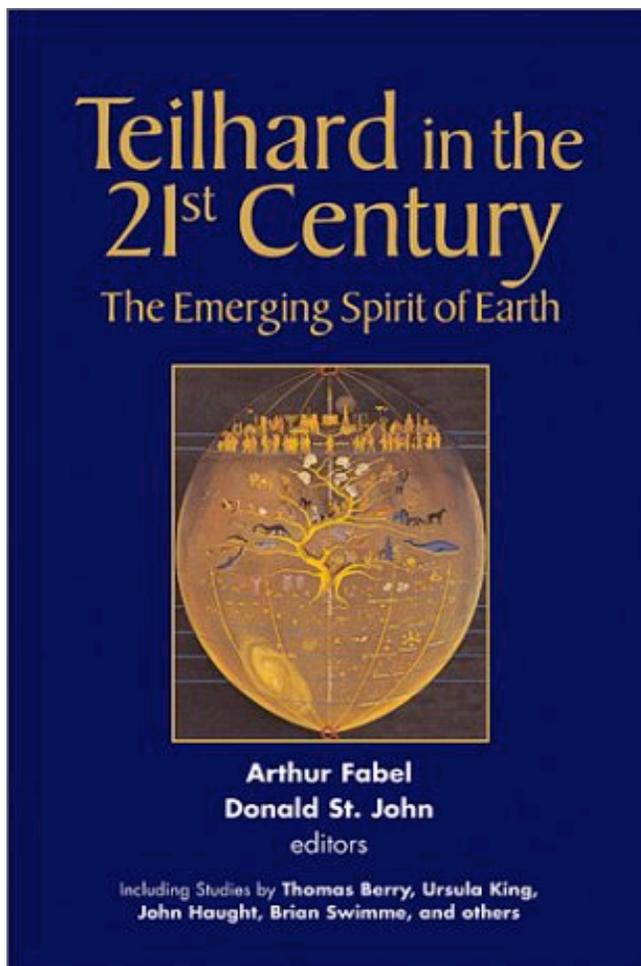


TEILHARD PERSPECTIVE

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This comprehensive volume which spans and draws on many of the contributions of the American Teilhard Association over the past 25 years is now available. It can be purchased from orbisbooks.com or from amazon.com where a large view of the cover can be downloaded. Here is the book's description from the Orbis Books website.

Almost fifty years after his death the work of Pierre Teilhard de Chardin, French Jesuit mystic and scientist continues to shape contemporary work in spirituality, theology, and the interaction of science and religion. These essays, drawn from the best of the first twenty-five years of *Teilhard Studies*, journal of the American Teilhard Association, show how this giant of the twentieth century sheds light on the most urgent spiritual challenges of our time.

The writers represented are a who's who of scholars: Thomas Berry offers reflections on Teilhard and ecology. Brian Swimme explores unsuspected depths of natural selection and its meaning for our age. Articles by Ursula King, Donald Gray, and Thomas King offer insights into Teilhard's friendships with women, the way in which he strove to articulate the unity of knowledge, and his ever-deepening creation spirituality. A brief biography by John Grim and Mary Evelyn Tucker explores the key moments of Teilhard's development and offers new readers a superb entrée into his life and thought. Other authors include William Rees, Arthur Fabel, John Haught, Eulalio Balthasar, Eleanor Rae, and Joseph Grau.

TEILHARD PERSPECTIVE is published by the American Teilhard Association, a non-profit organization whose goals are to explore philosophical, scientific, religious and social concerns in the light of Teilhard's vision and to clarify the role of the human in this emerging understanding of the cosmos.

The American Teilhard Association is very fortunate and indeed rare among such groups to have had the same persons guiding, advising and taking care of needs over the several decades since its inception in the 1960's. It is also exceptional to have a publications series maintain its continuity and quality over this long period. A major reason for this is that Harry Buck has served as publisher for the Teilhard Studies series since it began in 1978 and for this Newsletter at the same time.

Now an emeritus professor of religion at Wilson College in Chambersburg, PA, Harry came to the Teilhard Association by way of Thomas Berry and his own interest in East Asian religious traditions. At Wilson College, Harry founded, edited and published for many years an experiential journal of women's and Jungian issues, *Anima*. His endeavor, Anima Publications, also produced a select series of books in these areas, such as works by the historians of religion Thomas Berry and Diana Eck

My own experience of working with Harry Buck covers earlier the Studies and now the Perspective. His editorial expertise provided a reality check on all sorts of manuscripts, style, grammar, infelicities in punctuation, citation and so on. As a meticulous proofreader, Harry also caught many typos and misspellings.

Harry Buck says he presently wishes to be able to devote full time to his writing projects. We wish him well in this new endeavor and offer both for myself and for the Association many thanks for all his service and contributions.

American Teilhard Association Annual Meeting

For 2004, the yearly event of the Teilhard Association will be held on Tuesday, May 11 as part of the presentation of the Thomas Berry Award. This will be preceded by an afternoon Symposium: Religion and Ecology in the Abrahamic Traditions to be held at the Interfaith Center in New York City, 40 E 30th St.

The Thomas Berry Award is to be presented to James Parks Morton, a recent Annual Meeting speaker and emeritus Dean of the Cathedral of St. John the Divine in New York. The event is sponsored by the Forum on Religion and Ecology, the American Teilhard Association, the Center for Respect of Life and Environment, and the Interfaith Center of NY.

Previous recipients of the Award have included Mary Evelyn Tucker, Brian Swimme and Stephen Rockefeller. The Board of Directors and Advisors business meeting will be held on this day prior to the Symposium. Notice of the event will be sent to all members.

Adds Science Section

As this extensive multimedia site steadily grows in content, along with other new postings such as environmental issues and links, a Science bibliography for the new universe story has been recently placed online. The site is reachable at: www.environment.harvard.edu/religion or by typing 'religion' and 'ecology' into Google and click on the Forum listing on the first page. Hosted by the Center for Environmental Studies at Harvard, initiated and supervised by John Grim and Mary Evelyn Tucker, this website has become a valuable resource for students and those interested in the indispensable religious basis for ecological concerns.

In this issue is reprinted the Introduction to the bibliography and its Table of Contents. Its intent is to provide in one place copious documentation for an unfinished cosmic creation worthy of respectful care for each other, all beings and a sacred earth. Its general theme is to first cite Principles of Self-Organization and then to document how these appear throughout a nested scale of emergence. Clicking on a heading such as 3.1 Cosmogogenesis will route one to the references in each topical area. The bibliography was prepared by Arthur Fabel in collaboration with Brian Swimme, Mary Evelyn Tucker, John Grim and Larry Edwards.

The Emerging Discovery of a Self-Organizing Universe

Brian Swimme and Mary Evelyn Tucker

In the last several decades the scientific community has been engaged in discovering the nature of our interconnected universe. From cosmology to ecology to complexity sciences a remarkable body of literature illustrating the relational qualities of our planet and the universe in which it evolved has emerged.

This annotated bibliography brings this literature together in a comprehensive manner for the first time. The bibliography has arisen in response to the contemporary global environmental crisis that has resulted in massive destruction of species and ecosystems. Such devastation has arisen from the fact that humans have become a planetary power with virtually unrestrained desire for resource consumption. We are now, however, entering a period of rethinking this maladaptive tendency of the human. We are reimagining our role as humans at the species level as participants in the Earth Community.

Critical to this revisioning process is the recognition that we are part of a vast evolutionary process that has brought forth life and continues to sustain life on the planet. The discovery of science—in its various branches of knowledge—is that we are embedded in nested spheres of symbiotic, ecological communities.

Throughout most of the modern era, science provided only a linear approximation of nature's dynamics and conceived of the universe in mechanical terms. With the emergence of the various sciences of complexity and evolution we can see ourselves in an empirical manner as part of interconnected, nonlinear emergent processes. This is a radical break from the sciences of the nineteenth century.

This bibliography represents a flowering of this new knowledge that can be seen in conjunction with the reorientation of religious traditions to their cosmological components. Together the insights of science, as evident in this bibliography, and the insights of religion, as illustrated in the Harvard Divinity School Center for the Study of World Religions series on World Religions and Ecology, can serve to realign the human within a cosmological context of benefit to both persons and planet.

As the Forum on Religion and Ecology strives for a rapport between religious and scientific perspectives appropriate to a sustainable biosphere, this annotated bibliography proceeds from highlighting self-organizing principles to understanding their embodiment at each stage in the emerging universe from galaxies, stars, planets, and ecosystems.

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What is the Future of Cosmology?

With regard to this bibliography, the physicist Lee Smolin, regarded as a leading spokesperson for the state of cosmological science, posted a remarkable paper with the above title on the Internet on November 8, 2003. See: www.flash.net/~csmith0/future.htm.

In a succinct summary, Smolin contends that the current theoretical ferment can be best resolved if space itself is understood as the result of spontaneous processes of self-organization. The synthesis of general relativity with quantum physics will require a discrete, grainy universe which is yet interconnected by a complex network of interactions. By necessity, there are both things and relationships. This perspective is not based on the bottom level string Theory of Everything, as shown on PBS TV in *The Elegant Universe*, but finds the cosmos to be more defined by its emergent, self-organized biological structure. These dynamics are seen at work in evolution prior to Darwinian natural selection. His paper closes with these thoughts:

“This means that there is a deep and fundamental connection between the idea that space and time are to be defined solely in terms of relationships and the idea that the world is a complex system whose structure is to be explained, in part, by its having undergone processes of self-organization.

The first is the key idea behind general relativity, the second the idea behind modern biology. What joins them is that in the end both sets of ideas make sense as descriptions of systems, like the universe or life on earth, that must structure themselves from the inside, without being made or observed from the outside.

But these themes are not only essential for understanding what is happening in cosmology and fundamental physics. More and more I have the experience of meeting people in other fields who talk to me about the importance of the themes of relationalism, variety, evolution and self-organization in their own fields.

Of course, this does not mean that these ideas are right; only observation and experiment can, in the end, tell us that. But it does mean that the late twentieth century pessimists, the postmodernists and social constructivists, and the end-of-this-and-that-ists have it completely wrong. We enter the 21st century with new ideas and wide horizons, with much to do and everything to talk about.”

Ecomorality Conference

A remarkable gathering took place on Star Island, 10 miles off the coast of Portsmouth, New Hampshire, from July 26 to August 2. As noted in an earlier newsletter, Fall 2002, it was sponsored by the Institute on Religion in an Age of Science, IRAS. Organized by co-chairs Ursula Goodenough, Mary Evelyn Tucker and Brian Swimme, it expanded upon the Earth Charter document which states that “the protection of the Earth’s vitality, diversity, and beauty is a sacred trust,” by situating this sentiment in the Evolutionary Universe Story. This emerging vision was further informed by deep insights from Asian, Western and indigenous religious traditions.

Our survey report presents an abstract (italics) for each talk, along with some general observations.

George Fisher, professor of geology at Johns Hopkins University and recent recipient of a Masters degree in theology, was chosen to make the initial Saturday evening presentation.

To set the stage for the week’s conversation, we will invoke the cosmic, geological, and ecological context in which we live. We will reflect on the immense journey that matter and life have traveled from the beginning, and how throughout that journey all that was and is has emerged from a fertile mix of individual well-being and reciprocity. But to sense the meaning of the story and to know our place in it takes more than hearing its broad outline. We will need to remember the individual actors who have gone before us; to read their stories in particular places, like the rocks and ecosystems of Star Island; and to listen for the meaning to be found in those places and those actors.

Prof. Fisher sketched the course of evolution from universe to human on a timescale conceptually spread over some 10,000 meters. He then wondered about the sudden burst of sentient, hominid life which takes up only the last millimeter on this scale yet has such an impact on the biosphere. How might we achieve the vital shift from uncontrolled economic growth to an ecologically sustainable earth? By what insight might nature’s innate ‘sacredness’ be recognized? In this cosmic context was set an urgency to contemplate and restore a precious living planet.

Each conference day began with an ecumenical service of reverence and mindfulness held in a roughhewn, windswept chapel, built around 1800. A brief homily was given each morning at 9 by cosmologist **Brian Swimme**. On Sunday he stressed the imperative to attain an “intersubjectivity” among all earth beings. By this insight, a theme for the week was introduced which drew upon Thomas Berry’s pithy phrase which calls for an emphasis more on the empathic communion between subjects, rather than on the competitive collection of objects that imperils the mainland.

Next on Sunday morning **Ursula Goodenough**, a professor of biology at Washington University and author of *The Sacred Depths of Nature*, spoke on Emergentism as a Way of Thinking about Evolution and Ecosystems. Her research laboratory studies the molecular evolution of mating systems and speciation in eukaryotic green algae. In the talk she explored a novel perspective, in collaboration with neuroscientist Terrence Deacon, on the trajectory of earth

life’s as a nested sequence of self-organizing and increasingly cerebral systems.

Terry Deacon and I are offering a two-part presentation. Today I will set out my version of Terry’s three orders of emergence, bringing in my understandings of the evolutionary process, and will suggest that ecomorality is an obvious, and joyful imperative – a no-brainer – on the basis of our scientific understandings alone. Tomorrow Terry will develop the concept that symbolically mediated intersubjectivity has radically restructured human experience, and that the emergent human capacity for “moral regard” generates a complementary foundation for ecomorality.

Ursula’s presentation revolved around the concept that evolution, rather than a product of random, aimless selection, possesses an intrinsic tendency to arrange and emerge into multicellular, symbol-using, self-aware entities. This is seen to occur in three stages: a first-order shape-based synthesis of nuclear elements and chemical molecules, followed by a second-order rise across space and time of increasingly complex organic assemblies. “Natural selection does not act on mutating genes but on the emergent, self-organized novelties.”

What is different in this pioneering work is to perceive an evolution most distinguished by cerebral and cognitive qualities, a feature missed or ignored by the fossil-based view. This pathway (variously known as encephalization) is traced by a growing ability in organisms to codify and remember (represent) one’s natural and social environment by means of symbols. From monkey to great ape to early hominid to homo sapiens, this process is facilitated by a remembered co-evolution of cultural interactions, language use and larger brains, the next third-order emergence.

A further distinction Ursula noted is to go beyond the standard reduction of life to a molecular domain by perceiving evolution as akin to a developing organism. In this approach, evolved organisms are found to take an increasingly active role in the modification and “construction” of their local ecological niche. (See New Books for a recent Goodenough and Deacon reference.)

George Fisher set the scene again on Sunday afternoon, this time drawing on his global sustainability studies in his talk Energy and Climate.

During this century, we must face the question of how 10 billion people can live in ways that are both sustainable and worthwhile. Doing so will require that we understand the capacity of the Earth system to both supply resources and absorb the byproducts of resource use; that we manage that capacity effectively; and that we share that capacity equitably. The twin issues of energy resources and global warming illustrate the difficulties. The greenhouse effect enabled life as we know it to evolve on Earth. Development of an infrastructure capable of deriving energy from fossil fuels has improved the conditions under which most of us live, and made possible the emergence of a global society. But our increasing use of those fossil fuels has begun to enhance the greenhouse effect artificially, overdoing the warming in ways likely to impair the ecosystems on which life as we know it depends. Population increases and the growing expectations of a global community are expanding demand for energy still further. But the production of oil is expected to peak and

begin an irreversible decline by 2010. We clearly need to develop viable alternative energy technologies, but the energy infrastructure in place makes doing so quite difficult. Working our way through these issues will take all the know-how we can muster. Doing so in a way that is sustainable and that is seen as fair by a majority of people will take all of the moral wisdom that a global community can bring to bear.

The Sunday evening presentation: Land, Life-Forms, and Cosmology: Relational Knowing in Indigenous Communities, was given by **John Grim**, a professor of religion at Bucknell University. As a historian of religions, John undertakes annual field studies in American Indian lifeways among the Apsaalooke/Crow peoples of Montana and the Swy-ahlpuh/Salish peoples of the Columbia River Plateau in eastern Washington. He completed his doctorate at Fordham University under Thomas Berry. His dissertation was published in 1983 by the University of Oklahoma Press as *The Shaman: Patterns of Religious Healing Among the Ojibway Indians*.

This talk will explore how particular indigenous peoples understand the significance of personal and community actions based on relationships with land, with different animals and plants, and through kinship with larger forces in the cosmos. In the Central Australian desert Warlpiri, Kaytej, and Pintupi peoples maintain ancestral connections with specific Dreaming places that for them manifest a larger cosmic Law. In the northern Plains of North America the Apsaalooke/Crow peoples display Xapaaliaa, or “medicine bundles” after hearing the first thunder in spring that celebrate their close connections with specific animals and plants as spiritual manifestations of larger forces in the world. This practice is but one of a complex web of ritual activities maintained by the Crow as a means for exploring the larger cosmic self. Finally, both of these Australian Aboriginal and Native American peoples still organize their societies according to complex kinship systems that transmit indigenous interpretive understandings of land, life-forms, and cosmology. Underlying these diverse indigenous ethics are relational modes of knowing that differ from one another yet manifest distinct and shared interpretations of nature as providing vitality, meaning, and guidance for the human.

John contributed uniquely to the Ecomorality theme by advising how traditional peoples have long sought to abide in attunement with their natural universe. Such wisdom is seen to be especially present, to “sit in,” sacred sites such as Keith Basso explores in his work *Wisdom Sits in Places*. He drew upon a recent article by Nurit Bird-David, “Animism Revisited,” (*Current Anthropology*, 40/Supplement, 1999) which reminds us that animism is not a primitive worldview but can still offer a relational way of knowing which can situate a person’s life within an encompassing communal and cosmological context. In her article Bird-David re-introduces the concept of ‘person’ as a means of understanding indigenous peoples’ recognition of diverse moralities that have emerged from awareness of consciousness and intentionality, perception and relationality widespread in the world.

In response Solomon Katz, an anthropologist at the University of Pennsylvania and past-president of IRAS, worried that we have indeed lost our sense of sacred space and time, and are seriously adrift without such bearings.

The Monday AM talk was by **Michael Kalton** who teaches in the interdisciplinary curriculum of the University of Washington, Tacoma. A former Jesuit, his doctorate is from the East Asian Languages and Civilizations program of Harvard University with a dissertation on Neo-Confucianism in Korea. Typical courses he teaches are God East and West; Zen and Taoism: Systems Models and Critical Inquiry; and Environmental Ethics. Michael is presently at work on a new book to weave together East Asian traditional cosmologies, psychology, spirituality and ethics with a contemporary understanding of evolutionary and self-organizing systems.

Brother David Steindl-Rast describes the religious quest as the journey we make in search of home, a home we carry already deep in our hearts, so we recognize it when we find our way back, however long the path. The Epic of Evolution, though it carries the label of no religion, invites such a homecoming.

Many now hear this Story and respond with reverence and joy. This marks a transition now underway but by no means complete. From the time Darwin first published his theory, no one missed the implication that humans too were included, but that thought brought alienation rather than homecoming. Many experienced the notion of evolution as a threat to hallowed ways of self-understanding, while others took up the theory aggressively to uproot traditions they regarded as outmoded superstition.

But ecologically aware ears can now hear “members of the community of life,” where previously people rejected the notion of being reduced to “mere brutes.” It’s not that we think less of ourselves, but that we are learning to think more of life, and to appreciate the wholeness of the systemic fabric of life. Our session invites you to join in a process of reflection and discussion that examines the promise and challenge presented by the religious dimensions of this understanding.

Our vehicle for engaging this question will be a poem by Robinson Jeffers entitled, “Rock and Hawk,” from which comes the title of our session. We will find in Jeffers’ poem an unflinching form of Darwinism, conflicted religious sensibilities, and a mystical encounter at the intersection of struggling life and the “disinterestedness” of stone. He could not reconcile what he saw in stone and hawk with the religion in which he was raised. In reflecting on Jeffers’ assumptions, reactions, and discomfort, we will find much that echoes a common experience. But Jeffers’ stunning perception, the “massive mysticism of stone,” forms the core of our inquiry. The question is not about Jeffers and how he came to such a perception. Rather it is about us, and whether we can manage, with the scaffolding of a little contemporary science and systems theory, to get a glimpse of the kind of home Jeffers discovered.

Kalton wondered how we might today perceive rock and hawk as “scripture.” Does the evolving universe know and await our coming, can it care for us? Our new understandings of complex systems in their symbiotic “patterns of configured energy flow” might seem to suggest so. But we remain thrust into “fierce consciousness,” the question is still to be answered, the stark search continues.

Paul Waldau, an ethicist at work in the fields of religion, ecology and the legal protection of animals addressed on Monday afternoon: Habitat and Species. With a doctorate in ethics from Oxford University, Prof. Waldau currently teaches at Tufts University.

Each of us will pass through and by many habitats and species on our way to and from Star Island. Who are the "others" in these communities about whom we might care? How do we notice them and take them seriously? We'll engage specific examples of some particularly severe habitat problems in order to focus on four interrelated issues: (1) the significance of these problems for human moral sensibilities and personal moral choices, (2) their relevance to protection of the Earth, (3) the relevance of habitat and species to various religious, cultural, educational, and legal resources for ecomorality: and (4) paths available to individuals for deepening awareness of our increasingly harmful impacts on the habitats and nonhuman communities in our shared world.

Waldau especially noted the plight of the chimpanzees, bonobos and gorillas, along with baboons and the many monkey species imperiled both from habitat destruction and widespread poaching. He is Vice President of the Great Ape Project, which together with Jane Goodall and others is trying to establish legal rights for these precursor and cousin creatures, who indeed feel, think and grieve as we do.

Arriving after a long journey from San Francisco, on Monday evening **Terrence Deacon** brought the conferees into the midst of his latest work in progress. Terry has a doctorate in Biological Anthropology from Harvard, taught at Boston University for some years and is now at the University of California at Berkeley. His research focuses on the evolution and neural development of human brains and cognitive capacities. Terry's significant 1997 book is *The Symbolic Species*. The working title for his current work is *Homunculus*, an attempt to properly define the concept of "emergence" in order to illuminate issues such as the evolution of biological complexity and of content-rich consciousness.

Can't trust revelation. Can't trust authority. Can't trust hedonism. Can't trust relativism. Can you trust nature, evolution, Gaia?

We scientists are still held captive to the Naturalistic Fallacy because we have tried so hard to deny it. This "fallacy" highlights one kind of ethical reductionism, which can take diverse forms, including appeals to deistic fiat and to cultural or biological relativism. It is paralleled by reductionistic/holistic arguments in other fields, which suggests that it may be similarly resolved or found irresolvable. I agree with the philosophical skeptics that ought cannot be reduced to is. Even so, I think that ethics derives from nature and so must be subject to a naturalistic account. This is because ought did emerge from is in our evolution. Humans are capable of what I will call "moral regard," and yet there was a time in evolution where no creature was capable of this, even if many, including our ancestors, had highly evolved pro-social emotional systems.

Does this commit us to accepting a reductionist ethics? I don't think so. I will suggest that the way out of this paradox is to understand the emergent nature of ethics, and the way symbolically mediated intersubjectivity has radically restructured human experience. The emergence of ethical

regard is a process that is amenable to scientific study, even if using it to project the "good" is an inescapably fallible hypothetical process. Understanding its form should illuminate the ground of moral behavior irrespective of the Naturalistic Fallacy. An ecomorality that is based on a reduction to some gloss of "evolutionary purpose" or "ecological good" risks being as hollow as other reductionistic ethics, and an ecomorality tied to mere enlightened biological self-interest seems likewise vacant. But an ecomorality founded on a sentiment to expand intersubjectivity seems both consistent with the natural basis of morality and an opening to experience new emergent forms of moral regard.

These notes can only sample Terry Deacon's intense, multifaceted, illustrated presentation by one of our most creative and important thinkers. His talk Emergence and Ecomorality began with a historical framework. Is the cosmos materialist, non-deist, and indifferent to life as Darwinists would have it? Or might there still be a place for ethical resources, as Herbert Spencer sought in the 1890's, to go from an Ought to an Is? Can a true natural basis be found for ethical behavior?

In contrast to John Stuart Mill's rejection of intuition, Deacon cited recent findings whereby kin and group selection and reciprocal altruism suggest an innate social penchant for empathy and cooperation. The primatologist Franz de Waal is reported to perceive an evolutionary "tower" of a rise in morality, lately enhanced by conscious deliberation. This persuasion counters a narrow reductionism by an appreciation of these ascendant qualities. But Deacon asked: how can matter beget meaning without an idealist bent?

Following upon Ursula Goodenough's lecture, an approach is to consider a novel view of evolution as a self-organized progression of nested circles or spheres of organic and cerebral emergence. In some bootstrap fashion, a "compound interest" is accrued as this scale of being and becoming manifests itself. If such a directional axis or path can be traced, what then arises? Evolved nature does contain "frozen contingencies" in animal form but a central trajectory can be noticed of an enhanced ability to achieve and remember symbolic representations of an organism's environmental and social niche. By these lights, evolution is most of all a "semiotic" process defined by consciously perceived signification in symbols, now flourishing on a human and global scale.

Tuesday morning was graced by **Barbara Smuts'** luminous talk: Our Moral Obligation to Nonhuman Animal Persons. A leading researcher of animal and primate behavior, Barbara received her doctorate from Stanford Medical School in Bio-behavioral Sciences. She is currently Professor of Psychology at the University of Michigan. Her fieldwork includes studies of chimpanzees and baboons at Gombe National Park, Tanzania and bottlenose dolphins off the coast of Western Australia. Dr. Smuts' writings focus on the evolution of affiliative relationships, such as the male-female bonds described in her book *Sex and Friendship in Baboons*.

The societies of other social mammals, such as monkeys, apes, dolphins, elephants, and wild dogs, depend on elaborate affiliative and cooperative relationships. Several kinds of

affiliative relationships have been identified, including ties among close kin and reciprocal aid among allies who cooperate to better compete against others. Less well-studied are tendencies in other species to form "friendships," that is, enduring positive relationships based on mutual, long term commitment to the other, above and beyond their immediate, utilitarian value. While family bonds reflect genetic kinship and alliances are based on the allies' capacities to provide useful aid, friendships often appear to be based on idiosyncratic preferences of one individual for another that are not easily explicable. In other words, friendships are highly personal relationships, in which the partners recognize and value one another's individuality. I argue that the capacity to form such relationships endows some social animals with "personhood," and illustrate this concept with examples from my fieldwork with wild baboons, as well as the dogs I live with. Coming to know individual animals personally provides a direct, immediate experience of them as sentient beings much like ourselves. Such experiences provide a relational foundation for expanding our moral obligation to other species.

Nowhere is the need for such an expansion more urgent than in our relations with the great apes. The chimpanzee, bonobo, and gorilla persons of Africa are endangered by human hunting pressure; we are literally eating our closest living relatives to extinction. If we are capable of feeling our moral obligation to the rest of the universe anywhere, surely we can begin here, with our sister species. Because of our inherent identification with them, because of the urgency of the crisis, saving the great apes from extinction could function as a pivotal transformational event in our evolution toward becoming responsible, reverent, and moral planetary beings.

Adding emphasis to Paul Waldau's talk, Barbara told of the decimation of the great apes, especially gorillas, in Africa, which is overrun by small arm weapons and poachers. Yet these far removed intelligent beings and forebears are often seen as unassociated, disconnected objects. In our urbanized removal and cocoon, we have lost any sense of an evolutionary continuity.

Environmental Ethics and Cosmology: A Buddhist Perspective was the title of the Tuesday evening talk by **Brian Brown**. A member of the ATA for many years, Brian attended with his wife Amarilys Cortijo, a physician. He holds doctoral degrees in Law from NYU and in the History of Religions from Fordham University where he studied with Thomas Berry. Brian is an Associate Professor of Religious Studies at Iona University in New Rochelle, New York.

It is my interest to ground a Buddhist environmental ethic in a coherent cosmology in which the universe as primordial self-expressive reality is as much a psychic-spiritual as well as physical-material process which becomes conscious of itself in human awareness. While such a cosmology is elaborated by the later Mahayana tradition, it is rooted in one of the earliest formulations of Buddhist teaching, the foundational principle of "dependent co-origination."

I shall briefly explore that concept as a Buddhist ecological perspective where nothing exists in and of itself, but only as a context of relations, a nexus of factors whose peculiar concatenation alone determines the origin, perpetuation or cessation of that thing. Noting the primacy of dependent co-

origination as an animating concern of early Buddhist meditational practices, I shall indicate the consistency of that principle in the subsequent development of Mahayana Buddhism and its concept of "wondrous Being."

The major emphasis of my presentation will focus on the complementary doctrines of the "embryonic consciousness" and the Absolute consciousness." Together, these specify the ontological and epistemological framework for understanding "wondrous Being" as the movement towards its own self-revelation: it comes to recognize itself as the essential nature of all things in and through the human mind which is grounded upon and informed by it. Not only is such a cosmology coherent with the ethical ideals of the classical fourfold vows of a Bodhisattva but is an appropriate context which both instructs and dynamizes contemporary moral commitments for the protection of global biodiversity, natural habitats and the preservation of planetary atmospheres, waters, and soil. By its venerable wisdom, Buddhism reinvigorates the human in an ethic of mindful awareness of, reflection upon and care for life in its entirety, as the species that can identify the integrity of the whole in the richness of its diverse particularities.

If we are to truly heal and sustain the earth's biosphere and its creatures and if we would draw on the essence of Buddhist wisdom, Brian advised in a carefully constructed paper that we need gain a meaningful cosmological frame and ground for the human presence. What is missing is the ability to perceive the universe as a psychospiritual reality, a dynamic totality of interdependent causes and entities. This radically relational perspective serves to locate oneself in a mutually interpenetrating sacred context, in marked contrast to a Western particularity of objects.

By this viewpoint, in a Mahayana Buddhist cosmology and anthropology all beings are seen as embryonic Buddhas graced by an awakening consciousness. Rather than isolated individuals, both persons and cosmos evolve into mindfulness by "dependent co-origination."

In a later comment, Ursula Goodenough suggested that Buddhism and the new view of an emergent evolution are convergent readings of an innately developmental and numinous creation.

On Wednesday morning psychologist **Stephanie Preston** considered Empathy for Mother Earth: From the Brain to Bipartisan Politics. Stephanie has a doctorate in psychology from the University of California at Berkeley, where she studied squirrels and kangaroo rats as models for memory and decision making. A recent collaboration with Franz de Waal on a theoretical review of the evolutionary and physiological bases of empathy was published in the journal *Behavioral and Brain Sciences*. (25/1, 2002.)

Across cultures, the environment is personified as a living organism, often referred to as some variation on "Mother Earth." Thus, in order to understand how we apply moral principles to our treatment of the environment, we must understand how we apply moral principles at the individual level, which has long been an endeavor of psychology and biology. A successful biopsychological theory of morality accounts for physiological, developmental, and social influences. Physiologically, I argue that certain emotion-

processing skills are necessary for individuals to regulate their own emotions and to resonate with the emotions of others. It is these abilities that in turn allow for morality and for the moral emotions of empathy and sympathy. The prefrontal cortex has been identified as a possible neural substrate for moral reasoning and for cognitive empathy; many other areas seem necessary for the emotional components of empathy and sympathy. Developmentally, a responsive and coordinated mother-infant bond allows for the development of the necessary emotion-processing skills. Socially, a continued dialogue about the feelings and perspectives of others is necessary throughout development for true moral reasoning. Data from a century of research in psychology and biology support these statements, but I will also bring up some untested ideas about how empathy, morality, and concern for the environment cluster into two distinct groups or personality types that mirror our two-party political system.

Our human brain has evolved a capacity to represent and remember the natural and social environment in such a way that one is able to respond with compassionate concern. An individual tendency for hoarding of resources is seen to be leavened and surpassed by these empathic qualities. But we do not in our secular society seem much concerned over the rainforest or the fate of the earth.

In another aspect of her studies, Preston finds a polar division between right and left political persuasions. An insightful list of comparisons can be made whereby Republicans are orderly, individualist, male, militaristic, rule based, valuing efficiency, rural, and tend to look backward. On the other hand, Democrats are more populist, interpersonal, socialist, pro choice, value civil rights, diversity and community, and have respect for the environment. Right is “nodal” (particulate) while Left is “relational” (wave). The clear inference is that we are acutely out of sync and complementary balance in our national and global societies.

So that the roots of Western thought would be included, **Paul Woodruff** spoke Wednesday evening on *The Ancient Greek Tradition: Reverence for Nature, Natural Reverence*. A professor of philosophy at the University of Texas, Dr. Woodruff recently wrote *Reverence: Renewing a Forgotten Virtue* (Oxford University Press, 2001).

The earliest Greek thinkers held that nature is true and good, but too powerful for human beings to master. Sometimes, however, they felt it was dangerous to leave nature uncontrolled. They were concerned about natural phenomena such as lions, snakes and extreme emotions, but they recognized that attempts to control what is natural can lead to tragic failure. In Part One, I will discuss the place of nature at the center of Greek metaphysics (especially Heraclitus) and also the poets (Sophocles and Euripides) who show how violations of nature lead to disaster. In the fifth century BC, Greek thinkers began to appeal to nature as a standard for social reform, using nature-based arguments, for example, against slavery and the oppression of women. In Part Two, I will outline the concepts of nature that are at work in discussions of this kind – an empirical concept for thinkers like Thucydides and Protagoras, an a priori one for Plato. My main example will be the Protagorean argument that reverence is natural.

The Thursday morning Chapel homily was given by **Mary Evelyn Tucker** who provided a succinct capsule of Confucian wisdom. Seated on a rock in the overflow outside (with speakers) on a sparkling morning of sunlight, seascape and gulls, these words had an especial validity. Confucianism seeks to cultivate individual potential but within a cosmological compass of heaven, earth and human. Persons complete this triad as they attain mindful self-awareness. Chinese tradition perceives a living, organic reality which is distinguished by a “relational resonance,” and “systems of correspondences,” between microcosm and macrocosm. Its animation by a creative life force results in interlinked spheres of mutual harmony and reverence, surely a vital sentiment for ecological issues today.

The inclusion of ancient Hindu wisdom was accomplished by **David Haberman** in his talk: *Living with a Vedantic View of the Self: Gandhi and Deep Ecology*. A professor of religious studies at Indiana University, Dr. Haberman received his doctorate from the University of Chicago. He has lived in India while studying aesthetic, temple, and pilgrimage traditions and is currently working on a new book on sacred rivers in India, which are facing severe pollution.

Deep Ecology, as first articulated in the 1970's by the Norwegian philosopher Arne Naess, has emerged as one of the most influential among all the eco-philosophies of our time. It is associated with much of the eco-spirituality that is appearing worldwide, and has also come to inform much of the direct action of radical environmental groups, such as Earth First!. Many around the globe have identified themselves as Deep Ecologists and have made major contributions toward further elaborating the principles of Deep Ecology. These would include such figures as Gary Snyder, Bill Devall, George Sessions, Joanna Macy, and Dolores LaChapelle in the United States, John Seed, Warwick and Freya Mathews in Australia, Alan Dregson in Canada, Pat Fleming in England, Thich Nhat Hanh in France and Vietnam, and Sunderlal Bahuguna in India. One of the fundamental principles of Deep Ecology is the idea of Self-Realization. This is the idea that the self is interconnected with all living beings. Although this idea comes out of scientific ecological research, few realize that it also has deep roots in the Vedantic tradition of Hindu India. I will trace the lineage of this idea of the self from early Vedantic texts, through the writings of Mahatma Gandhi, and into the Deep Ecology of Arne Naess. Throughout, I will explore the moral implications of the idea of the interconnected self in the works of Gandhi and Naess, with a special emphasis on eco-morality.

The Deep Ecology perspective asks us to consider who we are as selves. As conceived by Naess, Mathews and others, human beings are engaged in their own self-actualization while at the same time involved with cosmic self-realization. For this reason, an anthropocentric view is to be mediated by an appropriate “ecocentrism.” Human beings should be appreciated as both unique entities and connected with the flora and fauna of the surrounding biosphere. From this expanded identity, which has much affinity to Vedantic teachings, could emerge an encompassing compassion for the welfare of person and planet.

The Earth Charter: Aspirations Toward a Flourishing Earth Community was the title of **Mary Evelyn Tucker's** Thursday evening presentation. A vice-president of the ATA, Mary Evelyn is a professor of religion at Bucknell University, where she teaches courses in world religions, Asian religions, religion and ecology and religion and nature writers. The founder of the Forum on Religion and Ecology with her husband John Grim, she has recently edited with Tu Weiming two volumes on *Confucian Spirituality* to be published by Crossroad in the *World Spirituality* encyclopedia series.

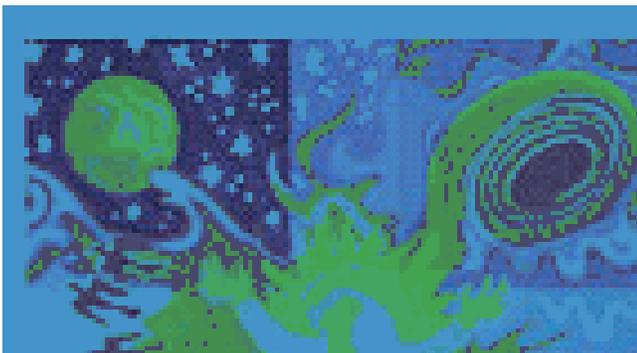
From many quarters there has been a growing concern for the development of a global ethics in response to the interconnected ecological and social problems which now threaten the flourishing of life. The movement for a comprehensive planetary eco-morality is most fully expressed in the Earth Charter that was drafted by an international committee from 1997-2000 (www.earthcharter.org).

Since the United Nations Summit in Rio in 1992 there has been a movement to create an Earth Charter as a vision for a sustainable future for the planet and its diverse community of life. The hope is to balance the impulse for economic development with environmental protection. Such a document was formally adopted by the Earth Charter council in the Hague Peace Palace in 2000.

This "soft law" document embodies an integral tripartite vision of ecological integrity, economic and social justice, and democracy, non-violence and peace. It is the only international document of its kind to embrace the epic of evolution as a functional cosmology for the future of humans and the Earth. In addition, it acknowledges a Gaian perspective that "Earth our home is alive with a unique community of life." Our participation in the Earth Charter Initiative is a singular opportunity to engage in the Great Work of our time.

As a symbolic species, Mary Evelyn advised we are presently forming a new evolutionary phylum and planetary envelope, but largely without a meaningful cosmology. As a result, an absence of a global ethics and a spirituality of nature and the earth undercuts movements toward a sustainable society. An expanded perception which appreciates the "primacy of planet" can embrace third world peoples, women, youth, all the disenfranchised, so as to heal a fragmented, polarized, severely threatened world.

Many folks spoke at a Friday morning wrap-up forum. In his closing statement, **George Fisher** believed that biblical and ecological sentiments could converge into a sacred reverence for Earth life. Psalm 119: "the unfolding of your words gives life" was seen as a fitting expression of the "serendipitous creativity" of a numinous nature. Barnacle and biosphere are united within a holistic earth systems science which can reflect its Divine source and guidance.



Ministry of the Arts

A new website and catalog has been created by the Sisters of St. Joseph of LaGrange, Illinois, where an extraordinary range of artwork can be found. Featured in their 2004 calendar are the paintings of Mary Southard, CSJ, who also illustrated Joyce Rupp's book *The Cosmic Dance* (Orbis Books, 2002). The luminous scene above, full of lively colors, is for the month of February as a new life year begins to stir. These vibrant images depict a quite different cosmos from the standard dark display of expanding, expiring galaxies where life and the human seem alien. Here is an alternative and feminine vision of a Teilhardian universe which innately develops into greenery, awareness, communion, and reverence. At their website: www.ministryofthearts.org a screen saver with several of the images can be downloaded. The following text is the Sisters' mission statement:

"We encourage and affirm creativity in ourselves and all persons. Our mission of unity brings us in our time to a deeper awareness of our communion with God and all creation. Through the arts we contemplate and express the unity and holiness of all creation, and the heights and depths of the human heart in response to the great mysteries of existence. We affirm the power and prophecy of the arts and believe the arts to be an important ministry for hope and healing in a critical moment of world transformation."

The North American Continent

Thomas Berry

This poem was originally read at a conference in Central Kansas and posted at the website for the E.F. Schumacher Society: www.smallisbeautiful.org. Thomas Berry spoke at their annual meeting on October 25, 2003 in Great Barrington, MA on the subject: "Legal Conditions for the Survival of the Earth."

In these opening years of the 21st century as we gather here in this great central valley of the North American continent, we reflect, in a moment of quiet, on our dwelling place here on this Continent.

When we came to this continent, it was

a glorious land of woodlands and prairie
grasses, of a vast open sky, a land
of buffalo and elk, a land of abundance
shaped through the centuries
with their summer storms and winter chill.

Today we come to this valley
from the coastal plains
along the Atlantic shores
from the northeastern woodlands
from the Appalachian hill country,
from the Great Lakes to the north
the Gulf regions to the South,
from the Grasslands, the Mountains
and the deserts to the West,
the Redwood forests
along the Pacific shores,
from the rainforests
in the shadow of Mount Rainier
from the far North
where the boreal woodlands
sweep down from Alaska
across central Canada
to the storm-beaten cliffs
of the North Atlantic.

We come here today, to this valley,
as on a pilgrimage, from all these regions
and from regions beyond. We come
to reflect on how, centuries ago,
we might have joined the community of life here,
we might have established an intimacy
with this continent in all its manifestations.

We might have seen this land
as a divinely blessed land to be revered
and dwelt in as a light and gracious presence.
We might have felt the divine in every breeze
that blew across the landscape, seen
in every flowering plant, wondered at
in every butterfly dancing
across a meadow in daylight
in every firefly in the evening.
But if in the past we have not been sensitive
to the deeper meaning of this continent,
we come here today as pilgrims, not simply
to this place along the grasslands
but to the entire continent.

Pilgrims, penitent, we bring with us
The promise of dedicating ourselves
To relieving the oppression
we have imposed in the past
and beginning a new era
in our presence here today.

We begin to understand that the way
to the world of the sacred is through
the place of our dwelling

We are finally awakening to the beauty of this land.
We are finally accepting the discipline of this land.
We are finally listening to the teaching of this land.

We are finally absorbed in the delight of this land.

We have come from the far regions of this continent,
each of us with our distinctive experience
of the regions whence we come. We reflect
on the 200 million years since this continent
broke off from the other continents
and began its distinctive development.

While we learn the sacred quality of this continent
in its spatial extent we also experience
those historical moments of grace
whereby all the various features of this continent
took on their present modes of expression.

The story of this continent is now our own story,
for while we came here in the later stages
of its history we are now integral
with what takes place here. Throughout the future
the story of this continent and our own story
will be a single story.

Today we begin to relieve an ancient wrong.
We wish especially to restore to this continent
its ancient joy. For while much of what
we have done is beyond healing, there is
a resilience throughout the land that only
awaits its opportunity to flourish once again
with something of its ancient splendor.

So far as we are able, we wish to evoke
these powers to their full expression
so that the primordial liturgy of divine praise
that once arose from this continent might again
burst forth in a new brilliance of expression.

We are concerned for the children,
the children of every living being
on this continent, the children
of the trees and grasses,
the children of the wolf,
the bear and the cougar,
the children of the bluebird
and the thrush and the great raptors
that soar through the heavens
the children of the salmon
that begin and end their lives
in the upper reaches
of the great western rivers,
the children, too, of human parents
for all the children are born
into a single sacred community.

It is increasingly clear that none
of the children, nor any living being
on this continent or throughout
the entire planet has any integral future
except in alliance with every
other being that finds its home here.

Tonight we come here as pilgrims to this continent
To beg a blessing from its mountains and valleys,
and from all their inhabitants. We beg a blessing

that will heal us of our responsibility
for what we have done, a blessing
that will give us the guidance
and the healing that we need.

For we can never bring a healing
to this continent until we are first
blessed and first healed by this continent.

To make ourselves worthy of this blessing
is the task to which we dedicate ourselves
in these opening years into the 21st century
that all the children of Earth
might walk serenely into the future
as a single sacred community.

Miriam's Well

This is the name of a new center for programs on creative, holistic mindfulness in a new century. Based in Saugerties, NY, events are held at the Dolce Heritage Conference Center in Southbury, CT. Their web address is: www.miriamswell.com.

Recent speakers have been Brian Swimme on The Power of the Universe, Huston Smith on The Enduring Truths of the Great Religions and Meg Wheatley on Making a Sane Contribution in an Insane World. Here is a sample from their invitation.

Miriam's Well offers time and space for you to become a part of something unpredictable and exciting. By engaging in light-hearted but profound discourse with curiosity and paradox as our most reliable friends, we emerge—if not smarter or more at peace—less afraid, more hopeful, and newly energized with maybe a little more faith in the human race.

The Wisdom of Living Systems

This phrase is the title of an interview in the Spring/Summer 2003 issue of *What Is Enlightenment?*, which was reviewed in the previous TP. Of interest is the above artwork which accompanied the article and depicts a novel image, just being understood, of life's evolution as a nested genesis of whole systems from an atomic realm to a living, cellular earth, rather than the directionless Darwinian model.

The website of its biologist author: Elisabet Sahtouris: LifeWeb: Biophilosophy, is www.ratical.org/LifeWeb, where publications, projects and more graphics are accessible. Of special interest is a new summary article of her views: "A Tentative Model for a Living Universe." Once again here is an organic cosmology which expresses an innate propensity for emergent, embryonic sentient life as its defining feature.

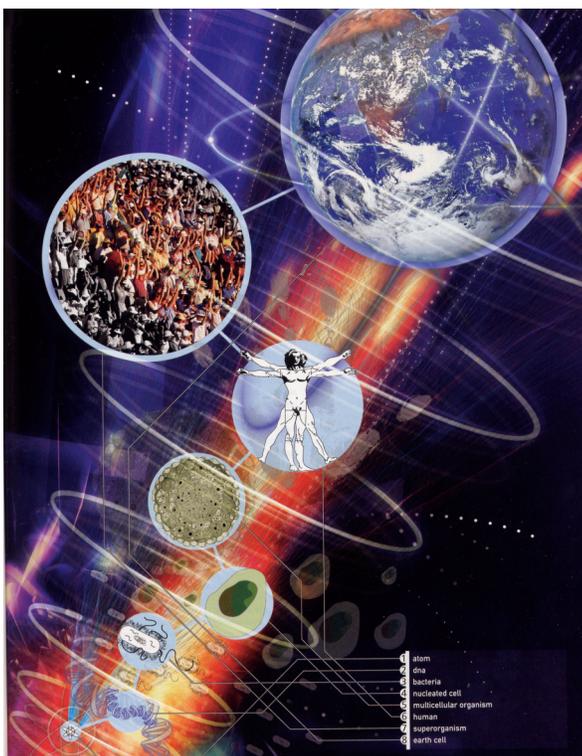
"Teilhard de Chardin believed in love as a cosmic principle. Even though he represented this as a Christian concept, and monotheism has never been my cup of tea, I find his writings meaningful, intelligent, and inspiring. I believe the phenomenon of humanity on Earth is a local example of a trend toward higher consciousness and spiritual enlightenment that transpires all over this universe." David Grinspoon *Lonely Planets*. (412) (See

Center for the Story of the Universe

This is the home for the visionary projects of cosmologist Brian Swimme and can be reached at: www.brianswimme.org. In a recent letter, Brian offers these thoughts for our time.

Greetings! We live in one of the most troubled eras of world history. So much technological power, yet so much of it used for such needless destruction. The planet has become, increasingly, a series of armed camps attacking and being attacked. And as all this violence is carried out we know so clearly we should be devoting our attention and energy to making sure we leave a vibrant Earth Community so that our children and all children might flourish.

In the midst of this senseless violence there are, as well, energies of renewal and transformation, one of which has been named by Thomas Berry as The New Story. Coming out of contemporary science, and in consonance with the oldest wisdom within the human community, this emerging awareness recognizes that every human is kin to every living being throughout the planet, that every living being is composed of elements forged by the same stars, that the health



and well-being of anyone is woven into the health and well-being of all the communities of Earth. No scientist has any doubt about the truth of the main ideas of this New Story. What is needed is a way to make these ideas available to larger segments of humanity. There is little doubt that this will happen over time. If in 2003 only one percent of the world's population knows the basic facts of the New Story, in future centuries nearly every child will begin life with a prolonged introduction to the manner in which we all form a single, complex, interconnected community of life.

The Center for the Story of the Universe was founded to address the challenge of sharing with humanity the New Story of the Earth and Universe, and we are writing today to thank you for your participation in this work over the last couple decades. Though we have only reached a small fraction of the human community, we can already see the way this awareness of our common story is slowly diffusing through human groups on every continent. Up until now CSU has concentrated mainly on traditional means of communication, including printed materials, public events, and educational videos, but we are now venturing into some new areas of interest.

Brian goes on to describe the new Internet course **Epic of the Universe** he developed with Dr. Larry Edwards, which was introduced in the last Perspective.

The Universe is a Green Dodecahedron

A 2002 study by Johns Hopkins University astronomers has come up with a composite color for the entire cosmos as a shade of turquoise green. Researchers combined the visible color wavelengths of the celestial cosmos into a spectrum, much like sunlight when it breaks down into the colors of a rainbow. By taking into account the varying concentrations of the different visible light wavelengths, this spectrum was then converted into one color that the eye would see. So instead of black darkness, a more fitting pastel hue for an organically creative cosmos appears. The results were presented at the January meeting of the American Astronomical Society.

Similarly in a cover story in the journal *Nature* for October 9, 2003, a team of French and American scientists report that from an analysis of the Wilkinson Microwave Anisotropy Probe satellite data the universe may in fact be finite and have the shape of a 12 sided dodecahedron. Some problems remain, but the theory received wide admiration in the press and should be verified or not in the next few years. As the *Economist* magazine noted, Plato would be pleased but not surprised.

More information can be accessed by typing green and universe or dodecahedron and universe into the Google search engine and selecting from the top ten or twenty hits. And with a notice of Brian Swimme's famous book, could this green dodecahedron universe with its flaring forth of galaxies and supernova be seen as fire-breathing?

Reflections on Teilhard by Members of the Manhattan Discussion Group

The Teilhard Discussion Group in Manhattan was founded in the Spring of 2000 by Jean Maalouf and Terri Heveran in the hope of providing a forum in New York City for sharing ideas on Teilhard and his message for today's world. Meeting monthly on Sunday afternoons, attendees may discuss individual areas of special interest, read Teilhard, read about him, and try to relate his thinking to their own situations and to current events. For information about the group and meetings, please contact Terri Heveran at (212) 759 2106, email: THEveran@aol.com.

Reflections on Teilhard

Richard Jordan

Well for myself, it all began with Brother Arthur Hannigan, my sophomore religion teacher at Holy Cross High School in Flushing, NY, and Frank Gluchowski, a student in the class. Brother Arthur often used to call on a student when things were getting a bit dull, and one day he called on Frank. "Gluchowski" – "Yes, Brother Arthur?" – "you have a question." "Well, OK, there's this philosopher whose name is Teilhard de Chardin and he has a concept called the noosphere..." Most of the class laughed since they thought that Frank was pulling our collective legs.

That was the beginning, since Brother Arthur had read *The Phenomenon of Man*. But I wanted to find out for myself. So I bought the book, I think it was a Harper Torchbook priced at \$1.65. I opened to the introduction by Julian Huxley. After two pages and 30 minutes later, I decided that if I could not read and understand the introduction, and that it was written by Someone Else, how could I understand the book?

So I decided to wait until I was in college. Now I found the ideas interesting. I really did not do anything else except from time to time read other paperback editions of Teilhard.

Then about 20 years ago, in conversations with the theater director at my Episcopal Church, Calvary/St. George's in Manhattan, I found out that there was a Teilhard society and that they met at the Cathedral of St. John the Divine. After some phone calls, actually over the course of a few years, I finally found that they met in Riverdale at the home of a man named Thomas Berry.

Well, at the first meeting, I found out that the Vice President of the Society was Mary Evelyn Tucker, who taught at my Alma Mater, Iona College in New Rochelle. The meetings were great, we could go into the backyard and say hello to the Great Red Oak tree, there when Henry Hudson sailed up the river. And a remarkable event occurred after each gathering - which was the pot luck supper. Brother Conrad, who lived at the house, a large Victorian owned by the Passionist Order, made his special recipe baked beans. They were the best beans I ever ate. Still hold that distinction.

After a couple of years of attendance, I was asked if I was interested in serving on the Advisory Board. I said yes. This meant that at the Annual Meeting, I had the good fortune to listen to issues involving the Association. This Meeting was then held at Union Seminary, followed by a lunch and a lecture.

Over the years, I heard Thomas Berry refine his own cosmovision. At the same time, I began to develop mine, in

conversation with many of the Teilhardians of the contemporary scene.

Eventually, I was asked to serve on the Board of Directors. During that time, I was elected as a Trustee of the Cathedral of St. John the Divine. My concept of being a Trustee of such a great institution is that I also serve as a Trustee of Sacred Space. And the Cathedral is a microcosm of the universe when Paul Winter holds the solstice celebrations.

So my interest in Teilhard has now brought me to work with many of the leading planetary thinkers, including Mikhail Gorbachov. And a person at the UN that I see every day. I call him “Gregory the Illuminator” – he washes the windows, cleans the glass doors, day in and day out. His work goes unheralded, but it allows clarity for all.

As a closing reflection, I would mention that I am the thurifer at my church. My nickname is “Richard the Smoke” – apt for a fire sign, born April 16, and who has fire throughout his astrological chart. Where I often end up kneeling is on a small series of steps in the sanctuary, the top step of which is very interesting. It contains a fossil of a snail, or probably an ancient ancestor of a snail – it’s really large – but it keeps me reminded of the fact that we are at the end of many million of years of evolution, and that this creature is an example of the answer to: “Who is my neighbor?” Well, it’s this snail, for one, so long ago, caught in time and somehow brought to this spot to help me recall the Hymn of the Universe, the Human Phenomenon, and the Divine Milieu.

Pretty interesting stuff. Thanks, Brother Arthur and Frank, for setting me on part of my life’s adventure.

Teilhard in My Life

Terri Heveran

When I was a child my parents used to tell me about God – that he was everywhere, right around us, but we couldn’t see him because he is a pure spirit. And that he had no end and no beginning. I used to lie awake at night thinking about all this. The spirit part, I decided, was clear enough: God was like air, everywhere but invisible. But the second part used to drive me crazy until finally I would fall asleep. It was not until many years later, when I had been out of college and working in New York for some time and happened upon Teilhard’s *Phenomenon of Man* that all of those early thoughts were reawakened in me.

I had attended a Catholic college and received thorough training – Jesuit style – philosophy and Thomist theology, which made a deep impression and prepared me well for the many arguments I would subsequently find myself embroiled in. It was a time of intellectual ferment, when it seemed that everyone except us Catholic graduates was convinced that belief in God was no longer tenable given all the advances in science in general and evolution in particular. The existentialists seemed to believe that life was meaningless anyway, and others were sure that the world was doomed, if not from nuclear bombs then from starvation due to overpopulation. Scientists made public statements that the human race had no more than 30 to 35 years left on the planet before we ran out of water, food, oil, heat, or whatever their specialty happened to be. In the mid 1950’s the Club of Rome, a group of eminent scientists and leaders from the

developed countries, had met and produced a report, complete with charts and graphs, showing that Doomsday would indeed arrive in some thirty years or so if present trends continued.

None of this seemed real to me. I felt in my bones that these ideas were somehow wrongheaded, but my liberal arts degree hadn’t provided the scientific background to be able to rebut them. My interest in science had been pretty much limited to the space program, and to recent progress made in particle physics as I realized that solid objects were really not solid at all.

When Teilhard’s *Phenomenon of Man* arrived on the American scene in the 1960’s, the Saturday Review of Literature, a well known weekly magazine edited by Norman Cousins, featured the book and mentioned that it had just been translated into English after causing a sensation in Europe. There was just enough background about Teilhard (whom I had never heard of at that point) to whet my interest.

When I picked up the book I couldn’t put it down – it just blew my mind! Here was a scientist who made sense, who projected a deep religious faith, and who was able to meld the two together – in fact to show that they were really two sides of the same coin. Reading *The Phenomenon of Man* and later Teilhard’s essays as they became available, was to me like filling in the blanks in my own thinking, as well as providing material for holding my own in the many arguments mentioned above. It illuminated the dark corners in my own mind, and gave me a basis from which to go forward, which is what Teilhard intended his work to do and to be.

Over the ensuing years I reread Teilhard once or twice and sort of made his ideas my own. But I had not consciously thought about him for some time until one day in the early 1990’s when, as I was wandering through a bookstore, a title caught my eye. It was *Complexity* by Mitchell Waldrop, which immediately brought to mind Teilhard’s emphasis on complexity as the engine of evolution. The book – an account of the new sciences of complexity and chaos – renewed my interest in Teilhard and in science in general. I was delighted to find that his findings and theories had relevance to today’s scientific research.

So Teilhard has been with me in one way or another most of my adult life. Today, in our confusing world, he helps me to see through and beyond the present to what could be: from the current complexity through chaos and finally to a creative order.

Book and Journal Reviews

PIERRE TEILHARD DE CHARDIN: WRITINGS
SELECTED WITH AN INTRODUCTION

Edited by Ursula King

Maryknoll, NY: Orbis Books, 1998.

By Jean Maalouf

Why do so many scholars still seem captivated by the writings of Teilhard de Chardin (1881-1955)? One good reason would be because Teilhard identified the crisis of modern times as most of all a spiritual crisis. Next, he tried to provide a solution for this crisis, or at least, we should perhaps

say, he put a number of great ideas on the table for discussion. Thus, a book that collects writings taken from the many volumes of Teilhard's works is welcome, especially if it is edited by a scholar like Dr. King.

Ursula King, emeritus professor and director of the Center for Comparative Studies in Religion and Gender in the Department of Theology and Religious Studies at the University of Bristol, England, is the author of several other relevant books including: *Spirit of Fire: The Life and Vision of Teilhard de Chardin*, *The Spirit of One Earth: Reflections on Teilhard de Chardin and Global Spirituality*, *Christ in All Things: Exploring Spirituality with Teilhard de Chardin*, *Towards a New Mysticism: Teilhard de Chardin & Eastern Religions*.

Although it is not easy to make an appropriate and comprehensive selection from the many writings of Teilhard, a Jesuit priest who was also identified as a poet, philosopher, theologian, scientist, and a mystic, and whose aim was to reconcile science and religion, Dr. King has succeeded admirably. Her choice of writings indeed conveys the great influence of Teilhard's holistic vision on our contemporary spirituality.

A comprehensive introduction provides the reader with the essentials of Teilhard's life and a description of his writings. She selects important texts and classifies them under the following titles: "Discovering the Divine in the Depths of Blazing Matter," "Living in the Divine Milieu," "Christ in All Things," "The Awakening and Growth of the Spirit in the World," and "The Heart of Teilhard's Faith Questioned and Reaffirmed." Each of the titles has its own introduction.

The chosen texts of this selection are obviously incomplete. How can they be complete? Teilhard's writings are too vast, and a publishing house series usually confines the author by certain parameters.

When I was working on my own selections, essays and books on Teilhard, I too experienced the same agony of choices. Nevertheless, I would have wished to see in this present volume more prayers that Teilhard wrote, and more texts about the interaction between spirituality and matter, and more emphasis on Teilhard's vision of communion with God through communion with the world. This is where Teilhard, in my opinion, is most relevant for spirituality today.

Many of us still remember how controversial and how suspicious Teilhard's ideas were before his death in 1955. He was even forbidden to publish on religious matters during his lifetime. But somehow, his ideas found their way to Vatican II Council members and even permeated some of its official documents. Considered ahead of his time, Teilhard may be more relevant than ever before. There are many more publications, and national and international conferences about Teilhard now taking place. New Teilhard groups are being created. Numerous writers, Christian and non-Christian, quote frequently from his writings and for good reason.

"All the senses come into play in his writings," wrote Dr. King in the introduction, "...and the words he uttered can touch us in turn, seize our heart, inspire our imagination, and nurture our inner growth."

Ursula King, in this book as well as in her other writings, speaks with authority, an open mind, and with a big heart and

high hopes. This book is more than a collection of writings or a study. It is a soul-stirring call to conversion and growth.

Besides giving us a brief but very good idea about a spiritual and intellectual giant and about one of the most influential Catholic thinkers of modern times, this book is an excellent source of spiritual truth and an effective source for the "Zest of Living."

Jean Maalouf holds a doctorate in philosophy from the Paris-Sorbonne University. He is the author of many articles and ten books including the best-selling Bold Prayers from the Heart. His work of Teilhard's writings is Teilhard de Chardin: Reconciliation in Christ (New City Press, 2002). Dr. Maalouf is also the author of the latest Teilhard Study: Teilhard and the Feminine, Number 47, Fall 2003.

New Books and Articles

Baron-Cohen, Simon. *The Essential Difference: Men, Women and the Extreme Male Brain*. New York: Basic Books, 2003. Following upon collaborative studies of autistic behavior, a neuropsychologist proposes that men are to be more equated with "systemizing" tendencies, which require close analysis and control of mechanisms, and women as "empathizing" by their preference for social relations and concern. A novel step is then to perceive the condition of autism with its obsession for enumeration, predictability and inability to relate to others as due to an excess prevalence of those male traits. But the author seems to misappropriate these propensities to the brain hemispheres with men seen as more right brained, women biased to the linguistic left, which goes against the majority of findings in this area. But surely innovative work and the basis of a cover story in *Newsweek* for September 8, 2003.

Davies, Paul. "E.T. and God." *Atlantic Monthly*. September 2003. Two great options – sheer chance or a lawlike evolution – are concisely reviewed in light of the growing evidence for an inherently self-organizing, convergent creation. In this rising view, life is no longer incidental but a fundamental, intended product of cosmic nature.

"The more one accepts the formation of life as a natural process (that is, the more deeply embedded one believes it is in the overall cosmic scheme), the more ingenious and contrived (dare one say designed?), the universe appears to be." (118)

Gardner, James. *Biocosm*. Makawao, HI: Inner Ocean Publishing, 2003. A novel attempt to express the growing realization that the universe innately develops into intelligent, planetary entities who may then continue on to solar, galactic and cosmic scales. The author provides a synthesis of many thinkers at this frontier such as Lee Smolin, Stuart Kauffman, Christian de Duve, Martin Rees and Lynn Margulis. From these sources is described a teleological creation whose emergent life and mind is involved with the ultimate 'self-replication' of the universe. Be advised the work is speculative and heavy on jargon and technology. Teilhard's vision of an Omega Point is seen as a prescient exemplar of the view that "intelligent life is the architect of the universe."

Goodenough, Ursula and Terrence Deacon. "From Biology to Consciousness to Morality." *Zygon*. 38/4, 2003. A summary article of their innovative rethinking of evolution which can include and reflect the symbolic emergence of memory, cooperation, empathy, purpose and value.

Grinspoon, David. *Lonely Planets*. New York: Harper Collins, 2003. An astroscientist writes a natural philosophy of life in the universe which steers between the rare earth theory that we are alone and the moribund mechanical version so as to perceive an evolving cosmos that inherently becomes richer in animate complexity and sentient intelligence.

"The tendency of matter, under certain conditions, to self-organize suggests a new picture of evolution. Traditional Darwinian theory has regarded evolution as a "blind watchmaker" where natural selection between random mutations leads to all innovation and adaptation. But complexity theory suggests that evolution may also refine and exploit the nascent emergent properties of matter. Natural selection may be helped along by some spontaneous pattern-forming habits built deep into this universe. (270)

The universe is progressing in a direction toward greater intelligence, conscious awareness, and self-understanding. The dark universe becomes gradually more lit up with consciousness." (402)

Hefner, Philip. *Technology and Human Becoming*. Minneapolis: Fortress Press, 2003. A profound little book which is the text of Hefner's chapel talks at the 2001 Star Island IRAS conference, with the topical concern of "Human Meaning in a Technological Age." A guide throughout is Teilhard as this University of Chicago theologian seeks to meld and leaven the prowess of our age with traditional religious doctrines. Also amongst the pages is a luminous encounter with the themes of artificial intelligence in light of a painting of the Cosmic Mestiza, a Mexican woman as a symbol of a pathway to their resolution.

Keenan, Julian. *The Face in the Mirror*. New York: Harper Collins, 2003. A neuroscientist expands upon Gordon Gallup's mirror recognition test as a measure of self-identity by adding neuro-imaging studies along with other recent findings. From this synthesis is drawn the conclusion that the right brain hemisphere, rather than being of minor account, is the seat of self-awareness and consciousness. The condition of autism whence a child is unable to develop a "Theory of Mind" that other persons have their own thoughts is then attributed to an absence of this faculty. Keenan goes on to propose a recapitulation between the ontogeny of how a child's motor skills and cognitive abilities such as the 2nd year onset of self-recognition develop and the evolutionary phylogeny of their acquisition by primates, hominids and human beings.

Keller, Catherine. *Face of the Deep: A Theology of Becoming*. London: Routledge, 2003. In contrast to an explosive point of cosmic origin and subsequent linear time, a feminine reading would find a *tehom*, an amniotic fluid out of which life and being develops embryonically in a fundamental organic universe. At the edge of chaos and order, creation is seen to arise by its propensity for fractal self-organization. Rather

than pedantic description, in this book a stream of consciousness narrates a living, interrelated presence.

Merchant, Carolyn. *Reinventing Eden*. New York: Routledge, 2003. Historian Merchant summarizes a quarter century of insightful critiques of the masculine devastation of the Earth that began with her 1980 classic *The Death of Nature*. Opposed to this Enlightenment agenda to recover a primal age through controlled environments such as shopping malls and gated communities, is advised a respectful rapport with nature and reciprocity between women and men which can preserve a presence of original wilderness.

"Like others, I yearn for a Recovery from environmental decline – for my own vision of a postpatriarchal, socially just ecotopia for the third millennium. A partnership ethic implies a remything of the Edenic Recovery Narrative or the writing of a new narrative altogether. The new story would not accept the patriarchal sequence of creation, but might instead emphasize simultaneous creation, cooperative male/female evolution, or an emergence out of chaos or the earth. It would not accept the ideal of subduing the earth, or even dressing and keeping the garden, since both entail total domestication and control by human beings. Instead each earthly place would be a home, a community, to be shared with other living and non living things. The needs of both humans and nonhumans would be dynamically balanced." (242)

Nisbett, Richard. *The Geography of Thought*. New York: Free Press, 2003. The University of Michigan cultural psychologist summarizes a decade of research projects with East Asian colleagues and students which finds a general but real emphasis on individualism for Northern Europe and the United States and communal, group preferences for Chinese, Korean and Japanese persons.

"The collective or interdependent nature of Asian society is consistent with Asians' broad, contextual view of the world and their belief that events are highly complex and determined by many factors. The individualistic or independent nature of Western society seems consistent with the Western focus on particular objects in isolation from their context and with Westerners' belief that they can know the rules governing objects and therefore can control the objects' behavior." (xvii)

Peters, Karl. *Dancing with the Sacred: Evolution, Ecology, and God*. Harrisburg, PA: Trinity Press International, 2002. A theologian, scholar of science of religion and editor of the journal *Zygon* for many years, Peters proposes a "naturalistic theism" by which to perceive a process view of cosmic to human creation as a sacred dance with a salutary Divine presence. A tour of this insightful landscape leads to, in a final chapter, the metaphor of earth as a child of God. This image is then seen to resonate with the Teilhardian vision of a personalizing universal and planetary genesis.

"The metaphor I am suggesting is that the entire evolving universe is like a birth process that gives rise to children. One such child is our planet Earth, which has become alive with the advent of life and has become self-conscious with the advent of the human mind. The human mind is the self-reflective thinking layer of the earth, what Pierre Teilhard de Chardin called the noosphere." (138)

Peters, Ted and Martinez Hewlett. *Evolution from Creation to New Creation*. Abingdon Press, 2003. A review of the landscape of religious and scientific versions of life's evolution which also considers schools such as Creationism and Intelligent Design. The authors then opt for a response they call 'theistic evolution' which seeks to unite a belief in God with a recognition of the findings of evolutionary biology and anthropology. Many colleagues are surveyed such as John Haught, Francisco Ayala and Nancey Murphy but the leading proponent in their view is Teilhard.

Salmon, James, S.J. "Chemical Self-Organization, Complexification, and Process Metaphysics." Joseph Earley, ed. *Chemical Explanation. Annals of the New York Academy of Science*. Vol. 988, 2003. A paper from the Sixth Summer Symposium on the Philosophy of Chemistry and Biochemistry, Georgetown University, August, 2002. Fr. Salmon, a chemist at Loyola College in Maryland, employs Teilhard's concepts as a resource by which to view evolution as the oriented development of increasingly complex, unified and centered entities. Here is the abstract from this deeply philosophical and thoughtful essay.

"Recognizing the self-activity of matter through complexification can lead to seeing evolution as a process of union. This process approach emphasizes a metaphysics of becoming rather than of being. Advances in the science of thermodynamics lead to understanding chemical self-organization as a stage in this process of complexification."

Teilhard Perspective

We welcome suggestions of relevant ideas, books, news, events and contributions of articles. The editor's address is Arthur Fabel 11 Meadowbrook Dr., Hadley, MA 01035; phone/fax 413 549 1416; artfabel@crocker.com.

The *Teilhard Perspective* news letter along with the biannual *Teilhard Studies* pamphlet and meeting notices are available through membership. Please contact us at: **American Teilhard Association, The Spirituality Institute, Iona College, 715 North Ave., New Rochelle NY 10801**. Annual membership is \$30.

