, and snails occupy this phylum. Third-order lifeforms add the sense of smell, including most insects and spiders. Fourth-level beings, in addition to being able to touch, taste, and smell, also can see; these include butterflies, flies, and bees. The fifth nonsentient and sentient. Birds, reptiles, mammals, and humans dwell in this life realm.³

Jainism posits a cosmological view that at first glance seems similar to that put forth in Ptolemy's theory of the spheres and Dante's Divine Comedy. At the base of this cosmos can be found various regions of hell. In the central realm is the surface of the planet, on which reside the five elements, living beings, and humans. Above this realm extends a sequence of heavenly worlds. At the pinnacle of this cosmos exists a domain of liberated beings who have risen above the vicissitudes of repeated birth in the lower, middle, and higher realms. In spatial orientation and its theory of moral consequences, it seems to evoke Dante's system of hell, purgatory, and heaven. Depending on one's actions, one earns a berth in one of the three domains.

consciousness, energy, omniscience, and bliss. realm of the perfected ones, the siddhas. These liberated souls have or as a god or goddess. Ultimately, the Jain path of purification an ascent to higher realms, either as a more morally pure human being released themselves from all karma and dwell in a state of eternal through its many strict ethical precepts may culminate in joining the karma releases the negative, binding qualities of karma and allows for downward movement both in this birth and in future birth. Positive or dravya, onto the jīva. The nature of this karma determines the course of one's embodiment and experience. Negative karma causes a the flow of time and space and the binding of matter known as karma. rial objects such as wood or umbrellas or drops of water or flickers of energy, and bliss, Earth, water, fire, air bodies, which comprise matewould be considered inert. Each jiva is said to contain consciousness. force. The category of nonliving "things" includes properties such as flame or gusts of wind all contain jīva, or individual bodies of life defined as dynamism and suffuses what in precontemporary physics ries of reality: living and nonliving. Living reality, or jīva, is broadly may first seem apparent. First, Jainism identifies two primary categospace, time, and matter carry more subtlety and sophistication than However, if we look more closely at this system, its theories of

In this cosmological system, one's station in life can be understood in terms of one's degree of effort in following ethically correct patterns of life as taught by the Jain Tirthankaras, or spiritual leaders. The world of nature cannot be separated from the moral order; even a clod of earth exists as earth because it has earned its particular niche in the wider system of life processes. A human's experience includes prior births of various animals, microorganisms, elemental entities,

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and perhaps gods and goddesses. To see and recognize and understand the world is to acknowledge one's past and potential future. Though the Jain insistence on the uniqueness of each individual soul does not lend itself to an ultimate vision of interconnected monism, it nonetheless lays the foundation for seeing all beings other than oneself with an empathetic eye. In past or future births, one could have been or could become a life-form similar to any of those that surround one in the vast unlimited cosmos.

The Story of Contemporary Cosmology

The contemporary story of the universe as told by physicists and cosmologists is complex and varied, requiring an understanding of higher mathematics and a reliance on sophisticated instruments, such as electron microscopes, and telescopes that penetrate deep into distant galaxies. Though many interpreters of science, such as Stephen Hawkins and Carl Sagan, have summarized the various theories about the origins and structure of the universe, few have attempted to create a world of meaning from this raw data. Brian Swimme, however, has attempted to make sense of the insights of modern physics and examine the implications of this newly discovered world order for human behavior. In this section, one aspect of his interpretation will be summarized and then discussed in light of Jainism and the larger context of environmental ethics.

In their observations of the behavior of matter and energy, planets and galaxies. Einstein and Hubble calculated that the world flared forth some fifteen billion years ago. From that time and point of origin, all things blasted forth away from one another. The stuff of stars and elements continue to move apart from one another and, over the course of fifteen billion years, as yet uncounted galaxies spin forth and continue to move outward. Because of this initial momentum, everything retains a part of this original being. And because everything bit of that point of origin is at the center of everything else that is moving forth. And because everything is moving forth and everything originated from that original flaring moment, everything is the center of the universe and yet is moving from everything else.

Furthermore, the space that separates all these discrete masses of

atomic materiality continues to generate evanescent particulate matter that constantly emerges and then dissolves. Even empty space is not empty but carries what Swimme describes as the "all-nourishing abyss." As he describes it:

The usual process is for particles to erupt in pairs that will quickly annihilate each other. Electrons and positrons, protons and anti-protons, all of these are flaring forth, and as quickly vanishing again. Such creative and destructive activity takes place everywhere and at all times throughout the universe. The ground of the universe then is an empty fullness, a fecund nothingness. Even though this discovery may be difficult if not impossible to visualize, we can nevertheless speak a deeper truth regarding the ground state of the universe. First of all it is not inert. The base of the universe is not a dead, bottom-of-the-barrel thing. The base of the universe seethes with creativity, so much so that physicists refer to the universe's ground state as 'space-time foam.'"

This account of materiality abounds in mystery, unpredictability, and dynamism. The ground for the manifested world lies hidden in forces like the yin and yang of Chinese philosophy that constantly vacillate between presence and absence. Furthermore, like the Jain system of transmutation of life-forms, this primal energy constantly seeks new expression.

Both the story of contemporary cosmology and that of Jainism allow for awe and respect for materiality. According to Swimme, our deadened view of the material has led to the blight of consumerism, where ultimate meaning in life is mistakenly sought in the accumulation of things. This has resulted in lives of loneliness, depression, and alienation. He writes:

Consumerism is based on the assumption that the universe is a collection of dead objects. It is for this reason that depression is a regular feature in every consumer society. When humans find themselves surrounded by nothing but objects, the response is always loneliness...."

For Swimme, the remedy for this angst can be found in a rediscovery of awe through appreciation of the intricacy and beauty of the material world, from the complexity of the meadow to the splendid grandeur of the Milky Way. Swimme writes that

Each person lives in the center of the cosmos. Science is one of the careful and detailed methods by which the human mind came to grasp

the fact of the universe's beginning, but the actual origin and birthplace live your life.... 'The center of the cosmos' refers to that place where is not a scientific idea; the actual origin of the universe is where you you, the universe surging into existence anew.6 also refers to the upwelling of the universe as river, as star, as raven, as the great birth of the universe happened at the beginning of time, but it

able perspective, each point of life holds a commonality with all othgreater scheme of things. While retaining a unique and unencroachativity, all beings, all particles, play an important, integral role in the ongoing participation in the process of cocreation. As centers of crevidual, each context holds ultimate meaning in its immediacy and its ers due to their shared moment of origin fifteen billion years ago. In this vision of the human place within the cosmos, each indi-

including microorganisms and the elements, one can ascend to a knowledged and protected. Through respect for life in all its forms higher state of spiritual sensitivity. that things share a commonality in their aliveness, which must be acabout by advertisements and accumulations. Jainism similarly asserts mystery of creation as an antidote to the trivialization of life brought ment of creation, that people turn their attention to the beauty and things of the world be regarded as a celebration of the originary molower existence in this and future lives. Swimme suggests that the ality leads to a thickening of one's karmic bondage, guaranteeing a Swimme contends that the consumerist obsession with "dead" objects jects the notion of an initial creation moment. However, just as leads to depression, in Jainism, the abuse and manipulation of materi-Jainism, like Buddhism, asserts the eternality of the universe and rebegan in the single moment of the Big Bang or Flaring Forth.7 similarities with the Jain tradition; there are also notable differences. The fundamental disagreement would lie in the premise that the world In some ways, this vitalistic account of creation and reality bears

ism and its consequent trivialization and deadening of the material Swimme's system offers a prophetic critique of unbridled consumercalls for greater awareness of one's immediate ecological context. Both systems hold the potential to evoke the affective dimension of human responsiveness. Both systems develop an ethical view that of ecological theory. Both systems place value on the natural order. of the workings of the universe hold implications for the development Traditional Jain cosmology and contemporary scientific accounts

> spect the life force in its various forms, including its material manifesworld. Jainism develops a specific code of behavior that seeks to re-

sense of the universe as a living process of multiple subjectivities contemporary context of environmental degradation, requires protecan occasion to view the world as a living, dynamic process that, in the rather than as a chaotic assemblage of inert materiality. how the particularities of Jain biology might be used to enhance one's tion and care. In the next section of this chapter we will investigate that regards the things of the universe as dead and inert. Both provide their blind allegiance and devotion to a numbing materialistic view Swimme explains the universe in an attempt to wrest humans from ethical and perhaps teleological message. Jainism explains the unitwo systems presented by Umāsvāti and Swimme carry an inherent verse so that it can make sense of its theology of spiritual liberation. Umāsvāti to provide a Jain account for the structure of reality. These succinct and poignant manner, not unlike the Sutra style employed by present the central notions of Hubble's cosmological discoveries in a Swimme's summary explanations of contemporary cosmology

The Hierarchy of Life in the Jain Tradition

century B.C.E., the text states that suffused with life. In relating the life story of Mahāvīra, the twentyfourth great teacher, or Tirthankara, who lived in the fourth or fifth The Acārānga Sūtra, the earliest known Jain text, describes a world

that they are, if narrowly inspected, imbued with life.... ies and wind-bodies, the lichens, seeds, and sprouts, he comprehended Thoroughly knowing the earth-bodies and water-bodies and fire-bod-

of the ongoing process of samsāra, to be halted only when one, as a theory, each life-form will eventually take on a new existence as part Mahāvīra, Jainism developed an extensive theory of karma to account From this perception of the livingness of all things as articulated by numan being, attains spiritual liberation (kevala). for the existence of various life-forms. According to Jain karma

liberation. These rules were designed to minimize and eliminate Mahāvīra laid out a series of rules to assist one along the path to

karma through a careful observance of nonviolent behavior. Mahāvīra instructs his monks and nuns to avoid harming life in its myriad forms through various methods. These include explicit instructions for when the and what and how to eat; when and how to travel; where and when to accept food; and lists of various other activities, including attendance at wedding ceremonies, to be avoided. All ties, including attendance at wedding ceremonies, to be avoided. All ties, including attendance at wedding ceremonies, to be avoided. All ties, including attendance at wedding ceremonies, to be avoided. All ties, including attendance at wedding ceremonies, to be avoided. All ties, including attendance at wedding ceremonies, to be avoided. All ties, including attendance at wedding ceremonies, to be avoided. All ties, including attendance at wedding ceremonies, to be avoided. All ties, including attendance at wedding ceremonies, to be avoided. All ties, including attendance at wedding ceremonies, to be avoided. All ties, including attendance at wedding ceremonies, to be avoided. All ties, including attendance at wedding ceremonies, to be avoided. All ties, including attendance at wedding ceremonies, to be avoided. All ties, including attendance at wedding ceremonies, to be avoided. All ties, including attendance at wedding ceremonies, to be avoided. All ties, including attendance at wedding ceremonies, to be avoided. All ties, including attendance at wedding ceremonies, to be avoided. All ties, including attendance at wedding ceremonies, to be avoided. All ties, including the most coefficient in the air myriad ties, snakes, animals living in water, on land, in the air might be disturbed or frightened, and strive to get to a fold or . . . refuge, (thinking): 'the Sramana [monk] will harm me!'" This profound respect for the natural world distinguishes Jainism among the world's religious traditions as potentially the most eco-friendly.

In later Jain literature, various authors describe the living world with a great deal of care and precision. For instance, Sānti Sūri, a Svetāmbara Jain writer of the eleventh century, provides elegant descriptions of living beings, beginning with the earth beings and concluding with various classes of deities and liberated souls. In the Jīva Vicara Prakaranam, a text of fifty verses, he lists types of life, frequency of appearance, and cites an approximate lifespan for each. For instance, he states that hardened rock can survive as a distinct lifeform for twenty-two thousand years; "water-bodied souls" for seven thousand years; wind bodies for three thousand years; trees for ten thousand years; and fire for three days and three nights. Each of these forms demonstrates four characteristics: life, breath, bodily strength, and the sense of touch.

The attention to detail given to the elemental realm of one-sensed beings distinguishes the medieval Jains as closely observant scientists. Their descriptions include fundamental information regarding geology, meteorology, botany, and zoology. Santi Suri describes the one-sensed living realm with great precision, extending from the earth through water and fire and air to the plant kingdom. For the *prthivī-kāyika jīvas*, or earth-bodied souls, he offers the following two verses:

Crystalline quartz, jewels, gems, coral, vermilion, orpiment, realgar, mercury, gold, chalk, red soil, five-colored mica, hard earth, soda ash, miscellaneous stones, antimony, lava, salt, and sea-salt are the various forms taken by the earth-body souls (Prithivikayika Jivas).¹³

The numerous types of stone and soil listed indicate that the Jains were keen observers of geological formations, careful to distinguish the characteristics of color, density, and hardness.

Santi Sūri's descriptions of the various forms of water are similarly perspicacious, listing:

Underground water, rainwater, dew, ice, hail, water drops on green vegetables, and mist as the "numerous varieties of Water-bodied Souls."¹⁴

Santi Sūri provides an exhaustive list of various forms taken by firebodied souls:

Burning coals, flames, enflamed cow dung, fire reflected in the sky, sparks falling from a fire or from the sky, shooting stars, and lightning constitute Agnikaya Jivas.¹⁸

The various wind bodies are listed as follows:

Winds blowing up, winds blowing down, whirlwinds, wind coming from the mouth, melodious winds, dense winds, rarefied winds are the different varieties of Vayu Kayika Jivas.¹⁶

Descriptions of various plant genres then follow, with precise detail given for plants with fragance, hard fruits, soft fruits, bulbous roots, thorns, smooth leaves, creepers, and so forth. Lists are offered to restrict or endorse the use of specific plants, with special attention paid to determining avoidance of undo harm to plants that harbor the potential for even greater production of life-forms.

Two-sensed beings, possessing touch and taste, are said to live twelve years and include conches, cowries, gandolo worms, leeches, earthworms, timber worms, intestinal worms, red water insects, white wood ants, among others.¹⁷ Three-sensed beings live for forty-nine days and include centipedes, bedbugs, lice, black ants, white ants, crab lice, and various other kinds of insects. ¹⁸ These beings add the sense of smell. Four-sensed beings, which add the sense of sight, live for six months. ¹⁹ and include scorpions, cattle bugs, drones, bees, locusts, flies, gnats, mosquitoes, moths, spiders, and grasshoppers. ²⁰ At the top of this continuum reside the five-sensed beings, which add the sense of hearing and can be grouped into those who are deemed sense of hearing and those who are considered to be sentient. This last group includes the denizens of hell, gods, and humans. Various life

spans are cited for five-sensed beings, which Sānti Sūri describes in spans are cited for five-sensed beings, which Sānti Sūri describes in great detail: land-going, aquatic, sky-moving, and so forth. The degreat detail: land-going, aquatic, sky-moving, and so forth. The degree tailed lists by Sānti Sūri and his later commentators present a compretailed lists by Sānti Sūri and his later commentators present a comprehensive overview of life-forms as seen through the notion that the

The Jain worldview cannot be separated from the notion that the world contains feelings and that the earth feels and responds in kind to world contains feelings and that the earth feels and responds in kind to human presence. Not only do animals possess cognitive faculties including memories and emotions, the very world that surrounds us can cluding memories and emotions, the very world that surrounds us can chair that supports us, to the light that illumines our studies, all these entities feel us through the sense of touch, though we might often take for granted their caress and support and sustenance. According to the Jain tradition, humans, as living, sensate, thinking beings, have been given the special task and opportunity to cultivate increasingly rarefied states of awareness and ethical behavior to acknowledge that we live in a universe suffused with living, breathing, conscious beings that warrant our recognition and respect.

Various authors within the Western biological, philosophical, and psychological disciplines have similarly argued for the possibility that animals possess cognition and that the world itself cannot be separated from our cognition of it. Few have committed themselves to the very radical Jain notion that the elements possess consciousness, though some environmental thinkers, such as Christopher Stone, have argued for the legal standing of trees. But, as discussed in the sections that follow, Thomas Berry and David Abram have argued that a heightened responsiveness to the earth is essential for the full development of human consciousness.

The New Story of Thomas Berry: A Call for Sensitivity to Life

Thomas Berry has advocated the telling of a "new story" that allows us to reinhabit the earth with a greater awareness of the fragile balance of life systems. He writes:

The human species has emerged within this complex of life communities; it has survived and developed through participation in the functioning of these communities at their most basic level. Out of this interaction have come our distinctive human cultures. But while at an early period we were aware of our dependence on the integral functioning of

these surrounding communities, this awareness faded as we learned, through our scientific and technological skills, to manipulate the community functioning to our own advantage. This manipulation has brought about a disruption of the entire complex of life systems. The florescence that distinguished these communities in the past is now severely diminished. A degradation of the natural world has taken place.²¹

Berry suggests that, with the waning of traditional creation stories and functional cosmologies, we must develop a new story that can effectively replace them and introduce a new integrated worldview. This worldview must account for the workings of the universe, inspire awe at its grandeur, and prompt the earth's citizens to an appropriate response to enhance the sustainability of the earth. Drawing from the pioneering insights of the Jesuit geologist and theologian Pierre Teilhard de Chardin, Berry suggests an embrace of the cosmological story emerging from the new science. In his focus on the notion of a fixed point of creation and his orientation toward an almost eschatological prophetic voice, Berry's work seems well-grounded in the Jewish/ Christian/ Islamic tradition. Yet, in other ways, it is similar to and clearly informed by various aspects of Asian, African, and tribal traditions.

For the past twenty years, Thomas Berry has written and lectured on the topic of the emerging ecozoic age. Taking note of the tremendous harm caused to the environment during the twentieth century, he observes that we have lost touch with the natural world, that we have become callous to the magnificent universe that supports and nurtures us. During a plenary address to the American Academy of Religion in 1993, Berry stated:

We hardly live in a universe at all. We live in a city or nation, in an economic system, or in a cultural tradition. We are seldom aware of any sympathetic relation with the natural world about us. We live in a world of objects, not in a world of subjects. We isolated ourselves from contact with the natural world except insofar as we enjoy it or have command over it. The natural world is not associated with the very meaning of life itself. It is little wonder that we have devastated the planet so extensively.²²

The causes of the rift between humans and nature are numerous, layered, and storied. As noted by Lynn White, Jr., the religious tradi-

tions of the West find their roots in an entrenched anthropocentrism that places emphasis on dominion over nature. As Berry has written, the concern with redemption in Western religious traditions leaves little room for an appreciation of the natural world, which is seen as subsidiary to the interests of human comfort. The exploitative mentality of New World settlement, the rise of industrialization in the eighteenth century, the explosion of consumerism and technology in the twentieth century propelled the human into a new relationship with nature. Berry writes:

Here it is necessary to note that planet Earth will never again in the future function in the manner that it has functioned in the past. Until the present the magnificence splashed throughout the vast realms of space, the luxuriance of the tropical rainforests, the movement of the great whales through the sea, the autumn color of the eastern woodlands; all this and so much else came into being entirely apart from any human design or deed. We did not even exist when all this came to be. But now, in the foreseeable future, almost nothing will happen that we will not be involved in. We cannot make a blade of grass, but there is liable not to be a blade of grass unless we accept it, protect it, and foster it.²³

We have entered into a new phase of earth-human relations, wherein the human effectively has conquered nature. The now-sub-missive earth relies upon the human for its continuance. The earth has been bruised by the abundance of radioactive waste and the ever-present threat of nuclear conflagration. The sky has been fouled with emissions from automobiles, scooters, and factories. Human and industrial wastes have polluted our rivers and lakes. Life itself has become imperiled.

The Realm of the Senses: The Experience of Life

As this separation takes place, humans lose their intimacy with the natural world and themselves. With this loss of intimacy comes a deadening indifference to the natural world, which results in further exploitation and destruction. To reverse this process, one needs to recapture a sense of beauty and appreciation for the natural world, a sense of the wholly real materiality of things, not for the sake of consumption and manipulation but for the very being indicated by their

presence. Some of the insights contained in the book *The Spell of the Sensuous*: *Perception and Language in a More-than-Human World* by David Abram highlight reasons why we should take the Jain world-view seriously as one avenue of exploration for the development of an effective ecological outlook. Jainism proclaims that even seemingly inanimate things or objects, such as rocks and rivers, are in fact subjects possessing life force, or *jīva*, suffused with consciousness, energy, and bliss, as well as with a sense of touch. Although maintaining the primacy of the human perspective, David Abram suggests that we need to revive our relationship with things. Citing the French philosopher Maurice Merleau-Ponty, he writes that

Our most immediate experience of things is necessarily an experience of reciprocal encounter—of tension, communication, and commingling...[W]e know the thing as a dynamic presence that confronts us and draws us into relation... To define another being as an inert or passive object is to deny its ability to actively engage us and to provoke our senses.... By linguistically defining the surrounding world as a determinate set of objects, we cut our conscious, speaking selves off from the spontaneous life of our sensing bodies.... Only by affirming the animateness of perceived things do we allow our words to emerge directly from the depths of our ongoing reciprocity with the world.²⁴

To illustrate this, Abram describes the experience of the forest:

Walking in a forest, we peer into its green and shadowed depths, listening to the silence of the leaves, tasting the cool and fragrant air. Yet such is the transivity of perception, the reversibility of the flesh, that we may suddenly feel that the trees are looking at us—we feel ourselves exposed, watched, observed from all sides. If we dwell in this forest for many months, or years, then our experience may shift yet again—we may come to feel that we are a part of this forest, consanguineous with it, and that our experience of the forest is nothing other than the forest experiencing itself.²⁵

In the words of Merleau-Ponty, "the presence of the world is precisely the presence of its flesh to my flesh." Abram goes on to write that

To the sensing body all phenomena are animate, actively soliciting the participation of our senses. . . . Things disclose themselves to our impediate perception as vectors, as styles of unfolding—not as finished chunks of matter given once and for all, but as dynamic ways of engaging the body and modulating the body. Each thing, each phenomenon,

has the power to reach us and to influence us. Every phenomenon, in other words, is potentially expressive.... Thus, at the most primordial level of sensuous, bodily experience, we find ourselves in an expressive, gesturing landscape, in a world that speaks.²⁷

Though this does not take the step of claiming that things possess the capacity to touch and feel, it does call for a greater acknowledgment of the power of the things of the world to shape our own perceptions

and feelings.

In an earlier study, I explored a comparative analysis between Gaia In an earlier study, I explored a comparative analysis between Gaia theory and the Jain theory of the all-pervasiveness of eternal Jīva.

David Abram, alluding to Gaia theory, similarly suggests that the living-ness of things as articulated by Merleau-Ponty in fact has a scientific basis:

We have at least come to realize that neither the soils, the oceans, nor the atmosphere can be comprehended without taking into account the participation of innumerable organisms, from the lichens that crumble rocks, and the bacterial entities that decompose organic detritus, to all the respiring plants and animals exchanging vital gases with the air. The notion of earthly nature as a densely interconnected organic network—a 'biospheric web' wherein each entity draws its specific character from its relations direct and indirect, to all the others—has today become commonplace....²⁹

Whether seen as a continuity of interchangeable life-forms or as a succession of discrete incarnations, the web-like nature of both contemporary biology and traditional Jain cosmology merits our attention. Both views require us to regard the world as a living, breathing, sensuous reality, from its elemental building blocks of earth, water, fire, and air, through its microbial expressions, right up to its array of complex insects and mammals, including primates. In the Jain tradition, this has led to a careful observance of the principle of nonviolence. In the world of contemporary ethics, it has led to the introduction of animal rights language, the argument for legal standing for trees, and most recently, the Great Ape Project, which advocates that full rights be accorded to chimpanzees, gorillas, and other high-functioning primates.

In contemporary forms of post-Christian spirituality in America, this has led to the emergence of reflection on the landscape as a means

of attaining a heightened sense of intimacy, belonging, and meaning. This tradition, celebrated in the new anthologies of nature writing, has been part of American literature for over a century, as found in the writings of Henry David Thoreau, John Muir, Annie Dillard, Barry Lopez, and others. Abram's articulation of the appeal of this "practice" leads us to further explore those aspects of Jain philosophy that lend themselves to the valuing of particularity over a sense of oneness. Abram writes:

tunes us in turn. The senses, that is, are the primary way that earth has sounds and ally our nose to the seasonal scents, the terrain gradually tree, we feel the tree touching us; as we lend our ears to the local us that we can appropriately notice and respond to the immediate needs only at the scale of our direct, sensory interactions with the land around programs, global initiatives, and the 'top down' solutions will never of informing our thought and of guiding our actions. Huge centralized as this forested realm embraced by water, or a windswept prairie, or a as a uniform planet inviting global principles and generalizations, but astonishingly, irreducibly diverse. It discloses itself to our senses not of the living world. Yet at the scale of our sensing bodies the earth is suffice to restore and protect the health of the animate earth. For it is There is an intimate reciprocity to the senses; as we touch the bark of a participating in its specificity—by becoming familiar with its cycles desert silence. We can know the needs of any particular region only by and styles, awake and attentive to its other inhabitants."30

One might object that this has nothing to do with Jainism, that the Jains do not wax eloquent about the landscape, that, at best, Merleau-Ponty and David Abram romanticize an unattainable weak monism, that the grim rigor of Jain ascetism must not be confused with transcendentalist elegy. But I would like to cite one compelling passage from the $\bar{A}c\bar{a}r\bar{a}nga$ $S\bar{u}tra$ and tell one story of my visit to Ladnun that, while not sentimental, nonetheless underscore the importance of sensory awareness in the Jain tradition.

Senses and Sensibilities in Jainism

In the second part of the $\bar{A}c\bar{a}r\bar{a}nga$ $S\bar{u}tra$, Mahāvīra addresses his monks and nuns on the topic of forest preservation. This brief meditative advice encapsulates what could be seen as a textual foundation

for the development of an activist Jain environmentalism. It also shows the timelessness of human greed and exploitation of the natural shows the timelessness of human greed and exploitation of the natural shows the timelessness of human greed and exploitation of the natural shows the timelessness of the monks and nuns to "change their minds" about looking at big trees. He says, rather than seeing big trees as "fit for palaces, gates, houses, benches..., boats, buckets, stools, trays, ploughs, machines, [wheels] . . . , seats, beds, cars, sheds," they should speak of trees as "noble, high and round, big," with "many branches..., magnificent." This indicates that Mahāvīra in fact did regard trees as inherently valuable for their beauty, strength, and magnificence and that he advised his followers to turn their thoughts from materiality by reflecting on the greater beauty of sparing a tree from the woodsman's ax.

stood in such an inappropriate spot. I am an ant-sensitive person and pantleg. Had I been attuned to the local landscape, I would not have dent, stood atop an anthill of large red ants who swiftly moved up my quite adept at avoiding even the nearly microscopic lines of ants that ions gently urged me to take care not to hurt the ants as I moved them returned them to the ground. The entire scenario was filled with a sion both for me in my error and for the ants as I somewhat awkwardly ants; this reveals an intimacy with place. My companions felt compasthe landscape (in this instance the ground under our feet) to avoid red harm. The Jains who visit this landscape frequently know how to scan few life-forms flourish there, thus reducing possible inadvertant nation monastery-seminary-university in the remote desert because the Terāpanthī Śvetāmbara Jain community had located their combiback to the ground. This episode provoked in me multiple reflections: parade along the sidewalks of Southern California. My Jain companon the present in this simple encounter with ants. heightened sense of immediacy and importance, a sort of meditation While visiting Jain Visva Bharati in Ladnun, Rajasthan, I, by acci-

onclusion

Thomas Berry and Brian Swimme propose a new story based on scientific explanations (or "best guesses") regarding the origin and nature of the universe. In part, this approach depends on a starting point (the Flaring Forth or Big Bang) and the idea of an implied if not explicit sense of teleology. The Jain story does not include a fixed origin

point in either assumed fact or metaphor, but rather, assumes the eternality of the world. It will not work as a story in the sense of a sacralize all aspects of worldly existence. By seeing all that surrounds us as suffused with life and worthy of worship, Jainism offers a different sort of story, a story that decentralizes and universalizes ethics, taking away overly anthropocentric concerns, and brings into vivid relief the urgency of life in its various elemental, vegetative, and animal forms. The cosmic story in the Jain tradition might well be a story of immediacy and care rather than of mythic structures and externally imposed ethical values.

logically friendly. It emphasizes nonviolence. It values all forms of own book Nonviolence to Animals, Earth, and Self in Asian Tradiration on Nature (reprinted in the appendix to this book), in Michael hood, presumably based on the principle of ahimsā. Jainism's earthand Jainism, the periodical Jain Spirit: Advancing Jainism into the tions, and in the proceedings of the Ladnun conference on ecology friendly attitudes have been celebrated in L. M. Singhvi's Jain Declalife. It requires its adherents to engage only in certain types of liveliof some Jain businesses, we might detect a need for the sort of inultimate intention of the Jain faith as well as the actual consequences Future, as well as in other materials. However, if we look at both the Tobias's video Ahimsa and its companion volume, Life Force, in my expanded to prepare future leaders to be more familiar with environmaterials could be developed by Jains to be used in manufacturing animal products in their many businesses. Lists of "green-friendly" depth critical analysis and reflection that Thomas Berry has suggested form to legal standards. processes. The Jain programs of environmental education could be for the Western world. For instance, Jains have long avoided using tiatives by making certain that their own automobiles in India conmental issues. Jains could actively support air pollution reduction ini-At first glance, the Jain tradition might seem to be inherently eco-

In some respects, however, environmental activism at best could earn a secondary place in the practice of the Jain faith. The observance of *ahiṃsā* must be regarded as ancillary to the goal of final liberation, or *kevala*. Ultimate meaning is not found in the perfection of nonviolent (in this case, eco-friendly) behavior but in the extirpation of all fettering *karma*. Although the resultant lifestyle for monks

of the Jain layperson, certain practices such as vegetarianism, periof the Jain layperson, certain practices such as vegetarianism, periof the Jain layperson, certain practices such as vegetarianism, periof the Jain layperson, certain practices such as vegetarianism, periof the Jain layperson, certain practices such as vegetarianism, periof the Jain layperson, certain practices such as vegetarianism, periof the Jain layperson, certain practices such as vegetarianism, periof the Jain layperson, certain practices such as vegetarianism, periof the Jain layperson, certain practices such as vegetarianism, period the Jain layperson, certain practices such as vegetarianism, period the Jain layperson, certain practices such as vegetarianism, period the Jain layperson as vegetarianism, period the layperson as vegetarianism, period friendly. However, some professions adopted by the Jains, due to their odic fasting, and eschewal of militarism might be seen as ecoholistic vision of the interrelatedness of life. In terms of the lifestyle and nums recorded and number of the life in terms of the contact of the life in terms of the life in term and nuns resembles or approximates an environmentally friendly ecological business ethic would require extensive reflection and reest destruction or result in water pollution? The development of a Jain be environmentally disastrous, such as strip-mining for granite or religious commitment to harm only one-sensed beings, might in fact structuring. Likewise, how many Jain industries contribute to air pollution or formarble, unless habitat restoration accompanies the mining process.

of nonviolence and its deep involvement with the governmental strucentific, as well as the religious communities. Jainism, given its ethic superiority over nature has been told throughout the world, even by be effective, it must proceed from a story. The story of the human equipped to initiate the process. But, in order for any of this work to tures of India and the business community worldwide, is well scapes that separate the human from the pulse of nonhuman life. on and destroying the wild, isolating humans within fabricated landwide with their houses and condominiums and farmland, encroaching never to return. Yet humans proliferate, taking up more space worldhappens, entire species of animals, insects, and plants disappear, habitats continue to be destroyed as industrialization expands. As this ized, as seen in the success of consumer culture worldwide. Native the Jains who seek to rise above nature. And this story has been realthe networking of the political, economic, business, educational, sci-As Thomas Berry has noted, the task of ecological repair requires

sential shift toward the development and enhancement of an earthbeauty and fragility of the natural order all can contribute to this esheanth and contemporary science, and the growing perception of the on life in its myriad forms. The cosmological views of Jainism, the friendly way of life. A shift in consciousness must take place that places greater value

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