

Islam and Ecology: Southeast Asia, Adat, and the Essence of *Keramat*

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Abstract: The gradual “ecological genocide” of our times demands not only a transnational critical investigation but an ecumenical and interreligious query as well. In this paper, I will juxtapose the views of Lynn White (Christian) and Seyyed Hossein Nasr (Muslim) with respect to nature and religion. What the two share is the analysis that the rift between culture (Western ethos) and nature is the cause of the environmental crisis. By way of reference to Malay *adat*, and the example of *keramat*, this paper argues that the key component for the establishment of a harmonious ethos cannot be maintained without reenvisioning the sacred in nature. Within the context of South East Asia, the example of the Minanagkabau can serve as a model in which culture is shaped by nature. It is based on relationships that are neither anthropocentric nor androcentric, one that is not based on dominion but on fostering nature-human-divine relationships.

Keywords Ecology; Islam; Ethics; Christianity; Culture; Malay; *adat*; *keramat*; anthropocentrism; androcentrism

INTRODUCTION

In the past two decades there has been a surge in literary and critical environmental works in academia. This surge has produced a variety of environmentalisms, leading to the “Greening of Humanities.” At the same time, Rob Nixon has pertinently observed that the rise of various environmentalisms in the humanities has been suffering from an “unself-conscious parochialism,”¹ in that it is heavily Euro-American. There has been little mention or recognition of those who are engaged in the struggle in the rest of the world, and who often risk their lives or livelihoods in protecting the devastation of their environment and its resources by standing up to corporations.² While the flourishing of ecocriticism in academia goes back at least two decades, exploring literature and the environment from a post-colonial perspective is a novel, yet rapidly emerging field.³ One of the main goals of post-colonial theory and this paper is opening a space for voices that have been previously silenced by dominant ideologies.⁴

Particular forms of human relationships and control of power and production continue to bear harmful ecological effects. Historically, colonial incursions have had severe environmental consequences, including appropriation of natural resources such as wildlife, forests, minerals, and land, by both companies and settlers.⁵ If, in the fifteenth-century, Madeira was set on fire for seven years to clear its densely wooded landscape for settlers, more recently the landscape of South East Asia has been blazed and drastically severed, especially since the 1970s. In the early sixteenth century the colonial powers often announced their arrival by symbolically striking trees or cutting branches, everywhere from the Americas to the jungles of Aceh,⁶ with the aim of dominating the lucrative spice, sugar, and oil trades,

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along with other resources. The most longstanding legacy of colonialism, however, is not its material but its discursive effects; it is not its overt violence, but its covert cultural, intellectual, and religious assumptions that still remain in force today.⁷ The colonial mentality which sees the colonized as inferior people with inferior cultures has resulted, among other things, in the use of the knowledge of the colonized to serve the interests of the colonizers. It is this discursive effect that has heavily amplified the suffering of nature, women, and the poor, and is the subject of criticism by liberation theologians and ecofeminists. Consistent with this theory, Sallie McFague refers to the colonizing attitude as the “arrogant gaze” of colonialism that needs to be transformed into a “loving gaze.”⁸ It is with a similar methodology that the noted Liberation theologian Leonardo Boff binds the fate of the rain forests of his native Brazil with the fate of the Indians and the poor of the land in his book, *Cry of the Earth, Cry of the Poor*. Christian liberation theology considers violence against nature and the poor as a symptom that should warn the first world of a sickness at the heart of Western culture.⁹ What Leonardo Boff and Virgil Elizondo refer to as “sickness” is identified and elaborated on in the works of Lynn White Jr. and Seyyed Hossein Nasr in their reflections on religion and nature and human-divine-nature relations, with the focus not on the poor but rather on the loss of the sense of the sacred.

This paper argues that the two historians of science, one from a Muslim and the other from a Christian perspective, share the analysis that the rift between culture (Western ethos) and nature and the loss of the sense of the sacred are the cause of the environmental crisis. By way of reference to Malay *adat* (ethos), and the example of *keramat* appropriation, the paper argues that the establishment of a harmonious society cannot be maintained without reenvisioning the sacred in nature¹⁰ as well as in culture. Based on the premise that environmental degradation is not a resource problem but an attitude problem,¹¹ it is important to return to the innate wisdom that informs us of our primordial harmony with the natural world. This primordial harmony is at the heart of several religious traditions.

The field of social ecology, which grew as a subfield of evolutionary psychology, has also established that we humans have an affinity with our natural environment. It affirms that human separation from nature has health (both mental and physical) as well as intellectual perils for us. Edward Wilson, who coined the term, defines biophilia¹² as “the urge to affiliate with other forms of life.”¹³ His hypothesis emphasizes the bond between humans and the natural world, and other forms of beings. It implies that we are biophilic, i.e., we are in equilibrium in natural environments because of a basic human need to be in contact with nature. It is this basic need that causes an instinctive reaction of connectedness with the landscape every time we see the sun rise, watch the sun set, or even when we feel a soft breeze. In environmental studies and architecture, biophilic design aims to reestablish the lost connection between the natural world and us as an attempt to fill the gap resulting from expanding urban lifestyle.¹⁴ Biophilic design was an ancient architectural tradition in various Muslim cultures until the early twentieth century, when the local traditional models were replaced with modern architecture in many places.¹⁵

PARADISE LOST

Rapid industrialization and development in South East Asia threatens to destroy its biodiversity within the next few decades. Environmental problems, such as the illegal sand trade for land reclamation in Singapore,¹⁶ heavy oil palm plantations (with neglect and disregard for the killing and misplacement of orangutans,¹⁷ elephants, and tigers), conversion of forested areas into massive rice fields, commercial and illegal logging,¹⁸ the failure to establish sustainable agriculture, pit mining for coal, and heavy metal mining¹⁹ across

Southeast Asia are the main causes of this threat.²⁰ Foreignaid “experts” are hard at work to turn most of these islands into a giant plantation area for oil palms, rubber, pines, and tapioca.²¹

Taking advantage of the poor environmental regulations in those parts of the world, corporations not only seize their resources but also use them as dumping grounds for toxic waste. The most recent case in Kuantan, Malaysia is the Australian corporation Lynas, which managed to set up a rare earth processing plant despite local protests. The plant will potentially impose tons of toxic waste onto the region.²² Other companies, such as Cargill and April, are rather savvy about greenwashing.²³ According to conservation biologists, the rate and scale of industrial forest clearing in Sumatra by palm oil plantations and big pulp and paper producers is as daunting as an “ecological Armageddon.”²⁴ Repeatedly, state or local governors resist the efforts to protect the rainforest and give in to the big companies, because logging provides the state great revenue.²⁵

The outsourcing of environmental crises, along with “resource imperialism,”²⁶ has given rise to a resurgent “environmentalism of the poor,” i.e. the resistance by impoverished communities against the assaults on the ecosystem by transnational corporations, the military, and civilian and corporate elites.²⁷ The struggle of the Dayak of Borneo against palm oil monoculture and the efforts of farmers of Riau and Palau Padang, Sumatra are not only a struggle over resources, but also a challenge to maintain a way of life. The situation in these places has set up a tragic tale of resistance and survival that can be witnessed in villages across Indonesia.²⁸ The environmental travesties cause anger and desperation among the villagers who lose their land to company concession.²⁹ In his award-winning novel, *This Earth of Mankind*, Pramoedya Ananta Toer depicts this anger and grief, while simultaneously reflecting on the oppression of colonialism.³⁰ Munif’s *Cities of Salt*, the story of a desert oasis disrupted by the arrival of western oil companies, presents an image not so different from the stories of the Buru Quartet, the disrupted villages in Toer’s island of Java, or Saro-Wiwa’s Niger Delta that had suffered “the equivalent of an Exxon Valdez-size oil spill every year for nearly half a century.”³¹ What the cases discussed in these books share is a reflection on and protest against the attritional environmental damage that deems nature and the people of the land disposable. According to Guha and Martinez-Alier, this has led to a “full stomach” and “empty belly” dichotomy in environmentalisms³² and it is the relation between the two that will shape the future of the biosphere and the environment.³³

THE GREATEST RADICAL IN CHRISTIAN HISTORY AFTER CHRIST

If there is truth to the Hindu doctrine of the four human cycles, we are currently in the Kali-Yuga or “dark age” period, writes Rene Guenon. This period is known as the time of inaccessibility of the supra-human wisdom.³⁴ Something has been lost everywhere,³⁵ Guenon writes, and hence the crisis of the modern world.³⁶ Science at the service of industry has brought about development of machinery seeking to dominate matter, yet it has only led to human enslavement to the machine.³⁷ Reflecting on the greed and encroachment of Western civilization on other people and their resources, what Guenon deplors most is what he calls the poisoning of their minds and their spirituality.³⁸

The need for a return to spirituality and prophetic wisdom is at the heart of Lynn White’s seminal essay. If Guenon has found the cause of the crisis in modernity, White’s search for the historical roots of our ecological crisis took him back to the Christian Middle Ages. His research on the effects of technological invention led him to believe that technological and scientific movements began not in the 18th century, but in the Middle Ages,³⁹ that they achieved world dominance in that period,⁴⁰ and that they are distinctively Occidental.⁴¹ He

came to believe that the fundamental medieval assumptions established not only “a dualism of man and nature” but that the theologians of the time, figures such as Tertullian and Saint Irenaeus, insisted that “it is God’s will that man exploit nature for his proper end.”⁴² It was at that time, he claims, that humanity moved from man as part of nature to man as exploiter of nature.⁴³ Animism was deemed a pagan practice, and the whole concept of the sacred grove became alien to Christianity and to the ethos of the West. White rejects the Christian axiom that nature has no reason for existence save to serve man, and that man is the rightful master over nature,⁴⁴ and instead suggests an alternative Christian interpretation. That alternative voice, according to White, is none other than “the greatest radical in Christian history since Christ: Saint Francis of Assisi.” Reminding us of the radical virtues of the prophets, White emphasizes that what humanity lacks is “humility as a species,” hinting at the idea that humility is incongruent with individualism and with the basic tenets of modern democracy. Michael Northcott points out the contradiction in the Church’s perception “that democracy is essentially Christian, even when modern democracy ... is increasingly identified with the completely unchristian idea that the chief end of people is to be free from the needs and demands of other people, and in particular free to consume.”⁴⁵ This idea leaves out the Christian notion that not only humans, but all animate and inanimate beings have been designed to glorify their transcendent creator,⁴⁶ and are co-created and thereby joined in a unity of beings.

Human ecology is deeply conditioned by our understanding of nature and our destiny, issues that are fundamental to religious discourse. Religion as a reservoir of ethical code and conduct for many has much to offer in the conversation about ecology. As such, it is essential to understand and interpret the role that religious thought plays in today’s environmental crisis. General statements found in support of environmental sustainability suggest that Islam forbids overuse of natural resources even as it encourages agriculture. Planting a tree, sowing a seed, and cultivating a wasteland are considered reward-worthy actions. Islamic sources prescribe the prevention of pollution, enforcement of cleanliness, and respect for animals, plants, and water, which it considers worthy of protection.

GREEN PROPHET

The Prophet of Islam is at times referred to as a “green Prophet,” an “environmentalist *avant la lettre*”⁴⁷ because he sought to maintain a harmonious balance between human and nature. He is quoted as saying: “When doomsday comes, if someone has a palm shoot in his hand, he should plant it.” At the same time, he advises prudence and frugality in the use of water, “even if one is standing on a flowing river.” He considered it a sin to withhold water from one who is thirsty. The concepts of *hurmah* (*harim* and *hima*) are protective measures for the earth. To protect land, forests, and wildlife, “the Prophet created inviolable zones known as *hima* and *haram*, in which resources were to be left untouched. Both are still in use today: *haram* areas are often drawn up around wells and water sources to protect the groundwater table from over pumping. *Hima* applies particularly to wildlife and forestry and usually designates an area of land where grazing and woodcutting are restricted, or where certain animal species are protected.”⁴⁸

The Faithful servants of the beneficent are those who tread upon the earth lightly (*Qur’an*, 25:63). The Islamic primary code of ethics is drawn from the Quran and the *sun-nah* (tradition of the Prophet) interwoven with *adab* or social mores taught in the works of literature, both poetry and prose. The Qur’an makes references to the sanctity of nature and of all animal species. It specifically declares that all beings, the heavens, and the earth, glorify God (*Qur’an*, 17:44). All Islamic schools of law have set out guidelines for the proper

treatment of animals and plants as well as natural resources. A simple example can be found in the edict that polluting the water is a sin according to the *shari'ah*.

Other broad concepts such as justice “*adl*” kindness “*Ihsan*”, and balance “*mizan*” are important points to be considered in the discourse on Islam and conservation, sustainable development, and resource management. The Qur’an prohibits wastefulness: “... waste not” it declares, “for Allah loveth not the wasters” (Quran: 7:31). In fact, wastefulness is synonymous with ungratefulness, and the term used for ungratefulness in most Muslim languages has been *kufri*; i.e. disbelief.

Theoretically there can be much found within the sources of Islam that respects the natural world and maintains its sanctity. Muslim scholars of the 10th and 12th century perceived individual happiness and virtue as premised upon quality of interaction with the society and on a life of association.⁴⁹ Yet, as Mawil Izzi Dien observes, the majority of Muslim countries around the world are “witnessing a cultural environmental rupture.”⁵⁰ The rapid introduction of industry into these countries without a supporting value system compatible with Islamic values is cited as the main reason for this breach. In Islam, an acceptance of what is legal and what is ethical has not involved the same processes as in cultures that base their laws on humanistic philosophies.⁵¹ Ethical conduct which involves the well-being of the created world – and its relation with the creator – has been the central theme of Islamic thought and action for centuries; however, the contemporary study of Islam has afforded little attention to the theme of ethics, and to environmental ethics.

Both Christianity and Islam emphasize the idea that the book of nature (cosmos) and the book of God are to be read side by side in order to reveal to us the inner meaning of creation.⁵² The Qur’an repeatedly invites us to look into ourselves and to the heavens and the cosmos for reflection. In fact, Muslim scholars have come to call creation *al-Qur’an al-takwini*. Islamic theology, however, has not escaped charges of anthropocentrism and utilitarianism when it comes to its relation with nature. Some trace back “the genesis of Islamic humanism to the metaphysical notion of man as God-like, which has held sway among Muslim thinkers for generations.”⁵³ Some have taken this view to be a blind spot in modern Muslim thinkers like Jamal al-Din al-Afghani, Seyyed Qutb, Muhammad ‘Abduh, Muhammad Iqbal, and Ali Shari’ati.⁵⁴ These Muslim revivalists’ overemphasis of socio-political and cultural issues has come at the expense of theological and ecological issues, and even contemporary *fiqh*, jurisprudence, fails to go beyond vague references.⁵⁵ Referring to the idea of *insan al-Kamil*, some argue that “from an ecological critique of Islam to a critique of Islamic humanism is but a small step” and that “it is not enough to show that pro-ecology insights can be found in Islam.”⁵⁶

There are verses in the Qur’an that at first glance seem to support an anthropocentric⁵⁷ vision of humanity:

(22:36) thus have We made animals subject to you, that ye may be grateful.

(22:37) He has thus made them subject to you, that ye may glorify Allah for His Guidance to you and proclaim the good news to all who do right.

(36:72-3) ... and that We have subjected them to men’s will, so that some of them they may use for riding and some of them they may eat. And they have (other) profits from them (besides), and they get (milk) to drink. Will they not then be grateful?

(22:65) Seest thou not that Allah has made subject to you (men) all that is on the earth, and the ships that sail through the sea by His Command? He withholds the sky (rain) from falling on the earth except by His leave: for Allah is Most Kind and Most Merciful to man.

(6:165) It is He Who hath made you (His) agents, inheritors of the earth: He hath raised you in ranks, some above others: that He may try you in the gifts He hath given you: for thy

Lord is quick in punishment: yet He is indeed Oft-forgiving, Most Merciful.

(2:21-22) O ye people! Adore your Guardian-Lord, who created you and those who came before you, that ye may have the chance to learn righteousness; Who has made the earth your couch, and the heavens your canopy; and sent down rain from the heavens; and brought forth therewith fruits for your sustenance; then set not up rivals unto Allah when ye know (the truth).

A holistic approach to the verses reveals that human centrality in the Qur'an is balanced and mediated by moral and metaphysical controls.⁵⁸ While the earth appears as subservient to humans, humans are made subservient to the Creator of all things. Humans have rights and responsibilities. The earth has rights, just as the flora and fauna that live on it. While humanity is *ashraf al-makhlouqat* (the best of creation), the "creation of heaven and earth is greater than the creation of human beings" (40:57) and "The earth, God has assigned to all living creatures" (55:10). "There is no animal on the earth, nor bird that flies with its two wings but that they are communities like yourselves" (6:38). The Quran emphasizes the moral responsibility of humans as the custodian and guardian of the rest of the creation. At the same time, the Qur'an attributes other traits to humans, such as: weak (4:28), given to hasty deeds (17:11), ungrateful (22:66; 17:67), miserly (17:100), unjust, foolish (33:72), and ignorant (14:34).

"Let there be among you," proclaims the Qur'an, "a community that calls to the good (*al-khayr*), bidding virtue (*ma'ruf*) and forbidding vice (*munkar*)" (Qur'an, 3:104). The Qur'an repeatedly states: "God enjoins justice and kindness" (Qur'an, 16:90). It is also emphatic about the fact that all animals and birds are communities like human communities (Qur'an, 6:38). More importantly the affirmation of the principle of *tawhid* and the idea of the unity of the natural world, of the cosmos, and of living species is the first and foremost Islamic teaching.⁵⁹ Furthermore, *fitra*, or the state of instinctive balance and harmony with creation, denotes that all elements are connected with each other and with the whole, and that every action of ours affects other people, other species, and other places, near or far.

ENVIRONMENTAL CRISIS AS A SPIRITUAL CRISIS

In a series of lectures at the University of Chicago in 1966, Seyyed Hossein Nasr spoke of the ecological crisis not in terms of sustainability or a resource crisis but as the spiritual crisis of modern man.⁶⁰ The crisis is reflected, according to Nasr, in the fact that humanity has lost the sense of the spiritual significance of nature, and that nature is no longer seen as the grand theophany.⁶¹ He sees the destruction of the natural environment as a failure to fulfill our humanity, and as a crime against creation that also praises the creator.⁶² "The seven heavens and the earth and all that is therein praise God," the Qur'an declares, "and there is nothing but that hymns God's praise, but you understand not their praise..." (Qur'an, 17:44) In identifying the roots of the crisis, Nasr – like White – points to industrialization and mechanization. However, he associates the process not with Christianity of the Middle Ages, but with Western humanist thought and 19th and 20th century theologians, figures such as Karl Barth and Emil Brunner, who were the forerunners of a new theology that believed: "nature can not teach man anything about God and is therefore of no theological and spiritual interest."⁶³ To be an intellectual, for these thinkers, meant to surrender to science. Philosophy became a reflection of science, rather than remaining the judge and critic of scientific methods and discoveries.⁶⁴ In order to plunder nature, it was necessary to "reduce it to a meaningless artificial background for the life of modern man."⁶⁵ The damage this kind of thinking has done to the sacred and spiritual value of nature can be remedied not by modern science alone, but by attentiveness to the metaphysical knowledge, *scientia*

sacra, pertaining to nature.⁶⁶ Within the context of Muslim South East Asia, the example of the Minangkabau can serve as a model in which culture is shaped by nature. This culture is based on relationships that are neither anthropocentric nor androcentric, that are not based on dominion but on fostering nature-human-divine relationships.

MALAY ADAT AND MATRILINEAL ETHOS

In the Malay world-view *adat* (etiquette that guides all relations) are granted sacred status. For the four million Minangkabau people of Western Sumatra, *adat* is the foundation of their matriarchal society. In *alam* Minangkabau, like much of the Malay world, *adat* and Islam are thoroughly interwoven. In other words, *Adat* are based on religion and religion is based on *adat*. "... [A]*dat* is not the whole of life but operated in conjunction with the dictates of Islam and the laws of the nation-state."⁶⁷ At the same time, there is sanctity for *ilmu gaib*, a "secret understanding of the unseen world of spirits and healing practices."⁶⁸ At the core of the *adat* philosophy is good deeds, kindheartedness, and thoughtfulness for the feelings of others. *Adat* are taught and propagated through proverbs.⁶⁹ Within Minangkabau society, the highly present animistic past is fused with the primordial emphasis on the maternal. While women and men are considered the same in their humanity, women are given more privileges. They are heir to ancestral property. "The house goes to women and women keep the key to the rice house. Young boys sleep in other houses (usually mosques) to show their sisters that they do not own the house."⁷⁰ One has to consider the feelings of everyone else in the house and how they would be affected before acting. Attention to community rather than to the individual is one of the clear indications of *adat*.

In the broader context of Muslim South East Asia, the application of environmental policies based on *adat* is to act from an advantageous position of the age-old ecological wisdom of the people. For the villagers, "the forest is their brain; the land their life and soul; and the water their blood."⁷¹ For the Oma'lung tribe in Setulang village, near the Malay-Indonesian border, who apply the Dayak code restricting access to the forest and to its resources, the death of the forest is the demise of their promise to their ancestors. Their ancient indigenous knowledge guides them to manage their natural landscapes sustainably by shifting cultivation to agro-forestry that does not harm nature, while humans can still benefit from it.⁷² That is part of their cultural heritage. The new policies of REDD, while well-intentioned, change those values by putting a price on the trees of the forest, which in turn change the tribe's ways and perceptions of them. It compromises and replaces the agreement they have with the forest and with their ancestors to an agreement with the UN based on a monetary value.⁷³

KERAMAT PROPITIATION

In South East Asia, especially in Malaysia, *keramat*⁷⁴ refers to a sacred shrine where usually a holy person has been buried. Small, modest roadside shrines, often associated with a tree or nestled in its trunk (believed to have grown at the site)⁷⁵ reflect symbolic representations from Malay Muslim, Indian, and Chinese traditions. The *datuk* of the shrine provides protection, good health, and good luck. *Keramat* is highly venerated in the hybrid culture of Malaysia by people from all walks of life and, hence, removing them would be a bad omen. In its inception, the *keramat* was associated with a rural Malay practice, especially among the fishermen and the peasants.⁷⁶ During the colonial era, the practice spread among the *orang asli* (aboriginal people), as well as some rural Chinese, with the hope of reducing calamities and uncertainties arising from hazardous economic activities such as fishing and logging.⁷⁷ Ironically, the prevalent belief in the power of the Malay-Muslim

supernatural force present in the *keramat* has not protected the sanctity of the space from the transgression of the construction activities of developers. By the process of capitalist sacralization, most developers remove the *keramat* but hold *keramat* propitiation rituals at the commencement and completion of construction activity. It is especially common in Penang that the *keramat* is removed ceremonially and carried to its new location such as a corner rooftop of the newly constructed high-rise, to both respect and appease the common people's faith and sensibilities.

CONCLUSION

Joseph Meeker's *Comedy of Survival* suggests that the environmental crisis is caused primarily by a tradition of separation between culture and nature, and the moral elevation of culture over nature. The West Sumatran Minang society derives the rules of their culture (*adat*) from observing the benign aspects of nature. For them, culture emulates nature in order to learn what supports life as well as what destroys it.⁷⁸ The Malay concept of *keramat* wedds culture, religion, and nature seamlessly. Its propitiation is a misappropriation in the name of cultural sensitivity. Both *keramat* and *adat* represent models for an interreligious ecotheology that respects the collective memories and traditions that seek harmony with nature rather than dominion over it. It would be a failure for humanity to ignore or deny the traditions based on innate human nature (*fitra*), and appalling to call them irrational and worthless – in the name of modernity and rationality – as a way to seek to uproot them.

Religion was, for the primordial human, a sacred cosmology and a sacred order of nature. Comparative ecotheology, religious ecocriticism, and the study of models of authentic biophilic thought, design, and action in various religious traditions and cultures can lead the way in helping to heal the attitude problems that cause suffering for the earth and all that lies within it.

NOTES

1. Rob Nixon, *Slow Violence and the Environmentalism of the Poor* (Cambridge, MA: Harvard University Press, 2011).
2. In literature, the work of prominent activists, such as Ken Saro-Wiwa, who wished that his people would live to celebrate the end of Shell's ecological war did not make it to the list of important works on the environment, despite the fact that his protest against the gradual "ecological genocide" of the Ogonis was met with violence and, finally, execution. See Rob Nixon.
3. See Elizabeth DeLoughrey and George Handley (eds.), *Postcolonial Ecologies: Literatures of the Environment* (New York: Oxford University Press, 2011); Bonnie Roos, Alex Hunt, and John Tallmadge (eds.) *Postcolonial Green: Environmental Politics and World Narratives* (Charlottesville, VA: University of Virginia Press, 2010); Helen Tiffin and Graham Huggan, *Postcolonial Ecocriticism: Literature, Animals, Environment* (New York: Routledge, 2010); Rob Nixon, *Slow Violence and the Environmentalism of the Poor* (Cambridge, MA: Harvard University Press, 2011).
4. Human threats to the environment and its resources are vast and deep. Among the most severe of these threats is the startling rate of population increase. Over forty years ago Garrett Hardin wrote an influential article entitled "Tragedy of the Commons," in which he warned about population growth. The population of the world has more than doubled since the publication of his article in the journal *Science* in 1968. It reached 7 billion on October 31, 2011. It has grown by over 50,000,000 in the eight months since that time (by the time of this writing) with the net daily population growth of 171,000. <http://www.worldometers.info/world-population/> (accessed on July 2, 2012)
5. Alfred W. Crosby, *Ecological Imperialism: The Biological Expansion of Europe, 900-1900* (Cambridge, UK: Cambridge University Press, 1986): p. 76.
6. Stephen Greenbalt, *Marvelous Possessions: The Wonder of the New World* (Chicago: University of Chicago Press, 1991): p. 56.
7. See Syed Hossein Alatas *The Myth of the Lazy Native: A Study of the Image of the Malays, Filipinos and Javanese from the 16th to the 20th Century and Its Function in the Ideology of Colonial Capitalism* (London: Frank Cass, 1977).
8. Sallie McFague, "The Loving Eye vs. the Arrogant Eye: A Christian Critique of the Western Gaze on Nature and the Third World," *Macalester International*, Vol. 6, pp. 77-97. Rosemary Radford Ruether *Gaia and God: An Ecofeminist Theology of Earth Healing* (New York, NY: HarperOne, 1994).

9. Leonardo Buff and Virgil Elizondo, eds., *Ecology, and Poverty: Cry of the Earth, Cry, of the Poor* (Maryknoll, NY: Orbis, 1995), p.xi. and Leonardo Boff *Cry of the Earth, Cry of the Poor* (Maryknoll, NY: Orbis Books, 1997).
10. What Rudolf Otto called *mysterium tremendum et fascinans* (fearful and fascinating mystery) in *The idea of the Holy* (London: Oxford University Press, 1923).
11. Adi Setia, "The Inner Dimension of Going Green: Articulating an Islamic Deep Ecology," *Islam & Science*, Vol. 5 (Winter 2007) No. 2
12. Edward Wilson, *Biophilia* (Cambridge: Harvard University Press, 1984).
13. Stephen Kellert and Edward Wilson (eds.), *The Biophilia Hypothesis* (Chicago, IL: Island Press, 1995): p. 416.
14. Stephen Kellert, Biophilic Design. See <http://www.biophilicdesign.net/> (accessed on July 8, 2012.)
15. Biophilic and sustainable design have been articulated in various models of architecture around the world, including in many examples of Islamic architecture from Iran to Southeast Asia. A simple example of the biophilic design is the traditional Malay home made out of timber with wooden or bamboo walls, designed to suit the tropical climate of the region. For information on Malay traditional architecture see Lim Jee Yuan "Under One Roof," at <http://www.sabrizain.org/malaya/library/malayhouse.pdf> (Accessed on July 8, 2012.)
16. Singapore uses purchased sand in the construction industry to produce cement, in order to reclaim land within Singapore's territorial waters. Every cubic meter of concrete requires 0.8 tons of sand. See http://www.foreignpolicy.com/articles/2010/09/28/singapores_sand Indonesia and Malaysia have officially banned land sand exports for environmental reasons. Despite the ban, Singapore has traded 133 million tons of sand from Malaysia. The latter has expanded its land area from 581.5 sq. km. in 1965 to 710 sq. km. in 2011, expanding its land by 20 percent in less than 50 years. See http://www.foreignpolicy.com/articles/2010/08/04/the_sand_smugglers and <http://grbusinessonline.com/wp/?p=492>
17. <http://www.thejakartaglobe.com/home/bleak-forecast-for-the-future-of-e-kalimantan-orangutans/499327> and <http://www.thejakartaglobe.com/home/orangutan-extermiators-on-trial-in-indonesia/496443>
18. <http://www.thejakartaglobe.com/home/illegal-logging-unlikely-to-end-unless-all-companies-follow-rules/498255>
19. <http://www.nodirtygold.org/pubs/DirtyMetals.pdf>
20. Willem Meijer, "Ecology of Two Indonesian Islands," in *The Quarterly Review of Biology*, Vol. 64, No. 2 (June, 1989), p. 181.
21. See *The Ecology of Sumatra*, by Anthony J. Whitten; Sengli J. Damanik; Jazanul Anwar; Nazaruddin Hisyam, (Gadjah Mada University Press, Bulaksumur, Yogyakarta, Indonesia; distributed in North America by Sinauer Associates, Sunderland, Massachusetts, 1987). *The Ecology of Sulawesi*, by Anthony Whitten; Muslimin Mustafa; Gregory S. Henderson, (Gadjah Mada University Press, Bulaksumur, Yogyakarta, Indonesia; distributed in North America by Sinauer Associates, Sunderland, Massachusetts, 1987). The 1987 edition of the book on Sumatra praises the rapid consolidation of forest into monetary gain as the most rational path (p. 642). See Willem Meijer, "Ecology of Two Indonesian Islands," in *The Quarterly Review of Biology*, Vol. 64, No. 2 (June, 1989), p. 182.
22. <http://stoplynas.org/abc-malaysians-protest-against-mining-site/>
23. Asia Pacific Resources International Limited (APRIL) is a leading pulp and paper manufacturer. APRIL advertises as a sustainable company with a green leaf logo. It plants almost 400,000 trees per day or 150 million trees per year, which covers an area of 10,000 hectares, which claims to surpass targets set by the Forestry Ministry's "One Man, One Tree" Program to deal with the impact of climate change. In January 2012 protests and rallies staged by the local residents stretched from Meranti island district, Riau's capital, Pekanbaru, to Jakarta, where the villagers sewed their lips in protest. See <http://earthfirstnews.wordpress.com/2011/12/29/indonesian-protesters-sew-their-mouths-shut-over-deforestationpalm-oil/> and <http://eyesontheforest.or.id/index.php?page=news&action=view&id=512> and <http://eyesontheforest.or.id/index.php?page=news&action=view&id=505>
24. W. F. Laurance, T. Kakul, R. Keenan, J. Sayer, S. Passingan, and N. Sodhi., "Better governance to save rainforests," *Nature*, 467:789.
25. Estimate of logging revenue in Malaysia is RM 30 million each year, i.e. U.S. \$10 million a year.
26. Richard H. Grove, Vinita Damodaran, and Satwal Sangwan (eds.), *Nature and the Orient: The Environmental History of South and South East Asia* (Oxford University Press, Delhi, 1998)
27. Nixon, 22.
28. http://www.youtube.com/watch?v=xD2B0nJyAzs&feature=player_embedded
29. <http://www.abc.net.au/news/2011-08-02/sumatra---papertiger/2821752>, Sumatra- Paper/Tiger (accessed on 02/17/2012).
30. In his *Buru Quartet*, the prominent Javanese author, Pramoedya Ananta Toer (Feb. 1925- May 2006) tells the story of Minke, living in colonial Indonesia. The struggle for justice that Minke faces is perhaps as dramatic as Toer's own life. The story developed during his eight-year imprisonment in Buru Island, where political prisoners were kept. He told stories to encourage his prison mates, and was found effective. Minke's story is of a passionate struggle against the oppression of colonial rule, including injustices against women and the environment.
31. Rob Nixon, "Slow Violence," in *The Chronicle Review*, Section B, July 1, 2011. p. 12
32. Ramachandra Guha and Juan Martinez-Alier, *Varieties of Environmentalism: Essays North and South* (Routledge, 1997); and Juan Martinez-Alier, *The Environmentalism of the Poor: A Study of Ecological Conflict and Valuation* (Edward Elgar Publishing, 2003).
33. Nixon.

34. Rene, Guenon, *The Crisis of the Modern World*, translated by Arthur Osborne, Marco Pallis, and Richard C. Nickolson (Ghent, NY: Sophia Perennis) p. 7.
35. Ibid. 87.
36. Ibid.
37. Ibid.
38. Ibid. 99.
39. Guenon exclaimed that the West was Christian in the Middle Ages, but lost Christianity in the Modern era, and became not only anti-Christian but anti-religious and anti-tradition. (Guenon, p. 87-96)
40. Lynn White Jr. "The Historical Roots of Our Ecological Crisis" at <http://www.earthtalktoday.tv/earthtalk-voices/historical-roots-ecological-crisis.html>
41. Ibid.
42. Ibid.
43. Ibid.
44. Ibid.
45. Michael Northcott explains part of the problem for Christians: "The point is that this false notion of freedom and the use of violence against other people and other species to achieve human ends are deeply intertwined." Michael Northcott, "The Ecological Spirit: Being Church and Being Creatures" <http://www.jri.org.uk/resource/ecologicalspirit.htm> and Stanley Hauerwas, *After Christendom: How the Church is to Behave if Freedom, Justice, and a Christian Nation are Bad Ideas* (Nashville: Abingdon Press, 1991)
46. Ibid.
47. Francesca De Chatel, "Prophet Muhammad: A Pioneer of the Environment", http://www.islamicbulletin.com/newsletters/issue_23/environment.aspx
48. http://www.islamicbulletin.com/newsletters/issue_23/environment.aspx
49. Aryn Sajoo, *Muslim Ethics: Emerging Vistas* (London: I. B. Tauris Publishers, 2009) p. 2
50. Mawil Y. Izzi Dien, "Islam and the Environment: Theory and Practice," *Journal of Beliefs and Values*, 1997, vol. 18, no. 1, pages 47-58
51. Ibid.
52. See <http://www.jri.org.uk/resource/ecologicalspirit.htm> (accessed on March 15, 2012)
53. See Kaveh Afrasiabi, "Toward and Islamic Ecotheology" in *Islam and Ecology: A Bestowed Trust* (Cambridge, Massachusetts: Harvard University Press, 2003) p. 283
54. By the same token, can one say that the absence of ecotheology in the works of Catholic theologians Karl Rahner, Bernard Lonergan, and Yves Congar is a blind spot in their theology?
55. Afrasiabi, 289.
56. Afrasiabi, 285.
57. We humans will forever be at least to some extent anthropocentric, just as the jellyfish would be jellyfish centric, as Daniel Quinn puts it. Even in our concern over the environment we are at best minimally anthropocentric because with all the changes that we have imposed upon the biosphere, reduction of biodiversity, climate change, and the extinction of species, nature will survive, while we humans may not be able to endure.
58. Nasr.
59. Osman Bakar, *Environmental Wisdom for Planet Earth: The Islamic Heritage* (Kuala Lumpur: University of Malaya, 2007): p. 26-29.
60. See also Michael Northcott <http://www.jri.org.uk/resource/ecologicalspirit.htm>, and *The Environment and Christian Ethics* (Cambridge, England: Cambridge University Press, 1996)
61. Seyyed Hossein Nasr, *Man and Nature: The Spiritual Crisis of Modern Man* (ABC International Group, Inc. 1997) the book is based on four lectures delivered at the University of Chicago in May 1966
62. Nasr, p. 10.
63. Ibid. p. 31.
64. Ibid. p. 30.
65. Ibid. p. 32.
66. Ibid. p. 14.
67. Peggy Reeves Sanday, *Women at the Center: Life in a Modern Matriarchy* (Ithaca: Cornell University Press, 2002): p. 16.
68. Ibid. p. 7.
69. Ibid. p. 20.
70. Peggy Reeves Sanday, p.20
71. Bapak Jamaludin Antel is from Desa Semuningjaya, District of Jagui Babang, Bengkayan, West Kalimantan. He is one of the community leaders of the Dayak Iban indigenous peoples. See <http://ecological equity.wordpress.com/themes/stories-of-right-stories-of-might/call-for-support-for-the-struggles-of-the-dayak-iban-indigenous-peoples/>
72. <http://ourworld.unu.edu/en/forbidden-forest-of-the-dayak/>
73. REDD (Reducing Emissions from Deforestation and Forest Degradation) leaves forest out. It is a UN program that creates a financial value for the carbon stored in forests, by offering monetary incentives for developing countries to reduce emissions from forests. The plan is that communities like the Oma'lung will essentially be paid for doing something that they would have otherwise done for no financial benefit.
74. In Islamic mysticism; *irfan*, *keramat* are gifts, miracles, unusual powers of the prophets, but also of the *awliyya*, saints, or ordinary Muslims who have reached high levels of piety.
75. See, Iain Buchanan, *Fatimah's Kampung* (Penang, Malaysia: Consumers Association of Penang, 2008). An

illustrated tale of a disappearing world of Kampung Malayu, a *keramat*, the forest, and the tiger, and their destruction along with the trees to make room for multi-level apartment complexes and mega electronic stores.

76. See Winstedt, R. "Keramat: Sacred places and persons in Malaya," Journal of the Malayan branch of the Royal Asiatic Society, 1924: 2(3): 264–279.
77. Beng Lan Goh, "Malay-Muslim spirits and Malaysian capitalist modernity: A study of *keramat* propitiation among property developers in Penang," Asia Pacific Viewpoint, Dec 01, 2005; Vol. 46, No. 3, p. 307-321
78. Sanday, p. 23.