

## Connecting Religion and Ecology

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### Introduction

In June 1990 Phrakru Pitak, a Buddhist monk in northern Thailand, despaired of the extensive deforestation which had devastated local culture and society. Logging companies, both legal and illegal, had cut down much of the traditional forest and, to make matters worse, local farmers were also clear-cutting swathes of land to plant maize, a non-indigenous cash crop. The result was significant soil erosion that necessitated even more clear-cutting for agricultural land (Darlington 1998), putting local farming on a downward spiral that resulted in high rates of emigration to the cities and the inexorable impoverishment of the local area. The solution that Phrakru Pitak hit upon was to begin “ordaining” trees, that is, wrapping them in the saffron cloth of a Buddhist monk, and ritually investing them with the status of an ordained Buddhist. The result was that local people were now forced to consider the trees not simply as obstacles to growing maize, or as potential lumber profits, but as having an even higher sacred value. Nailed to the tree was a sign saying “To destroy the forest is to destroy life.” Referring to a more recent ordination project in northern Thailand, village headman Suay Sisom described the importance of the ordinations as follows:

A tree wrapped by a robe represents a monk; if someone dares to cut it off, the demerit would equal that of killing a monk, and finally the destruction of the tree would lead to the end of his or her own life. ... Since the trees have been ordained, no one has cut them or made charcoal in the forest. (Liu Jun 2006)

To cut down one of these ordained trees would clearly invoke a whole complex of moral, cultural and religious meaning, and entail a very high degree of karmic demerit, not to say social shame. In July 1991, Phrakru Pitak conducted a second ordination, this time of a forest surrounding ten neighbouring villages, and thus began a movement that has attracted widespread international attention.

Of course, religion alone did not create the transition to a more ecologically sustainable economy in these areas of rural Thailand; the series of ritual actions involved in ordaining the tree was only part of an intensive educational effort. But, as Susan Darlington (1998) writes, the ordinations lay at the symbolic heart of the movement:

The tree ordination was the symbolic center of Phrakru Pitak's conservation program. The discussions with the villagers leading up to the ordination and the conservation activities organized by them afterward were all motivated by the emotional and spiritual commitment created by the ceremony. Throughout the ceremony, Buddhist symbols were used to stress the religious connection to conservation, the villagers' interdependence with the forest, and the moral basis of the project.

It is worth considering carefully the role played by religion in this complex of culture, ecology and economy. First of all, religion motivated action or, more accurately, non-action—in this case the non-action of refraining from logging the trees. Here religion

functioned effectively as a kind of restraint or barrier towards certain types of action deemed morally pernicious. If environmental problems are seen as the result of too much of the wrong sort of activity, then clearly one aspect of the solution lies in developing mechanisms of restraint, such as capping carbon emissions or limiting fishing activities. Religion is one of the few cultural resources geared towards *not* doing things. Secondly, Phrakru Pitak did not simply issue an injunction against deforestation but motivated people psychologically through the theatre of ritual performance to behave in a certain way. That is, he effectively employed the symbolic resources of the Buddhist tradition in such a way as to promote reverence for nature. Religion is thus not simply about rules and regulations but also the complex symbolic mechanisms that can be deployed to motivate people's behaviour. Thirdly, religion functioned as a system of sacred value that stood as a powerful alternative to the narrow economic system of value that had previously encouraged the villagers to trade in their natural environment for a quick buck. The villagers no longer cut down trees because they came to regard them as having a higher symbolic value than their inherent monetary value.

What is significant about this story, and the way it has been reported on, is that rarely do commentators mention any kind of underlying Buddhist theology, scriptures or doctrines. In contrast to academic essays on Buddhism and ecology, which focus on the doctrine of dependent co-origination or the relation between samsara and nirvana, the focus of this story is the ritual of ordaining the tree, and the symbol of the saffron cloth. It was not the sermons and teachings of the monks that motivated the people to act, but rather the people's participation in the ritual ordination and their respect for the symbols of the Buddhist tradition. These ritual practices and objects functioned at a symbolic level to forge a practical connection between the worldview and concepts of the Buddhist religion on the one hand, and the living ecological context of the local community on the other hand. This emphasis on religion as a symbol system has certainly been a feature of conventional approaches to the nexus of religion and ecology. The typical practice, however, has been to focus on those religions (in the plural) as distinctive historical and social communities of belief and practice, rather than on how the religion (in the singular) might be construed as functioning at the symbolic level.

### **Historical Background**

In 2001 the American Academy of Arts and Science devoted a special issue of its journal *Daedalus* to the topic *Religion and Ecology: Can the Climate Change* (Fall 2001). This issue was the fruit of many years of hard work by Mary Evelyn Tucker and John Grim, the driving force behind the Religion and Ecology movement in the late 1990s in the United States. The special issue begins with four general overview chapters on religion, modernity, ethics and globalization and then continues with eight chapters on specific religious traditions: Christianity, Islam, Hinduism, Jainism, Buddhism, Confucianism, Daoism, and Indigenous Traditions. The format of this issue highlights the way in which the nexus of religion and ecology has traditionally been construed, which is to view religions principally as diverse social movements which are capable of exercising influence over people's behaviour. As Mary Evelyn Tucker and John A. Grim write in their introduction (2001: 1):

The scholars of religion in this volume identify symbolic, scriptural, and ethical dimensions within particular religions in their relations with the natural world. They examine these dimensions both historically and in response to contemporary environmental problems.

They then go on to cite the *State of the World 2000* report which “cites climate change (along with population) as the critical challenge of the new century. It also notes that in solving this problem, ‘all of society’s institutions—from organized religion to corporations—have a role to play’” (Tucker and Grim 2001: 1). Their conclusion from this is clear: “That religions have a role to play along with other institutions and academic disciplines is also the premise of this issue of *Dædalus*” (2001:1). When religions are construed principally as social movements—organizations with leadership and followers—then the task of the religion and ecology movement is clear: it is to motivate those organizations to rethink their theologies and practices so as to promote an ecological consciousness. In this way the religion and ecology movement takes as its model the various social justice movements that have been a distinctive feature of Christian organizations in the past century, or perhaps NGOs or lobbying groups that seek to educate the public about various issues. After acknowledging that religions have often worked to foster conservative, rigid and oppressive social relations, Tucker and Grim go on to emphasize the public power of religions (2001: 3):

In the twentieth century, for example, religious leaders and theologians helped to give birth to progressive movements such as civil rights for minorities, social justice for the poor, and liberation for women. More recently, religious groups were instrumental in launching a movement called Jubilee 2000 for debt reduction for poor nations. Although the world’s religions have been slow to respond to our current environmental crises, their moral authority and their institutional power may help effect a change in attitudes, practices, and public policies.

This view of the social function of the religion and ecology movement is echoed in much of the contemporary discourse. Gary Gardner’s (2002) paper *Invoking the Spirit: Religion and Spirituality in the Quest for a Sustainable World* makes a similar argument about the social significance of the world’s major religions. He describes religions as powerful agents for social change:

They know how to inspire people and how to wield moral authority. Many have the political clout associated with a huge base of adherents. Some have considerable real estate holdings, buildings, and financial resources. And most produce strong community ties by generating social resources such as trust and cooperation, which can be a powerful boost to community development. Many political movements would welcome any of these five assets. To be endowed with most or all of them, as many religions are, is to wield considerable political power. (12)

This logic is further extended by considering the importance of religions based on the number of adherents. From Christianity to Zoroastrianism, religions command the allegiance of 4.988 billion people or 82.4% of the world’s population (using Gardner’s 2002 figures). All of this is designed to point out why religions are significant in the world’s societies: in a sense they resemble transnational corporations, straddling the world’s ethnic and national boundaries, wielding political power and influence, and, in

fact, constituting a significant sector of the economy. These arguments seem to say that religions exist; they are present; they have power; and therefore they should be taken seriously. Of course it is absolutely necessary to recognize the social, political and economic significance of religions in terms of their engagement with environmental movements, and it is quite clear why major scholar-activists in this field have taken this broadly sociological approach.

### **Key Figures**

The focus on religions as powerful social movements has led to a major attempt by religious insiders and scholars to reconfigure their own reading of religious texts and traditions with a view towards making them valuable “resources.” Typical of this approach is the Harvard series on World Religions and Ecology, which focuses on the major “World Religions” plus a volume on indigenous traditions. The volumes grew out of a series of conferences hosted by Harvard University’s Center for the Study of World Religions in the late 1990s, in which major scholars of these traditions were invited to bring their expertise to bear on the issue of the ecological crisis. This approach, based in academic scholarship, naturally reflected the concerns of the scholars invited, and tended to emphasize texts, traditions and philosophies. The volume on Daoism (Girardot et al. 2001), which I co-edited, contains a section on “Ecological Readings of Daoist Texts” and another on “Towards a Daoist Environmental Philosophy.” The significance of these volumes is reflected in subsequent endeavours such as Roger Gottlieb’s *The Oxford Handbook of Religion and Ecology* (2006) which contains a large first section devoted to “Transforming Tradition,” authored by many of the leading contributors to the Harvard series.

This emphasis on texts, or at least the perception of such an emphasis, led Bron Taylor (2005: 1.1376) to produce a sharp critique of the series for its “undemonstrated idealism,” “narrow focus,” and “privileging of mainstreams.” By this, he targeted what he saw as the series’ emphasis on the ideas and philosophies of mainstream religions as presented by their elites, and its neglect of grassroots, alternative, or popular religions. Taylor acted constructively on his criticism, editing a two-volume *Encyclopedia of Religion and Nature* (2005), which strongly emphasized nature religions, indigenous and pagan traditions, and eventually his own book *Dark Green Religion* (2009), which notably features an essay on surfing as a kind of religious-ecological practice.

This divergence reveals not simply a different “choice” as to which religions ought to be conversation partners in the alliance between religions and environmentalism, but rather a methodological difference based on whether one understands religions principally as historical traditions maintained and transmitted by elite custodians, or as cultural practices forged from the daily engagement of human beings with the natural world. It is fair to say that the former approach has dominated the academic discourse thus far.

One consequence of this emphasis on historical traditions has been the attempt to construe the ecological crisis as a historical-cultural complex that has a specific cultural genealogy and normative taxonomy. This approach can be seen most fully in Szerszynski (2008), which demonstrates how contemporary Western views of nature and technology are cultural constructs informed by centuries of (Christian) religious imagination about humanity, nature and the supernatural. This approach builds on a long tradition in the

field of religion and ecology that goes back to Lynn White, Jr.'s famous essay (1967) in which the degradation of the environment is linked genealogically to a particular strain of Christian thinking which came to dominate the late middle ages.

This "tradition-based" approach to religion has thus made it possible, rightly or wrongly, to identify the ecological crisis with Western religion and history and, in particular, Christianity. The corollary to this has been the emergence of a cultural taxonomy of non-Western marginalized "others," such as women, indigenous societies and colonized peoples, who are uncritically deemed to possess an ecological wisdom that enables them to live "closer to nature." The way this line of reasoning works in relation to the identification of "women" and "nature" was clearly exposed by Ortner (1974). Other works such as Pyne (1982), documenting the fires that transformed vast woodlands of North America into prairies, have also resulted in exposing the cultural framing of indigenous peoples as being necessarily "environmentally friendly." As regards the non-Western "other" of Daoism, beloved by environmentalists such as LaChapelle (1988), Goldin (2005) takes pains to explain why "Daoism is not Environmentalism." All three of these approaches are significant for the fact that they are trying to question something that is assumed to be the case, namely that these "others" to Western modernity have come uncritically to be associated with nature and environment. The historical fact that such societies, traditions or groups may not have been as environmentally friendly as moderns might suppose is significant for revealing the normative taxonomy of religions and ecology, in which some religions are supposed to be more "connected" to the natural world than others. While I am not disputing that this may be the case, I do wish to highlight the way normative discourse about religion and ecology can lend itself to assuming such a connection without evidence.

## **Survey of Arguments**

### **Religion, Ecology and Evolutionary Psychology**

An alternative approach, which has not been so commonly taken by scholars of religion and ecology, focuses not so much on religions as social movements but on religion as distinctive aspect of human culture that is constructed out of human engagement with the natural world. It pays attention to the distinctive tone that the religious dimension of human existence brings to the ecological crisis investigates what religious people claims to be distinctively religious about the ways that religions engage their environments and ecosystems. To do so requires putting on hold the concept of religions as distinct empirical, social realities in favour of religion as a generic psycho-cultural mode of being which functions so as to mediate and construct the human experience of the natural world. The premise of this chapter is thus that religions are important not because they resemble large social organizations that wield political clout, though they are indeed that, but because they have the imaginative capacity to construe the human engagement with the world in a distinctive way, one that is archaically and symbolically rooted in the human experience of nature.

This approach thus centres on "religion and ecology" rather than "world religions and ecology" and must begin with an examination of how symbolic systems in general function as an interface between imagination and practice, followed by an examination of

what, if anything, is distinctive about religious symbol systems. To do so requires a brief examination of some recent findings in cognitive science and evolutionary biology.

Terrence Deacon, professor of biological anthropology and linguistics at Berkeley, begins his book *The Symbolic Species: The Co-Evolution of Language and the Brain* with the observation that the Latin term for the human species is *homo sapiens*, that is, the wise human. This, he suggests, points to “the defining attribute of the human species, namely our cognitive ability. We think differently from all other creatures on earth, and we can share those thoughts with one another in ways that no other species approaches. In comparison, the rest of our biology is almost incidental” (21). He then goes on to describe the ways in which the human brain evolved differently than other animals, and locates this difference principally in the capacity of human beings to engage each other and the natural environment through symbols. The processes of evolution have thus brought about the capacity of humans to interact with each other and the rest of the world by means of what Deacon calls a “shared virtual reality” (23), that is to say, the web of symbolic communications by which we indicate some reality in an indirect way.

Deacon’s work in symbolic communication owes a lot to the work of the American pragmatist philosopher Charles Sanders Peirce, who worked out how signs (Peirce’s technical term) function as icons, indexes or symbols. In Peirce’s terminology, an icon is a simple representation of a thing, such as a picture of a fire that warns people of a real fire. An index is a sign that refers to the reality of another thing, a picture of smoke designed to warn people of a real fire. A symbol is a purely conventional sign (the letters f-i-r-e referring to the reality of fire). Deacon’s point is while many animals communicate with some form of language, the human brain is particularly capable of communicating using these third-order symbols, that is to say, symbols that are purely arbitrary and have no direct connection to the thing that they are trying to represent. Symbolic discourse is three stages removed from reality such that only people who are culturally educated in the symbolic discourse are able to fathom the various meanings that symbols convey. Thus whereas a perceptive non-human animal might smell smoke and take this as indicating fire that it cannot see, only someone who can read French will take the letters “feu” as indicating the same reality. While this might sound like a very inefficient way of communicating because of the vast amount of learning that has to take place before any kind of basic communication takes place, once the individual has been schooled in the language of a particular culture he or she is able to weave extraordinarily complex tapestries of meaning from the juxtaposition of a relatively small number of symbols. The result of this evolutionary process is that the swathing of a tree in a saffron cloth invokes for the rural Thai farmer as rich and powerful a set of meanings as a score of sermons or legal injunctions.

Religion shares this use of symbols along with poetry, art, music and many other cultural forms. While religion may not be absolutely unique or *sui generis*, it is unusual in the depth and persistence of its hold on the human imagination. Religion, in particular, invokes shared worlds of meaning that are imaginary in the sense of being so far removed from reality, but at the same time real in the sense that they have a real effect on our thinking and behaviour. As the cultural anthropologist Clifford Geertz has famously claimed, religious systems clothe their conceptions “with such an aura of factuality that .. the moods and motivations seem uniquely realistic” (Geertz 1985: 4). The point here is

that while theatrical drama might compel the audience to temporarily suspend its disbelief, religious drama has a much more long-lasting effect.

In psychological terms, symbolic thinking relies heavily on what psychologists call decoupling, whereby human cognition functions in a way that is disconnected from immediate experience. As Pascal Boyer writes (2001:131) the idea that “if kangaroos had shorter legs they could jump higher” seems implausible to us even though it is completely hypothetical. Furthermore, the notion that “if kangaroos had shorter legs, they would eat broccoli” strikes us as meaningless even though it is a statement about a non-real entity. This ability to detect meaning in situations that are not in fact real is an important psychological function that enables more complex religious meaning to take place. Religion is far more serious than broccoli-eating kangaroos because it involves the postulation of mythical beings who have a definite effect on our actions. One analogy for this is the way in which a child might speak to an invisible friend. Psychologists now understand these imaginary friends not as the product of childish wish-fulfilment but as important tools in children’s social development: “[imaginary companions] might find odd information unsurprising, or frightening situations manageable” (Boyer 2001: 150). There are, of course, important differences between religious beings and imaginary friends, not least the fact that religious beings are social realities rather than personal fantasies, but Boyer’s point is that the religious imagination relies on this same ability to engage in decoupled cognition.

An example of this decoupled thinking in the religious context would be the popular slogan “What would Jesus do?” or its environmentalist counterpart “What would Jesus drive?” This form of decoupled reasoning invites the individual to engage in a complex moral dialogue based in effect on an imagined conversation with a person who is not immediately real. Thus the bumper sticker “WWJD” draws the person who is socialized into its meaning into a moral conversation. This is similar to the effect of the saffron cloth on the tree. The symbol draws the observer into a moral conversation which, if it is successfully deployed, has the effect of changing the behaviour of the viewer. Thus a simple object or a combination of letters can lead to a complex world of symbolic logic that is in fact a way of engaging the real world. From the perspective of individual psychology, this symbolic reasoning translates into important psychological effects: “The reason religion can become much more serious,” writes Pascal Boyer (2001: 135), “is that it activates inference systems that are of vital importance to us: Those that govern our most intense emotions, shape our interaction with other people; give us moral feelings and organize social groups.” Humans use imagination, language, art and religion not to escape the world but in fact to dwell in it in more complex social forms than is possible for other animals.

This view of symbols as ways of engaging the world transforms the way in which one regards the nexus of religion and ecology. In this view religions are significant not for the fact that they are another form of social organization, but rather that they are social organizations explicitly constructed around symbolic conventions. The fact that religions dwell largely in the world of mythic fantasy and imagination has, of course, been off-putting to many environmentalists who have charged religions with focussing too much on the fantasy world of ghosts and spirits at the expense of dwelling in the real world. These critics, however, fail to appreciate how this apparently unreal symbolic discourse

actually functions as a symbolic mediator of the real. The construction of religious mythologies and symbols of course points human beings away from the real world in the proximate sense, but this proximate construction of a virtual reality in fact functions precisely as the mechanism by which religious people engage the real world. Thus the symbol WWJD or the saffron cloth takes the participant away from the immediate object (namely the moral problem under question) and into the world of myth. The participant considers the teachings of Jesus or his imagined personality, or considers the significance of Buddhist tradition, and the status attached to monks in Thai society. But the important thing is that the person who engages in this symbolic processing does not forget about the immediate situation but rather through this exercise in symbolic reasoning emerges with a fresh perspective on the problem at hand. The result is that the person decides that SUVs are not a responsible form of stewardship of the earth's resources, or that deforestation is in fact a violation of Buddhist concepts of dependent co-origination or nonviolence to living creatures. Even more significant is that the person may not even be able to express his or her beliefs in such a sophisticated form of moral reasoning yet he or she nonetheless arrives at the same conclusion through employing symbolic imagination in his or her decoupled reasoning.

Modern culture, however, is heavily biased towards discursive forms of reasoning, emphasizing the written word and the carefully-footnoted legal argument. It favours legal agreements, Kyoto protocols and Earth Charters. Religious people and religious organizations have certainly played active roles in these discursive processes, and have certainly been motivated by religious arguments to do so. But this chapter aims to investigate not only how religious people have been active in promoting environmental issues, but also to excavate deeper into why the religious imagination inspires this type of moral action. We know from evolutionary biology and cognitive science how religious symbols can serve to mediate between human imagination and practice, but why should they? Why is it that religious people view the environment as a moral issue on which they take a stance, and why is it that so many people do not view the environment as such an issue?

The answer to this question can be found by examining the way symbols function together in a system that orients people towards some types of action and not others. Some individuals may be culturally inculcated to experience severe disgust at the depiction of homosexuality or consumption of pork, even to the extent of violent physiological reactions such as nausea and vomiting. Other individuals may experience the same phenomena in a completely different cognitive, emotional and physiological way. Similarly, some people might burst into tears at the sight of an animal undergoing experimentation in a laboratory. To other people the sight might represent hope for a cure to a disease that they are suffering. To understand how the same physical experiences, the same sights and smells, induce completely different emotional and behavioural reactions in people, we need to understand the role of myths and symbols in education people's emotions.

Loyal Rue (2005) has constructed a sophisticated theoretical account of how religious myths function so as to structure and educate our emotional responses to experience. Fundamental emotions such as fear, disgust and desire are not automatic responses to external stimuli but rather are shaped by the cultural narratives that make up an



individual's world view. In some cultures, for instance, sadness may be regarded as evidence of passivity, whereas in other cultures sadness may be admired as a sign of spiritual progress (Rue 2005: 118). The sight of the saffron cloth around the tree, for instance, might seem purely decorative to one person, but to another could invoke feelings of awe and respect. In Rue's investigation of how religion intersects with this emotional landscape, he focuses chiefly on religious myths, understood as the overarching cultural narratives that have traditionally formed the backbone of the world's cultures. As such, myths structure and educate our emotional response to experience and guide our actions accordingly. Religions, with their complex panoply of rituals, objects, texts and communities are the methods through which this educative process takes place:

[W]hen the mythic vision is interpreted plausibly, when it is performed ritually, when it is objectified aesthetically, when it is regulated and ministered, socially, and when it is validated by subjective experience—when these things happen, a pattern of piety will emerge as a dominant factor in modulating background moods and attitudes, and in guiding perceptual, appraisal and coping events from moment to moment in the lives of individuals. (162)

The function of a religion, in Rue's view, therefore, is to provide a comprehensive system of emotion, education and experience that structures and guides human behaviour in ways that maximize cooperation within groups. To return to Deacon's argument, behaviour, that is to say, engagement with the real, for the human species, is a complex process that is mediated by third-order symbols such as myths about the origin of the world, love for one's neighbour, concern for the post-mortem karmic consequences of one's actions, or the wishes of deceased ancestors expressed through mediums and shamans. Through this imaginative symbolic reasoning, at once derived from and detached from the actual reality of the present world, religious humans experience, value, and respond to that world with concrete actions that bring significance in terms of the cultural myths and world views.

### **Modernity and the Transformation of Nature and Technology**

In the modern period, however, traditional religions have lost their power in the world despite remaining as prolific as they ever were. Although Gardner points out that religions cover 82% of the world's population, this does not mean that they have 82% influence on what happens in the world. The reason for this is that the symbolic systems of traditional religions are no longer as deeply operative in the ways they once were as mediators of human community. Most scholars have considered this social fact in terms of the cultural narrative of modernity, in which science and reason are deemed to have triumphed over religion, and human culture evolves towards ever more liberated and progressive forms. Scholars have also investigated the role played by the values of European modernity in bringing about the present ecological crisis, with conservative religious figures calling for a return to traditional values as a solution to dealing with the world's ills, including our ecological ills. In order to address the nexus of religion and ecology it is necessary therefore to investigate more closely the transformation in our relationship to the natural world that occurred in the modern period.

The popular account of the dawn of the modern enlightenment period sees reason as the key protagonist, and views progress and development as the gradual replacement of irrational myth-based culture by a global scientific culture founded on the canons of

reason. More recently, anti-religious intellectuals such as Richard Dawkins and Daniel Dennett have publicly worried about the rise of a religious consciousness, and have seen this as a kind of regression back to the time when cultural values rather than scientific reasoning dominated our decision-making systems. Their view demonstrates how the rise of science has itself been viewed as a type of narrative, one that celebrates a particular value system based on the ideal humanistic progress. It is important to examine how a supposedly value-free scientific system could lend itself to favouring particular cultural values. The modern scientific viewpoint is based upon the principle of instrumental rationality, according to which the natural world is not regarded as being imbued with any kind of sacred meaning, but rather as inert matter. Science, we say, is objective, which means that scientists regard the objects of their study as objects, that is not as subjects with feelings or personalities, but as inert data that can be quantified and theorized. As Freya Mathews puts it (2006: 90):

Modernity may then be defined in terms of its materialist premise. As a metaphysic, materialism is normatively neutral—the materialist universe is indifferent to human concerns and has no concerns of its own.

But the consequence of this view is that humans are no longer required to consider the natural world as an arena of subjectivity to be engaged with in a communal relationship. In the modern, scientific world, nature does not “speak” to humans or have any specific revelatory function in terms of human morality and imagination. The consequence, says Matthews, is that “[h]umanity has therefore to invent its own reasons for living—its own meanings and values. In the absence of religious revelation, human nature itself becomes the sole source of meaning and value” (2006: 90).

The notion that humanity becomes the “sole source of meaning and value” is not, despite appearances, a value-free notion. If we begin to characterize modernity not as the absence of religious values, but as replacement of religious value systems with human nature as “the sole source of meaning and value” we can begin to see the danger inherent in the modern world view: a system that is not based on anything other than the will of the powerful. As the devastating criticism of the Frankfurt school made plain, the instrumental rationality that gave us science and technology is exactly the same type of reasoning that permitted the totalitarian instrumentalization of groups of people in the horrific genocides of the modern period (Mathews 2006: 91). It is also the same type of instrumental reasoning purely abstracted from other values and concerns that permitted the deforestation of northern Thailand.

Modernity, despite promising the idea of a new beginning inevitably brings with it the baggage of its historical past, for the freedom that modernity implies is not simply “freedom to,” but “freedom from.” Modernity (and the concomitant idea of freedom and liberation) requires moderns to develop a concrete sense of what exactly it is that they are freeing themselves from, thus setting up a whole set of binary oppositions between reason and revelation, enlightenment and ignorance, science and religion, modernity and tradition, progress and conservatism. Inasmuch as modernity proclaims the absence of tradition it is precisely at the same time committing itself to the construction of a concept of tradition. Moreover, it is this same commitment to the future that engenders in moderns anxiety about the past:

Modernity is a restless condition, a condition of disconnection from the past and from tradition. Modern civilization turns its face to the future, reaching beyond the given for new and ideal forms of life. (Mathews 2006: 91)

Paradoxically, therefore, modernity is a tradition, a system of value based around the concept of progress. Progress, like freedom, is dialectical: it requires something to progress from, and something to progress to. Whether we moderns are Marxists who emphasize social progress, or liberals who emphasize economic progress, we all inhabit the same world view that regards progress as the absolute presupposition of our world view and our fundamental moral orientation. Indeed to question the value of progress would be tantamount to a kind of modern heresy. As John Gray (2004: 10) writes:

Questioning the idea of progress at the start of the twenty-first century is a bit like casting doubt on the existence of the Deity in Victorian times. The stock reaction is one of incredulity, followed by anger, then moral panic. It is not so much that belief in progress is unshakable as that we are terrified of losing it.

Yet in his article on “An Illusion with a Future” he goes on to argue (2004: 11):

Progress is an illusion—a view of human life and history that answers to the needs of the heart, not reason. In his book *The Future of an Illusion*, published in 1927, Freud argued that religion is an illusion. Illusions need not be all false; they may contain grains of truth. Even so, they are believed not because of any truth they may contain, but because they answer to the human need for meaning and consolation. Believers in progress have identified a fundamental truth about modern life—its continuous transformation by science; but they have invested this undoubted fact with hopes and values inherited from religion.

In Gray’s view, progress is not simply about shirking off the problems of the past, but about embracing a faith in the possibility of a future. Such a faith is exactly like the faith and hope valued in Christian theology in that it is based on the realization of an imagined, or in Freudian terms illusionary, vision.

If we allow, with Mathews and Gray, that modernity is not some value-neutral rational ordering of the world, but rather new form of valuing based on hierarchies of materialism, science and progress (or faith in the future) then we should consider, along with Deacon and Rue, what are the mythic and symbolic forms in which modernity clothes itself. Although describing the full range of symbols that operate in modernity would be a massive and complex undertaking, there are two avenues of investigation clearly deserve mentioning in a preliminary way. The first is technology, and the second is economics. Both technology and economics have emerged as powerful symbol systems that mediate human engagement with the natural world.

It is perhaps strange to think of technology as a symbolic system since technology is clearly based on the manipulation of material reality, but it is clear that in the modern period technology has become an essential driver of society and culture and technological ventures have come to symbolize the spirit of hope and disaster that have alternately characterized recent history. The US space program, for instance, symbolized the ingenuity and inventiveness of the modern human spirit and perhaps can be regarded as an enormous symbolic extravagance equal in scope to the construction of the pyramids of Egypt or the first emperor of China’s mausoleum of terracotta warriors. More significantly, according to David Nye (1994), technology in modern cultures has now

attained the status of the sublime, exercising a terrifying and fascinating power over humans akin to the gods of traditional societies, but with a crucial difference: The symbolic events of American technological culture such as the launch of Apollo XI are, according to Nye, “nearly empty of the contents of political life required by republicanism,” that is to say, free of concerns for moral virtue or human value, but simply concerned with the pursuit of technological progress in and of itself (1994: 279). Technological ‘rites’ no longer symbolize the vast potential of human consciousness, but rather the vast potential of technological systems. Technological progress thus becomes a self-serving pursuit rather than something oriented towards the fulfillment of human needs. In such a condition, humans are mesmerized by the technological abilities of their machines but fearful also of the unforeseeable consequences of genetic modification or nanotechnology, and of the vast quantities of personal information contained in “databases” to which they do not have easy access. What is worse is that individuals have lost the subjective freedoms which liberal humanism promised that technology would deliver. Rather they have themselves become objects within a larger technological system, “passive enjoyer[s] or sufferer[s] of technological change” (Szerszynski 2007). Modern humans have become religious devotees anxiously praying for the new breakthrough that will cure their cancers and improve their lives, grateful for the crumbs of technological mercy that fall from the altar of science.

The second symbolic system that operates alongside the “religion of technology” (see Noble 1997) can be found in the new theology of economics and the global financial system, which has become the primary form of symbolic engagement with reality for nations irrespective of their level of technological development. That is to say, the complex discourse of symbolic communication which demarcates the human species from other species, is also clearly evident to the arena of commercial transactions, in which people no longer trade goods directly (first order transaction) nor via coin (second order transaction) but rather by paper or electronic symbols (third order transaction). The financial system has even appropriated words previously associated with faith, such as credit, trust, and fidelity, which indicates the extent to which the global financial system relies on the faith of people in the symbols for its continued success. Based on this ‘faith,’ over US\$2 trillion in foreign exchange transactions take place worldwide each day, and US\$100 billion is traded each day on the New York Stock Exchange alone. These transactions take place entirely in the virtual world of the global financial system and yet affect the underlying realities of life for billions of people across the world. This financial system is a third-order symbolic system, which is to say it operates at a purely conventional symbolic level abstracted from the material reality of everyday existence. No one doubts that this virtual financial system has a real effect on the world, which is to say that all of us are believers in the monetary value of the numbers in our bank accounts, and when on the rare occasion that banks fail people are in danger of losing their life’s savings, the banking system generally intervenes to prevent what would be an intolerable crisis of faith. This faith in the value of symbolic currency is analogous to the faith in the value of religious symbols for religious people. The question is what kind of an effect is this faith in symbolic value having on the world in terms of the global ecological crisis?

It is quite clear that the operative symbolic system of the modern world has had a devastating effect on the world’s ecosystems and environments. The reason for this is has not so much to do with rise to the fore of instrumental rationality which construes nature

as an object to be disposed of according to a human utilitarian calculus, but more to do with the rise of the global financial system as a third-order symbolic system. The danger of this system, just like the danger of religion, is that people can learn to forget the way in which these symbols, whether icons in a church or icons on an iPhone, actually serve to mediate our engagement with reality. As a consequence trillions of dollars are traded across the world with no regard for how this actually shapes the lived world of the biosphere. Financial transactions conducted in the absolute abstraction of the global financial system are reduced to pure symbols that have no immediate connection to the ecological substructure of the global economy. They constitute a mode of discourse and value that is as abstract as pure mathematics yet whose consequences are devastatingly real, in terms of the ecosystems and species of the planet. This is not to decry capitalism or neoliberal economics, but simply to demonstrate the way in which global finance functions analogically to religious symbol systems, constructing meaning and value indirectly through symbolic language.

The significance of our faith in technology and the pure symbolism of capital markets lies not so much in the fact that they betray such deep analogies with religious life. It is rather that in late modernity they have become avenues of what David Loy (2002: passim) calls a “means-ends reversal.” By this he means that in late modern culture, the instruments of human liberty (technology and economics) have started to define the goals of human life, rather than be subservient to them, and in so doing have become the instruments of our bondage. Here he develops and extends an insight of Weber in *The Protestant Ethic and the Spirit of Capitalism*:

The Puritan *wanted* to work in a vocation; we *must* do so. For when asceticism was carried out of monastic cells into vocational life and began to dominate inner-worldly morality, it helped to build the tremendous cosmos of the modern economic order. This order is now bound to the technical and economic presuppositions of mechanical, machinelike production, which today determines with irresistible force the life-style of all individuals born into this mechanism, *not* only those directly engaged in economic enterprise, and perhaps will determine it until the last ton of fossil fuel is burned. In [Richard] Baxter’s view the care for external goods should only lie on the shoulders of the saint like “a light cloak, which can be thrown aside at any moment.” But fate decreed that the cloak should become an iron cage. (Trans. Scaff 1989: 88; Weber’s italics; quoted in Loy 2002: 176-177).

Loy’s goal is to make the Buddhist argument that these modern problems are far from accidental. Rather, he believes that they stem directly from contradictions inherent in the Western quest for freedom, a quest he argues stems from a failure to appreciate the nature of ‘lack’, that is the intrinsic unsatisfactoriness of human life oriented teleologically around promises that can never be delivered. Whether or not one accepts Loy’s Buddhist solutions, his diagnosis of the problem is perceptive. Weber’s “tremendous cosmos of the modern economic order” has eventuated in the mythology of consumerism which promises the satisfaction of desires through the consumption of mass-produced goods, supported by a vast machinery of advertising, constituting what Loy terms “the greatest effort at mental manipulation that humanity has ever experienced” (Loy 2002: 208). To return to Rue’s description of the ancillary strategies employed by religions to reinforce the education of our emotions, advertising and public relations events perhaps come

closest to the ritual forms that accompany consumer culture, reinforcing our perception of desires and our beliefs that desires will be satisfied by consuming goods.

Rue is not sure whether consumerism qualifies as a myth directly comparable to religious myths, but he is convinced that “its influence in shaping the attitudes and values of contemporary men, women, and child in Western culture has in large measure displaced the influence of traditional myths” (2005: 328-9). He defines consumerism as the result of capitalism’s embedding itself in a “mythic vision of its own making” (331):

The root metaphor of the consumerist myth is that the providential market, the idea that the free market has a self-regulative and prudential sovereignty about it, and if we can manage to keep the market full of activity, it will provide for everyone’s needs. The market is our savior from want, our path to fulfillment. It is in the nature of human beings to realize their full potential for happiness. Happiness will be maximized, and human nature fulfilled, by consuming material goods and services in the marketplace. (331)

This myth is reinforced by the ancillary strategies of contemporary North American culture including developing strong corporate (that is to say, commercial) institutions, commercializing ritual festivals such as Christmas and Halloween, advertising, shopping “experiences” and the hedonistic ethic of the “spa” or “wellness retreat.” In all these cases consumer culture has adapted cultural forms from traditional religions quite simply because they work. We shop for gifts, for community, for experience, for meaning, and for pleasure. Americans were even reminded of their ethical duty to shop after 9/11. From this we can say that myths, rituals and symbols (whether religious or consumerist) are highly effective in motivating people to act in certain ways. To say that consumerism functions like a religion does not mean that it possesses all the attributes that we commonly associate with religion. It simply means that in these respects consumerism employs the cultural forms traditionally associated with religious activity, for the simple reason that they are highly effective in motivating people’s behaviour.

### **Religion, Nature and the Material Imagination**

So far, this chapter has explained the way in which scholars of religion and ecology have argued for a close attention to the way that symbols, whether religious, technological or financial, mediate the human experience and construction of reality, focusing especially on the biosphere. This line of argument also raises the possibility for the reorientation of those symbols so as to promote the experience of reality as being fundamentally ecological in nature. This is an unusual strategy when dealing with the ecological crisis. The more conventional “carrot and stick” strategy is on the one hand to develop technologies that allow us to live the consumer life we want but in a way that is more ecologically sustainable, and on the other hand to impose laws that restrict our freedom to destroy the environment. Both of these aim to improve the relations between humans and our environment, to make our lifestyle more “environmentally friendly,” as if “the environment” is a kind of poor relation or unwanted guest that we don’t particularly want to have to deal with but feel the need to “be nice” to.

However much we are “nice” to “the environment” this misses the deeper ecological point that we are the environment and the environment is us. Understood in this way, the ecological crisis is basically a failure of the human imagination to perceive reality as it

truly is. This failure arises from the fact that our operative myths, whether traditional religious myths or consumerist-technological-economic myths do not symbolically orient us to engage with the natural world in an ecological way. Thus, while broadly sympathetic with the functional account of religion (at least in its traditional form) expressed by Rue and others, this chapter does not focus on religious myths as the chief asset of religions in shaping people's behaviour as regards the natural environment. Such an approach would have to consist of analyzing the various interpretations of those myths within the various religious communities that exist in the world today, and would point out how Muslims or Christians are reconstructing and reinterpreting their myths in response to their perception of environmental issues as spiritually and morally significant. This is broadly in line with the approach traditionally taken in academic scholarship investigating the nexus of religion and ecology. But this approach has the downside of leading religious professionals to claim that their religion is the most "green" or that the ecological crisis would go away if only everyone was a good Buddhist or Muslim.

Rather than investigate all the richness of the mythic and ritual worlds of these various world religions, a more useful approach is to consider the archaic symbolic imaginary of the primal elements, elements that have the material capacity to re-root religious and aesthetic imagination in the natural world, and the symbolic capacity to engage and challenge the dominant mythologies of our time. Moreover, these primal elements lie at the heart of many religions' symbolic systems because of the deep psychological impact that they inspire. Organized religions build on these primal elements incorporating them into their mythologies and symbol systems, but their fundamental psychic power is frequently overlooked when one emphasizes the particular meanings and myths associated with the specific traditions.

The symbolic value of these primal elements has most powerfully been explored by the French philosopher of science Gaston Bachelard (1884-1962) who developed a theory of the "material imagination." According to Bachelard's studies of the elements of earth, air, fire and water, the human imagination invested these elements with a poetic quality that elicited a "passionate liaison" between humans and their objects (Bachelard 1957: 33; Lane 2006 21). These affective bonds evoke what he termed the "intimate beauty of materials; their mass of hidden attraction, all that affective space concentrated inside things" (Bachelard, 1948b: 9; Lane 2006: 20). The "material imagination" thus signifies the way in which our imagination is irreducibly material in character, as well as the way in which we imagine the material world. What is significant is that Bachelard, though a committed materialist and rationalist, sought to explain the affective, rather than intellectual, dimension of material experience and imagination. Firstly, humans transform material by valorizing it:

It is not *knowledge* of the real which makes us passionately love it. It is rather *feeling* which is the fundamental value. One starts by loving nature without knowing it, by seeing it well, while actualizing in things a love which is grounded elsewhere. Then, one seeks in it detail because one loves it on the whole, without knowing why. (Bachelard 1942: 155; quoted in Kaplan 1972: 4)

This affective bond precedes epistemology and ontology, and has the power to shape our imagination and our creativity. Bachelard focussed on the four elements familiar in the Greek world: earth, air, fire and water, and explored the way in which those elements

become valorized in the imagination, thus forming the basis of human creativity. It is because humans do not simply perceive nature but imbue it with value (even “over-rating” it) that we have the capacity to engage in the creative transformation of the world (Kaplan 1972: 5). Bachelard valued this affective power along side the rational materialist approach to the natural world and sought to bring both these aspects of our engagement with nature into a fuller scientific vision.

The process of modernization, however, resulted in a loss of the “affective space” that mediates between humans subjects and their spaces. Bachelard lamented the loss of phenomenological depth that occurred in the transition from oil lamps to electric lighting turned on with the flick of a switch (Lane 2006: 23). Electric light does not have the nearly as much capacity to evoke the material imagination as a flickering flame. The “administrative light” of an electric bulb, bound up in processes of bureaucracy and mechanization was typical of the modern condition. The spaces inhabited by humans thus become increasingly abstracted spaces, homogenized, geometrized and quantified. As Baudrillard later noted, the profound bodily engagement with labour and tools in traditional societies became replaced by mere “gestures of control” (1968: 77). Heating houses becomes no longer an effort of collecting wood and lighting fires but regulating the thermostat in the hallway (Lane 2006: 28). The post-modern condition, moreover, is characterized by technological forms that aim to simulate (and stimulate) the affective bonds that were lost in the transition to modernity. Thus we have electric fires that look like real log fires, and online social networks that compensate for the loss of community in the abstract space of modernity.

Despite these technological advances, human life remains irretrievably embedded in its foundational biological and ecological contexts. No matter how rich a symbolic life we can weave from the fabric of the Internet, we cannot survive without air and water. In the contemporary world, therefore, religions offer the capacity to retrieve the foundational bonds of the ‘material imagination’ and demonstrate their significance in terms of the material culture of contemporary existence and weave together a bond that connects people to the material world. In so doing religions demonstrate that they are not simply systems of private belief or ‘personal values,’ nor even complex and powerful social organizations, but rather symbolic frameworks that are on the one hand imaginative and mythic, but on the other hand embedded in the same material structures that inform all aspects of human life. Religions are thereby thereby interlinked with the processes of culture and nature that shape all human lives.

Symbolic systems are not only the way humans interpret and experience the world, they are also our way of shaping it. Religious movements across the world are consciously manipulating their symbolic systems to focus human attention on the natural world. In so doing they are not only becoming political forces, or social realities that governments and corporations have to contend with, but are attempting to effect a far deeper shift of consciousness that is necessary for humans to reshape the way that they engage nature. If humans are to refashion their destruction of the earth into a more harmonious and sustainable form of coexistence, this refashioning must take place at the symbolic level, because that ‘virtual reality’ is paradoxically the place where human animals make their real world real.



## Conclusions

The field of religions and ecology is undergoing rapid transformation as new theoretical frameworks emerge for the study of religion. The twentieth century was dominated by the awareness of religions as distinct cultural worlds that lent themselves to comparative analysis of their similarities and difference. This approach emphasized religion as a distinct field of study with a focus on “world religions.” Understanding the connection to ecology and nature in this framework meant investigating the philosophies, texts and histories of those religious traditions with a view to discovering the way they shaped human behaviour towards the natural world. Scholars investigated the ways in which Buddhist philosophy or Jewish law shaped religious people’s imagination, and consequently their values and behaviour. Indigenous traditions were largely ignored or left to be studied by anthropologists.

This emphasis on cultural and religious particularity has led to a view of modernity not as an inevitable process of secularization but rather as a distinctive feature of the Western religious or cultural trajectory. Consequently, modernity, secularization, technology, industrialization and the ensuing perception of an ecological crisis came to be regarded as the particular developments within the Western frame, rather than possessing an innate universality. This view of the ecological crisis as profoundly connected with the West led to an emphasis on non-Western others such as Asian and indigenous traditions, pagan traditions and alternative spiritualities that might connect the religious imagination and the natural world in ways that were supposedly divorced in the Christian imagination.

At the same time, the rapid growth of evolutionary psychology and cognitive science approaches to the study of religion has prompted a renewed emphasis on examining religion “in the singular” as a mode of human cognition and engagement with the natural world. This approach has the potential to bridge the gap between religion and nature, and between world religions and local, indigenous traditions. Inasmuch as all religious activity trades on an imaginative symbolic engagement with the real, such activity can be assessed in terms of the way it shapes our habits of thought about the existential location of the human species and our practical engagement with our planetary home.

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