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Are We Really Interconnected?
Ecophilosophy and Quantum Theory From a Postmodern Perspective

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This paper[1] is about the essential need for a new way of thinking about ourselves and the natural environment. I do not need to describe for the reader the enormous problems into which we humans have subjected our environment—depletion of natural resources, pollution, conflict, oppression. Our so-called anthropocentric paradigm has exacted a heavy toll on the environment which may not be sustainable in the near future.

The global environmental crisis today compels us to review an essential principle of reality which has been insistently articulated by ecophilosophy as a comprehensive vision of the fundamental interrelatedness of all life. The deep ecologist Michael Zimmerman explains this vision as "the internal relatedness of all things, that is, that particular entities are but contemporary knots in an interconnected cosmic web" (2). The fact that this view finds its scientific validation in quantum physics points to a profound transformation in human thought and the discourses of the human sciences. The ecophilosophical view of the environment based on the interrelational, or in other words the holistic perception of reality is generally referred to as the new paradigm. Moreover, in a complicit way the new pradigm has also come to be known as "the new postmodern paradigm," which, as Steven Best and Douglas Kellner emphatically argue, is "emerging in society and culture as a cumulative result of paradigm shifts in specific disciplines" (19). In fact the discourses of postmodernism have appropriated and incorporated "certain notions current in contemporary environmentalism" as the environmental thinker Jim Cheney notes (87), addressed the new conceptual changes concerning the descriptions, perceptions, interpretations and understanding

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[1] This is a revised and expanded version of the paper presented at the Center for Ideas and Society, UCR, 9 October 2002. The reference to Mevlana Jalaluddin Rumi's poem "Say I Am You" has been taken out, and sections on postmodernism have been reworked and expanded in the present version.

of reality, and at their best shed light on the new forms of culture, politics and society. The term postmodern is also applied to the new physics itself due to its radical discoveries in the subatomic realms. The postmodern turn has penetrated into almost all fields within the academia, and in Best and Kellner's words, "every domain of society is undergoing transformations to which the term 'postmodern' is applied" (19). This postmodernism, however, is to be understood as a transdiciplinary and as a reconstructive discourse in its practice and critique. Jim Cheney has called this new postmodern turn across the disciplines as a "transformed postmodernism" which will "have a transformative effect on environmental ethics" (87). Redefined thus, postmodernism becomes complicit with the ecocentric approach of the environmentalist discourses, and rejects all dichotomies between nature and culture created by the Cartesian/Newtonian-mechanistic worldview and reinforced by what George Sessions calls "Renaissance anthropocentric humanism" (161). The Cartesian view is also the prevailing mode of thought in Modernist and Enlightenment narratives which postmodernism has already notoriously challenged. The new reconstructive postmodernism respects cultural and ecological diversity. It is ecocentric without being essentialist as well as multiperspectival without falling into radical relativism. It honors biodiversity in the ecosystem and the cultural differences of the human communities without creating oppositions. Hence, there is no reason to assume that an ecocentric postmodern turn across the disciplines encourages totalizing forms of discourses in any field of study, and to believe that this redefined postmodernism precludes the major postmodernist ideas of pluralism, difference, and subversion. These terms themselves have come to be reconsidered in the postmodern paradigm shift. In what follows I will be arguing for the need to assimilate the emerging new paradigm into all of the human discourses.

The large-scale degradation of the environment openly reveals things falling apart, not only in highly self-reflexive Western cultures, but also in many other societies around the world. Many people in the West and the East feel that "Things fall apart. The center cannot hold." These prophetic lines from Yeats's poem "The Second Coming" echo the present condition made possible by industrial processes. As the American philosopher Max Oelschlaeger puts it, "[…] collectively we are driving nature toward a point where civilization will no longer be sustainable" (539). Similarly the leading Indian thinker B. D. Sharma states, we have to dismantle "the unbearable burden created in the name of so-called development at the cost of earth's fragile ecology" (563). Although there are international agreements about environmental safety, protection of endangered species, preservation of

Earth's ecological communities and the ecosystems, they are not fully enacted by the nations who signed them. The main response comes from the environmentalists.

Viewing the environmental crisis as a crisis of the Western anthropocentric values many environmental thinkers have developed a critical stream of thought which originated, especially in the United States, in the writings of Aldo Leopold, Rachel Carson and Gary Snyder. Aldo Leopold's call for a "land ethic" in 1949, for example, can be regarded as the first initiative to the new ecological theories as such. Leopold's famous moral maxim of the land ethic had pointed to biological and ecological wholes reflecting an ecocentric world view: "A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise" (224-25). Rachel Carson's *Silent Spring* in 1962 was also particularly effective in initiating conservation activism, and also influencing the Norwegian ecophilosopher Arne Naess to develop a radical philosophy of deep ecology in response to the detrimental effects of Western industrialization. In 1973, Naess introduced deep ecology movement to the environmental literature. Since then deep ecology continues to emphasize the essential value and interdependence of all forms of life. Deep ecology, and Arne Naess's personal philosophy, which he calls Ecosophy T, present a critique of the dominant social paradigm based on the dualistic conception of reality which grew out of the seventeenth-century Cartesian/Newtonian mechanistic worldview. What specifically characterized the Cartesian view was, since it saw nature as a lifeless entity, the conception of nature as an exploitable resource, the idea which found its legitimation in the mechanistic model of Newtonian science, and became the dominant social paradigm. It was this world view that led to the development of modern technological civilization and constituted the modern thought in all fields of knowledge. Consequently, it proved to be the cause of separation between us and the natural environment, culminating in today's severe environmental problems. As the Canadian deep ecologist Alan Drengson convincingly argues, the environmental crisis is primarily ascribed to the paradigms and development models of Western industrialism. In his words: "As industrial development based on these models has spread, so has large-scale degradation of the human and natural environment" ("Education"). This anthropocentric model, however, based on the idea of the ontological divide between human and nonhuman realms, is now being replaced by a more ecologically sane new paradigm. The old dichotomized ontology of man's domination over nature is being problematized not only

by the ecosophies like Naess's own, but also by contemporary science. They give voice to the Earth's narrative which is a narrative of the global climate change manifesting itself through the toxic contamination of the seas, land and air, the thinning of the ozone shield, deforestation, and the build up of the greenhouse gasses. The scientific community explores these issues and ecophilosophy underlines their serious environmental and human dimensions. But our cultural representations of these ecological challenges are still grounded in conceptual oppositions. As the report of Kofi Annan, the Secretary-General of the United Nations, on the 14 May 2002 reveals, "At discussions on global finance and the economy, the environment is still treated as an unwelcome guest. High consumption life-styles continue to tax the earth's natural life-support systems" ("Johannesburg Summit"). The Cartesian division on human thought, as mind and matter, still informs our cultural orientations. The ecological theories, however, show the fallacy of principal distinctions that comprise technological regimes, and point to an emerging paradigm shift. As B. D. Sharma already stated in his address to the 1992 Earth Summit, "A new paradigm—ecologically viable, socially equitable, and rich in human content—is the historical need of our time" (563). We can no longer treat human and non-human nature as separately existing oppositional entities. Instead, we should emphasize the importance of cultivating ecological consciousness. Ours is an 'Age of Ecology,' as the leading deep ecologist George Session calls it, and its underlying principle will be essentially holistic as the defining feature of the new paradigm. Other deep ecologists like Bill Deval, Alan Dregnson, Michael Zimmerman, Warwick Fox, Peter Marshall, to name a few, and in particular Arne Naess, all advocate the holistic worldview. The holistic ecological approach in modern environmentalism, like Arne Naess's Ecosophy T, "combines respect for all individuals with respect for ecosystems" (Sessions 157). The holistic paradigm, then, should be understood as the principle of the interconnectedness of the universe as put forward by the ontological interpretations of quantum theory, and not to be confused with any form of totalization. The new paradigm does not claim to present an essential epistemological formula for capturing the ultimate truth, nor does it privilege nature over culture in its narratives, creating another logocentric approach. On the contrary, the ecological principle of the interrelatedness of all life prevents any concept, term, system or being to be privileged over another. Therefore, this view needs to be integrated into all areas of human knowledge, such as economics, politics, education, law and medicine. To this end, new interdisciplinary bridges must be built between science, ecology and the humanities. In Fritjoff Capra's words, we need to see "the

world as an integrated whole rather than a dissociated collection of parts" (*The Web of Life 6*). In Peter Marshall's words, ecology teaches us to "recognize the interrelatedness of all things and beings [...] as an integral part of the organic whole" (5). This vision is central to deep ecology which accepts the intrinsic value of all life in its richness and diversity, and emphasizes the fundamental interconnectedness of life. It is also the basic law in quantum theory which projects a more holistic and ecological new postmodern science, which Steven Best and Douglas Kellner call an "emergent postmodern paradigm" (222).

Are we really interconnected? This is the question I often hear from various circles. If so, is there any scientific proof to this other than what the ecophilosophers are stating, or the Eastern spiritual traditions have claimed? This question can be linked to what the Cartesian partition had achieved since it was associated with the scientific metaphor of mechanism which so easily ordered the discursive practices in the West. The Newtonian laws had reduced nature into a state of inert entity, providing a valid conceptual framework for social values that developed on material progress. The anthropocentric model had become so deeply ingrained in mass consciousness that no one seemed to ask "Are we really separate from the natural environment?" It was something everyone universally agreed upon. Binary logic was what counted as a ruling model. Now the same can be achieved with the holistic vision if it can be appropriately associated with the scientific laws again. Although postmodernism has taught us that science is not value free, still it counts as the most viable source of knowledge. As Niels Bohr stated in 1958, science provides an important "opportunity of testing the foundation and scope of some of our most elementary concepts" (Essays 1). Today science provides, not only a mass of data on the global climate change with possible solutions, but also shows us the inherent interconnectedness of all life on the planet; and as George Myerson claims, it is also "the necessary reference point for any legitimate political response" (41). The prominent physicist Paul Davies, too, emphazises the importance of science:

> Of all the systems of thought aimed at understanding the world, what we call the scientific method stands out the most successful. Not only has science led us to many new and unexpected discoveries about the world, it provides a powerful conceptional framework within which to organize our thinking about natural processes. (226)

Moreover, Niels Bohr's words from the 1950s underline the importance of how science has prompted our recent critiques of industrial civilization: "In our own century the immense progress of science has […] given us an unsuspected lesson about our positions as observers of that nature of which we are part ourselves" *(Essays 8)*.

This major breakthrough in contemporary science can be dated back to Einstein's discovery of space and time being part of a larger whole which he called space-time continuum, and to the first experiments conducted on the unpredictable behavior of smallest particles by the early quantum physicists. Niels Bohr, Erwin Schrödinger, Wolfgang Pauli, Paul Dirac, Louis de Broglie and Werner Heisenberg were the first to anticipate the holistic logic of quantum theory. They discovered a new physical reality which exposed the limitations of the Newtonian laws of motion, and "showed that none of its features had absolute validity" (Capra, *The Tao of Physics* 67). The principal concepts of the Newtonian world view, which were basicly the notion of absolute space and time, and the idea of an objective description of nature, were shattered altogether. Niels Bohr wrote in 1927: "The quantum theory is characterized by the acknowledgement of a fundamental limitation in the classical physical ideas when applied to atomic phenomena" (PWNB 53). This radical discovery in the quantum sphere would give a new direction to human thought leading to a widescale revision of our fundamental concepts of reality. Heisenberg's words attest to the true laws of nature in quantum physics: "The world thus appears as a complicated tissue of events in which connections of different kinds alternate or overlap or combine and determine the texture of the whole" (107). Similarly Niels Bohr draws attention to the holistic nature of reality in all areas of human experience:

> In general philosophical perspective, it is significant that, as regards analysis and synthesis in other fields of knowledge, we are confronted with situations reminding us of the situation in quantum physics. Thus the integrity of living organisms and the characteristics of conscious individuals and human cultures present features of wholeness, the account of which implies a typical complementary mode of description […] *(Essays 7)*

The physicists saw that at the subatomic level reality was quantized, that is particles made quantum leaps from one energy state to another. Measuring a photon, for example, had an instantaneous result somewhere

else, so quantum measurements would always be about probabilities. Thus reality would change with each observation. Later discoveries showed that patterns of probabilities represented probabilities of interconnections. In *The Tao of Physics,* Fritjoff Capra explains it clearly: "As we penetrate into matter nature does not show us any isolated 'basic building blocks'; but rather appears as a complicated web of relations between various parts of the whole" (78).

Today there are many interpretations of quantum theory and debates over these have scarcely been resolved. But one principal factor remains intact. Quantum mechanics gives an undeniable proof of a fundamental interconnectedness of the universe, which in turn compels us to revise our old conceptual frameworks of nature. In this respect, the ecocentric view becomes legitimated by the ontological interpretations of the quantum theory at large. What follows is that at a deeper level of reality all things are interrelated, shown by the action of the indivisible quanta. The interconnectedness theorem was first articulated by John Steward Bell in 1964. He argued that any model of reality must be non-local in which particles are connected by non-local influences—a theory which holds that things can be linked at any distance. Thus information is transferred superluminally between the particles. Alain Aspect was the first physicist to test Bell's theorem and to draw attention to its validity. He conducted a remarkable experiment with his research team at the University of Paris, in 1982. Aspect discovered that under certain circumstances electrons instantaneously communicate with each other regardless of the distance separating them. This communication occurred faster than light, and each electron seemed to know what the other was doing. In this sense quantum theory provides a scientific basis for a reformation of our basic concepts of reality. Much of the theoretical groundwork of this discovery, however, is laid by the famous physicist David Bohm. According to Bohm, "The universe is one whole, as it were, and is in some sense unbroken" *(Unfolding Meaning 7).* Bohm's theory is one of the most important interpretations of quantum phenomena, which he calls "Undivided Wholeness and the Implicate Order." He repeatedly draws attention to the undivided and intimately interconnected principle of reality. Accordingly, the subatomic particles in the human body, for example, are deeply connected to the subatomic particles that comprise every other living organism, plants, animals, as well as the stars. Everything in the universe is part of a continuum behind which lies an implicate order. Although the world may look apparently fragmented at the explicate level, everything is an extension of everything else, and thus explicate order too is part of the deeper implicate order. Bohm states that

implicate means to enfold, or to fold inward, "in the implicate order everything is folded into everything" *(Unfolding Meaning 12)*. This is the underlying order in the universe which is composed of a field of energy and light. Electromagnetic waves travel through this field interrelating and crossing each other. Each encoded wave carries information and their interweaving creates constant connections. The movement of this energy unfolds and enfolds information. Implicate Order is the enfolded whole which flows into every portion of itself generating a holographic reality and making our universe a multidimensional complex.

Bohm's call for a holistic vision is entirely complicit with the deep ecological, or ecosophical views. To quote Naess: "We must abandon fixed, solid points, retaining the relatively straightforward persistent relations of interdependence" (50). Viewed in the light of the undeniable evidence from quantum physics, the ecosophical account of the interrelational order of nature ceases to be a mere philosophical speculation. Therefore, the ecological affirmation of the quantum model of relationality cannot be dismissed as a utopian discourse.

Arguing that deep ecology might also be called ecosophy to signify ecological wisdom with the Greek root "sophia" in the word, Naess advocates ecosophy as a "philosophical world-view or system inspired by the conditions of life in the ecosphere" (38). One may now add the quantum sphere here, since both the ecosphere and the quantum sphere underline the same basic fact: "all are intimately interconnected" (38). Bohm's theory of the implicate order is then an ecological affirmation, on the part of the ecophilosopher, of the fundamental laws of nature. Ecosophy shows a profound awareness of the intrinsic principles of this primary reality, and both the quantum theory and ecosophy have given it an ontological primacy. In fact the ideas of eco-philosophy and quantum physics are the complementary halves of the emerging new paradigm.

Critical to ecosophical undertaking is a comprehensive, long-range view of cultural variety and biodiversity. Within the holistic vision ecosophy maintains respect for human and biological diversity and the richness of cultural values within different societies. Alan Drengson describes it as "comprehensive and deep value inquiry." In his own words:

> The narrow immature appoach is an egocentric one, and the wider, more mature, ecologically and socially responsible approach is biocentric or ecocentric. Social and ecological responsibility are intertwined. An

> ecocentric appoach is inclusive, and includes cultures along with their natural contexts-their land. It appreciates intrinsic values found in both the human and the natural world. ("Education")

The recognition of biodiversity and cultural variety of the world, and developing a world-wide ecological consciousness constitute the basic norms of eco-philosophy. Ecosophical approach asks for a shared commitment to engage in actions on behalf of the planet. In fact all the other radical ecology movements, including ecofeminism, ecotheology and social ecology, all present valuable perspectives of the holistic processes, but none of these efforts have been able to integrate ecological thought with the rest of the human discourses.

The question remains how the holistic views of the leading environmentalists and also their scientific manifestations in quantum physics can be accomodated into the present forms of knowledge, and linked to the postmodern condition that dominates our existence today. Much of contemporary experience is one of fragmentation, described by such terms as displacement, disorientation and loss of reference points, to make sense of socio-political, cultural as well as individual realities. Contemporary reality is becoming not only more and more fragmented and chaotic, but also unreal and artificial. Bohm views our tendency to fragment the world into separate entitites as the cause of many of our social and environmental problems. Already in the first page of his book, *Wholeness and The Implicate Order*, he defines our situation clearly: "fragmentation is now very widespread, not only throughout society, but also in each individual" (1), and "this way of life has brought about pollution, destruction of balance of nature, over-population, world-wide economic and political disorder" (2). Bohm locates the reason for this condition in the human thought. "Our thought is fragmented" he proclaims, which "brings about a thoroughgoing confusion that tends to permeate every phase of life" (27). Although postmodernism has revealed the artificiality of all binary oppositions, they still inform the socio-political structures of many Western cultures. Sharing the common critical stance of the postmodern challenge of logocentric habit of thought, ecology and quantum theory adopt a holistic logic and point to a major paradigm shift. In fact, as Fritjoff Capra posits in his "Deep Ecology: A New Paradigm," various social movements, and numerous alternative networks "are also developing a new vision of reality that will form the basis of our future technologies, economic systems, and social institutions" (19).

I would like to argue that the solution to the environmental crisis lies in the emerging paradigm shift initiated by the converging discourses of ecophilosophy and quantum theory. A possible synthesis between the holistic views of ecophilosophy, quantum theory and postmodernism can be found in a reconstructive postmodern theory which is ecocentric in its practice and critique. The core idea of reconstructive postmodern theory is the acceptance that all things are to be understood in their interactions with other things. No "thing" is independent of this process of interaction. This position then becomes consistent with that of the ecophilosophical and scientific disclosure of the interrelational nature of the ecosytem. However, not much has changed since the 1960s when industrial progress and constant economic growth constituted the major narratives of society, which Lyotard had questioned as the Grand Narratives of progress.

I agree with the environmentalists that the grand narratives have become obsolete, yet they still retain their impact on our patterns of thought. Although I am aiming at a fairly speculative synthesis, I believe that an ecocentric postmodern theory grounded in holistic principles will provide an ecologically sound conceptual framework to Western social, political and cultural discourses. As Foucault has shown, knowledge is sustained by discursive practices, and a new ecologically informed postmodern theory inscribed with holistic ideology can generate an appropriate orientation in our knowledge of the world. Today's postmodern culture, however, reflects a polarized structure of industrialist societies in which conflicts and indeterminacies of materialist culture are a commonplace. Therefore the discourses of postmodernism are often equated with such limiting terms as depthlessness, disorientation and disconnection. But postmodernism emphatically highlights this discordant line of reality in the public sphere in order to show its discrepancies. It is a way of displaying the crisis of Western epistemology in subversive poses. In other words, postmodernism demonstrates how the the structure of our world is dismantled by our present discursive practices behind which lies the widespread tendency to fragment the world, to disconnect and to disorient human culture from nature. This is the crisis of today's failing theories, practices and lifestyles. We define our relationship to nature in terms of linguistic representations and perceive the world in the form of cultural constructions. We dwell in a world of interpretations while the ecosystem recedes into a culturally determined abstract concept. But there is a discrepancy between our conceptualizations of nature and the actual direct experience signalled by the environmental challenges. As Eileen Crist argues, "The idea of imputing

meaning to the natural world presumes a standpoint separate from it" (8). Accordingly, perceiving nature as a social or a cultural construct not only makes it a theorized abstract concept, but also leads to the denial of its intrinsic value and the dynamic complexity of its ontological existence in its own right. This is precisely why the ongoing global eradication of the natural environment has come to be politically, economically and culturally justified in the name of civilization's misguided hunger for progress. This approach has failed to recognize and appreciate the intrinsic value of the whole ecosystem, and thus its anthropocentric constuctivism caused what Eileen Crist calls "epistemic relativism" (6), validating itself in extremist postmodern positions in the intellectual community. When, to use Crist's words, "the natural world is portrayed as mute, intrinsically meaningless, ontologically indeterminate, epistemologically unavailable, and aesthetically indistinct" (8), the end result is inevitably a global environmental crisis. This type of deficient reasoning continues to perpetuate the ontological separation between the human and the nonhuman worlds. That is why an ecocentric approach becomes a necessity to face the problematized perceptions of nature and culture.

The ecocentric paradigm does not derive its ideological standpoint from any social or economic determinants of nature's value, nor does it situate itself in epistemological conceptualizations due to the reason of their contingency and radical variability according to changing social, cultural and historical circumstances. Its sole importance lies in its full realization and recognition of the fundamental interdependence and diversity of human and nonhuman life on a planetary scale.

In this sense, we need to reformulate our concepts into new discursive contexts. The environmental crisis presses for a general change of knowledge, and as Lyotard has stated, "The nature of knowledge cannot survive unchanged within the context of general transformation" (4). This change is already here with the emerging postmodern paradigm. In this regard it is important to redefine postmodernism as an "unfolding concept," which makes us see the world as process, and flow. The postmodern critique of what Daniel White calls "logocentric, egocentric paradigm" (51) not only coalesces with the ecological critique of the same binary logic of Western industrialism but also with the quantum postulate of the undivided universe. An ecocentric theory of postmodernism as such becomes contextual, and adopts a holistic logic that perceives nature and the human beings and their various cultures as integral parts of a complex system, honoring the radical plurality embedded in this system at large. In this respect, ecological holism

becomes central to the new postmodern theory. This is opposed to the extreme or radical postmodern theory which champions the fragmented nature of contemporary reality, and stresses, as Best and Kellner put it, "extreme breaks, discontinuities, and an apocalyptic sense of ending [...]"(25).

A reconstructive postmodern theory of ecology holds that unity and diversity are not mutually exclusive. It integrates concepts like plurality, diversity, difference as well as relationality, process and contextuality, which makes it conceptually complicit with ecophilosophy. This situates postmodernism in the philosophy of process which sees the natural world as a creative process of unfolding, and thus directly corresponds to the quantum notion of dynamic flow. These are also the basic premises of ecophilosopy. The environmental crisis itself shows the need for a transformative way of organizing such ideas from transdisciplinary fields. The ecocentric postmodernism offers a radically different ontology to put the ideas from ecophilosopy and quantum theory into perspective for a discursive change. They all converge on a number of significant points. First they reject the binarism of Western thought with a shared critique of privileging economy over ecology, technology over the ecosystem, and industrial progress over the environment. In other words, they announce the collapse of anthropocentric philosophies that privilege humans as separate beings from the environment. Second, they are skeptical of metanarratives which claim authority as generalized truths, and dispute what the physicist David Bohm calls, "a universal tendency to treat our knowledge as a set of basically fixed truths" (Wholeness 49). Third, they recognize cultural and biological diversity and see the world as a network of interrelations, and individuals as a unified mind-body. From this viewpoint the common perspectives among postmodernism, ecophilosophy and quantum theory prompt an emergent postmodern paradigm which will enable the development of ecocentric discourses. This does not mean that the new postmodern paradigm leads to another grand narrative based on fixed references, creating totalized perspectives; because, ecological narratives are "multidimensional" as Arne Naess defines them, since they only privilege unity in diversity. Their only reference point is an ecocentric perspective which draws attention to the interconnectedness of all life. Besides, as Best and Kellner argue, transdisciplinary work "can stimulate new thinking and generate new insights" (259).

So, deep ecology alone cannot reconstitute a new paradigm, nor can the quantum theory achieve a shift in the whole human perception of the world

on its own. The new paradigm shift can only be fully realized and infiltrated into cultural forms by a fundamental change in our thinking, our practices and our entire knowledge of the world. Such a change can come by building new discourses based on ecocentric values through a cross-disiciplinary integration of the quantum, ecosophical and postmodern theories. Scientific insight is necessary in enabling an effective social transformation of present dichotomies in Western thought, and postmodern critical theory is necessary in producing a discursive transformation. A new ecological postmodern theory can provide a basis for a critical evaluation of the relationship between deep ecology and quantum theory, concentrating on the idea of interconnectedness of the universe. Developing a reconstructive postmodern approach as such is necessary to describe, communicate, appropriate and to infiltrate the new paradigm—a paradigm that will enable us to understand the innate wisdom and value of the ecosystem for a better sustainable world, and make us realize our place in the ecological community as its integral members.

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