

Islamic Environmental Stewardship: Nature and Science in the Light of Islamic Philosophy

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INTRODUCTION AND PRELIMINARY NOTES

This essay presents a short overview of the Islamic philosophical approach to nature, the Islamic perspective on modern science and the relations between sacred tradition, nature, and science in light of the ongoing environmental crisis. It also proposes a solution to the environmental crisis, based on an integrated understanding of these subject matters. This is conducted through a lens that is Islamic by method but universal in principle and conclusion.¹

The prime source of all Islamic thought and practice, from theological doctrine to sacred law, is the Holy Qur'an. Similarly, in this essay, the influence of Qur'anic teachings is much greater than what may just appear in citations; their influence is central to this work. With that said, if there is anything presented in this essay that is disharmonious with the Qur'anic message, it is the fault of the essay's author.

Another prime source used for the purpose of this essay is the work and teaching of the Islamic philosopher Seyyed Hossein Nasr. An esteemed author of over 50 books and 500 articles, Nasr has written extensively on a wide array of subjects including Sufism, perennial philosophy,² comparative religion, the sacred sciences and the natural environment.³ In fact, much of this essay can be regarded as a summary of his integrated writings on modern humanity's approach to science, spirituality and nature. Nasr has spoken at many lecture-series and seminars, and in 1980 he was the first Muslim to deliver the prestigious Gifford Lectures—

1 Regarding terms used in this essay, the term "sacred tradition" is used here in reference to all paths of enlightenment and revelation ranging from Christianity to Islam to Buddhism. Additionally, all references in this essay to traditional and sacred sciences are meant to address those sciences that study not only the physical domain of reality, but the metaphysical as well, and are typically associated with any of such sacred traditions. With that said, this essay also provides a criticism of modern science for both its ignoring of the metaphysical domain and for its dominant claim as the only science of nature. Its dominating adoption of strictly empirical methodologies, such as that of logical positivism, is addressed in this essay and regarded as an instigator to the environmental crisis. Such criticism is not new and has been voiced by many others before, including religious philosophers, historians of science and scientists themselves. Examples of prominent thinkers, from the twentieth and twenty-first centuries, that have criticized modern science for these or similar reasons are Émile Meyerson, Alfred North Whitehead, F. Sherwood Taylor, Jacques Maritain, G.D. Yarnold, Lord Northbourne, Titus Burckhardt, Frithjof Schuon, Seyyed Hossein Nasr and William C. Chittick.

2 Perennialism is a philosophy that recognizes the universal recurrence of philosophical insight existent throughout epochs, sacred traditions and cultures, especially regarding dimensions of universal truth on the nature of reality.

3 Nasr Foundation: Islamic Teachings, "Biography / Dr. Seyyed Hossein Nasr.," <http://www.nasrfoundation.org/bios.html> (Accessed August 22, 2010).

a renowned annual lecture series in Scotland that features the most prominent thinkers in the integrated field of religion, science and philosophy.

In 1966, Nasr delivered the Rockefeller Lectures at the University of Chicago; there he traced the root issues of the environmental crisis to the spiritual crisis of modern humanity. These lectures became the basis of his book, *Man and Nature: The Spiritual Crisis of Modern Man*, which was used as a prime text for direction and reference in this essay. The writings of others affiliated with Nasr, namely his late teacher Frithjof Schuon and his student William C. Chittick, have as well had significant influence on this essay's content and direction.

OVERVIEW

With extinctions and endangerments within the animal kingdom still common place and the year 2010 possibly one of the hottest on record, the environmental crisis of today seems quite alive and far from ending.⁴ Moreover, the massive loss of natural recreational areas for people and the continuous repeats of "natural" disasters show that humanity itself is in grave danger. With this overwhelming plethora of catastrophes becoming more and more common in the modern world, humanity must ask itself: How has such an abnormal pattern of calamity come to be, and how can it be ameliorated or stopped?

Simply put, the environmental crisis is but an outward reflection of the inward crisis of modern day humanity. It is not just the environment that is in crisis, but humanity as well. In fact, humans' own inward disharmony serves as causation to the disharmony prevalent in their surroundings. Humans' lack of self-discipline and morals—such as excessive consumption and a lack of compassion—has translated onto their environment and into the crisis apparent today. The root of humanity's disharmony with nature is therefore humans' disharmony within their own selves.

More specifically, this inward crisis is a spiritual one. The lack of spirituality, rooted in a general lack of adherence to sacred tradition, has spurred the loss of merited aspects such as benevolence, love and compassion. Such a loss created a void in the soul of humans that was instantly filled by the very antithesis of such spiritual characteristics. Devilish characteristics such as greed, apathy and cruelty filled this void that was previously occupied by the fruits of sacred religiosity and spirituality. This marring of the human soul has translated from humans' inner nature onto the outward nature around them. Thus, the only lasting method for the modern human to redeem harmony in its environment is by restoring harmony within the human soul. Only with a purification of the heart, and hence the replacement of its diseases with primordially healthy attributes, can peace be attained both inwardly and outwardly.

In turn, direction is needed. Generally, the human's self is too prone to lawlessness to direct itself to a selfless state of peace. In order to understand how to

⁴ Paul Ecleston, "Red List of endangered species – wildlife disappearing as never before." *Telegraph*, <http://www.telegraph.co.uk/earth/wildlife/3306508/Red-List-of-endangered-species-wildlife-disappearing-as-never-before.html> (accessed August 31, 2010); MSNBC, "First half of 2010 warmest on record – U.S. news – Environment – Climate Change – msnbc.com." <http://www.msnbc.msn.com/id/38263788/> (accessed August 31, 2010)

best travel on the route of love, humanity must turn to the Loving. A turn to God, regardless of the sacred tradition taken by each individual, is needed for a lasting inner-peace. Humanity's resolving of the environmental crisis depends on the resolving of its own spiritual crisis, which, for each individual, depends on his or her reconciliation with God.

A study of this from an Islamic perspective may prove beneficial, given not only the Islamic sciences of the soul and the Islamic reverence for nature, but also what Islam shares with other religions. Given its theological correspondences to Western religions and its esoteric similarities to Eastern religions, Islam has the capacity to provide a universal basis that can benefit other religions in their own approaches to the environmental crisis. The religious approach to the environmental crisis, though perhaps different in nuance, is similar across all religions. Ultimately, all sacred traditions affirm sacred qualities to nature and all recognize humanity's responsibility of stewardship to this part of God's creation, the natural world. In this essay, Islamic philosophy serves as the lens through which these sacred qualities of nature are observed.

A QUR'ANIC CASE FOR ENVIRONMENTAL STEWARDSHIP

"Till, when they came upon a valley of ants, an ant exclaimed: "O you ants! Get into your dwellings, lest Solomon and his soldiers crush you without being aware!" Thereupon (Solomon) smiled joyously at her words, and said: "O my Sustainer! Inspire me so that I may be grateful for those blessings of Thine with which Thou hast graced me and my parents, and that I may do what is right that will please Thee; and include me, by Thy mercy, among Thy righteous servants!"⁵

When the Prophet Solomon (upon whom be peace) happened upon an ant colony and heard an ant communicate to others, he smiled and was inspired to pray to God.⁶ What significance does such a scenario, as portrayed in the Qur'an, hold for the daily life of a Muslim? How can such a prophetic reaction to nature bear influence on the Muslim response to the environmental crisis today? To what Islamic resources can Muslims refer for knowledge, inspiration and guidance in the development of their own approach to their natural surroundings?

The Qur'anic portrayal of nature is one of a companion in the glorification of God, a gift of sustenance, a cosmic book to learn from and more. In the Muslim world, the Qur'an is considered the sole literary source of sacred knowledge available today with unquestionable authenticity. Its legitimacy as the Word of God is considered sacrosanct and undeniable within the religion.⁷ Thus, a case for Islamic environmental stewardship might be best put forth through direct Qur'anic reference.

HARMONY

It is Islamic belief that humanity has a divinely ordained responsibility to act with care for the natural world and not to transgress the balance and harmony

5 Qur'an, trans. Muhammad Asad, 27:18-19. Modified.

6 The Qur'an 27:15-19

7 The Qur'an 4:136

placed within it.⁸ Within the Qur'an, humans are portrayed as God's vicegerents and stewards of the earth.⁹ In this role, the human purpose is to return to the primordial self and thus return to God by reflecting His names and characteristics in this life—all within the boundaries of a divinely ordained balance while maintaining a divinely set harmony.

Within this harmony, the natural world is in a constant state of prostration to God.¹⁰ Nature's constant worship of God serves as a foundation to its peaceful harmony. Lightning, birds, mountains and all other natural creatures and phenomena live by laws that set the harmony existent in nature today.¹¹ In each honeybee's flawless worship of God, it cannot but contribute to a honey-making process and fulfill its role for the sake of God within His ordained balance. For this reason, it is not flora or fauna that wreaks havoc on earth, but rather humans. Humanity has the free will to not worship God, while nature has no choice but to do so. It is thus the role of humanity, as God's vicegerents, that each human maintain harmony within the inward self and outward environment. God willing, through preservation of such harmony, peace may be attained in this world and the next.

A COSMIC BOOK

Embodied throughout the cosmos are messages concerning all orders of reality. They have significance for all kinds of knowledge, from that regarding the superficially physical to the metaphysically ontological. All such messages allude to God, His qualities and His supreme oneness. They are the Signs of God (*Ayātu Llah*)—shown for people with specific characteristics, such as those who contemplate and seek a greater kind of knowledge.¹²

Within humanity's surroundings: the Sun seemingly rises from East to West; in the Northern Hemisphere, moss is typically more abundant on the northern side of trees; night and day reiterate the juxtaposed locations of Sun and Earth... With so many natural compasses in humanity's surroundings, guidance and direction seem abundantly available. Though, perhaps if people saw with other than just two eyes, they would find guidance towards more than just physiographic location. All such embodiments of messages constitute Signs of God—available to people for their pursuit of knowledge concerning reality of both physical and metaphysical domains. Such domains of reality, throughout their hierarchies, allude to God the Real (*Allah al-Ḥaqq*) and to the many other characteristics of God.

Nature itself is permeated with the Signs of God. A single snowflake is of no threat whatsoever to a human being, but in the unity of snowflakes—a snow-storm—humans flee for shelter; in this is an allusion to the power of unity. It is

8 The Qur'an 55:1-13

9 The Qur'an 2:30, 33:72

10 The Qur'an 13:15, 16:49, 22:18, 55:6

11 The Qur'an 16:49-50, 64:1

12 The Qur'an 2:164, 3:190, 6:99, 10:6, 10:67, 13:3-4, 16:69, 17:12, 20:54, 24:44-46, 26:7-8, 27:86, 29:44, 30:20-25, 30:46, 32:27, 34:15, 36:33-44, 40:79-81, 41:37-39, 42:29, 45:1-13, 50:6-11, 51:20-23, 71:14-20, 78:6-16, 79:27-33, 88:17-20

always darkest before dawn; in this is an analogy to the law of ease following difficulty. Cyclically, land dies and is revived by means of rain from the heavens, and in time it dies again and is again revived; in this is an allusion to resurrection and a portrayal of the power of God as the Giver of Life and the Bestower of Death (*Allah al-Muḥyi al-Mumīt*). All such natural phenomena are regarded as Signs of God; however, such signs can be understood in many deeper levels than that of the simple examples just noted.

In what is understood as a reference to a cosmic holy book, such signs within the cosmos share the same terminology as Qur'anic verses. More specifically, the Arabic word used in reference to Qur'anic verses, "*Ayāt*," is the very same term used in reference to signs within the cosmos and within people. Thus, the signs within nature are regarded as verses of a cosmic or natural holy book, and thus nature itself a holy book—or more specifically, the cosmic "Qur'an of creation" (*al-Qur'an al-takwīnī*).¹³ Hence, with the realization that holy verses are not just available in scripture—but in nature, the cosmos and the soul as well—it is humanity's responsibility to generally approach nature with the same reverence it would a holy book.

Most surely in the creation of the heavens and the earth and the alternation of the night and the day, and the ships that run in the sea with that which profits men, and the water that God sends down from the cloud, then gives life with it to the earth after its death and spreads in it all animals, and the changing of the winds and the clouds made subservient between the heaven and the earth, there are signs for a people who understand.¹⁴

HEAVEN IS A GARDEN

With rivers flowing and fruits ever-available, both the Qur'anic and universal depictions of Heaven are of an uncorrupted piece of nature, a garden.¹⁵ Through not only describing Heaven as a garden, but also directly using the word "Garden" (*Janna*) in reference to Heaven, there is a Qur'anic allusion to a link between sacredness and nature. If Heaven is a garden, then the act of destroying the gardens of Earth (forests, rivers, etc.) is metaphorically a destruction of the Heaven on Earth. Thus, with both this and the status of natural creatures as worshippers of God in their constant prostration to Him in consideration, nature is regarded as sacred territory whose mistreatment is impermissible.

Nature is also a God-given gift. Throughout the Qur'an, and universally, Heaven is described as a positive recompense that God provides to those who deserve it.¹⁶ This heavenly reward comes in a form similar to that of nature; it is this that God gives to people as a gift for their good deeds. If the act of throwing

13 Seyyed Hossein Nasr, *Man and Nature: The Spiritual Crisis of Modern Man* (Chicago: ABC International Group, Inc, 1997), 94-95.

14 Qur'an, trans. Mohammedali H. Shakir, 2:164. Modified.

15 The Qur'an 2:25

16 The Qur'an 3:195, 18:30-31

money or anything valuable away is regarded a great waste, then what is there to say about mistreating what is similar to the invaluable reward that God sees most fit for the righteous? These are just some of the many reasons of why humanity should treat well, love, admire and understand nature—our holy gift and friend.

ISLAM AND SCIENCE

Integral to finding a solution to the environmental crisis is a study of modern science's role in it. Modern science, with its great capabilities for both construction and destruction, has been the means by which people today have drastically increased their negative impact on Earth. However, through specific scientific initiatives such as environmental engineering, modern science can also serve as a contributive means to solving this crisis. Therefore, specific aspects of the history of science must be studied in order to properly understand science's role in the environmental crisis as both a cause of the problem and a potential ameliorator of it.

It is also important to undergo such a study under the lenses of universal sacred traditions. The separation of science from sacred tradition, and thus also the loss of the sacred sciences, is indeed a contributing factor to the human abuse of nature today. Given the Islamic reverence for nature and the rich history between Islam and science, a study of both science and nature under an Islamic lens can prove constructive to an understanding of the subject at hand. Such a study can give its conductors insight to the faulty axioms within modern science, as well as provide a perception of modern day humanity's latent ability to regain harmony with nature.

ISLAMIC PHILOSOPHY AND SCIENCE

Islam has long claimed a strong compatibility with science and an openness to the pursuit of sacred knowledge through it. The rich history of Muslim contributions to the world of science bears enough evidence to support this claim. Scientific and mathematical branches such as algebra, astronomy and chemistry are, at least in part, made available today due to the Islamic sciences of old. Works by Muslim scientists, popularly known till today, such as Ibn Arabi, Avicenna, and Averroes, have had great influence on the discoveries and progresses within science and shall probably continue to have so for however long science itself carries on.

Moreover, a great phenomenon pertaining to an integration of natural theology and modern science has spread across Muslim culture. More specifically, in light of modern scientific discoveries, Muslims today use science to study what they consider Qur'anic miracles. The intention is to use empirical proof as a foundation for their belief in God. The many books and online resources on this topic are a product of this cultural phenomenon. They include references to mathematical phenomena in the Qur'anic repetition of words,¹⁷ as well as the Qur'anic

17 Peacethought.com, "The scientific and mathematical miracles of the Qur," <http://www.peacethought.com/miracles.htm> (accessed October 10, 2010). See "Example 7: Mathematical Miracles of The Qur'an".

presentation of topics in embryology,¹⁸ oceanography,¹⁹ astrophysics²⁰ and more. It is another example of how science has proved compatible with Islamic belief and culture.

Notwithstanding such compatibility, there remains a great difference between the approach of modern science and that of the traditional Islamic sciences. Unlike the usual modern scientist, a traditional Muslim scientist's work was never undergone for the sake of understanding the physical alone. It is the traditional Muslim scientist's belief that the true function of science is to discover aspects of the real.²¹ The intention behind their work was to understand the different and higher orders of reality—all in order to gather a better understanding of God. This reality permeates the inherent nature of all things. It encompasses the sacred symbolism of all facts, the gnosis attainable through the study of creation and the virtually infinite allusions to the supreme oneness of God.

The search for sacred knowledge had been a prevalent aspect of science in Muslim lands for centuries. With this aspiration to better know their Lord, Muslim scientists ranging from Jabir bin Hayyan to Avicenna have pioneered their respective fields with studies of both the physical and metaphysical. Through their studies of creation they intended to better understand the Creator, especially given His invitation to do so.²² Thus, the Islamic sciences not only gathered information of their surroundings, from earthly minerals to cosmic patterns, but also interpreted them through a sacred lens.

Following this Islamic outlook, one greatly valuable aspect of science is its study of the Signs of God embodied in all phenomena. Such signs are pervasively provided throughout each person's self and surroundings so that people may come to better know God. Thus, all phenomena of all kinds hold lessons for those who seek them. This notion is reflected within all aspects of the Islamic religion and is further alluded to in the Arabic vocabulary; there is a shared linguistic consonantal root between the Arabic words for knowledge, science, and world: *'ilm*, *'ulūm* and *'ālam*, respectively. It can thus be concluded that a great aspect of science is its development of people's knowledge of the world around—and within—they so that they may better know God. By studying the virtually infinite signs that symbolize His attributes, humanity can see that He is *Allah al-Khāliq ar-Rahmān*, God the Creator the Infinitely Merciful.

Furthermore, science is viewed as a process of innovatively developing the appropriate means to a God-pleasing end. With such an understanding, the use of creative and non-traditional methods to maintain harmony between humanity and the God-given natural environment is not just permissible but encouraged as well. The same applies to all innovations made for any good purpose. This is reflected in

18 M.A. Kazi, *Qur'anic Concepts and Scientific Theories* (Amman: Islamic Academy of Sciences, 1999), 41-46.

19 Maurice Bucaille, *The Bible, the Qur'an and Science: The Holy Scriptures Examined in the Light of Modern Knowledge*, trans. Alastair D. Pannell and Maurice Bucaille (Indianapolis: American Trust Publications, 1978), 178-180.

20 *Ibid.*, 151-169.

21 *Man and Nature*, 25.

22 Muzaffar Iqbal, *Science and Islam* (New York: Greenwood Press, 2007), 31.

the historical contributions of Muslim scientists to the realm of science, as well as in the innovative works of Muslims today.

THE SEPARATION OF SCIENCE AND SACRED TRADITION

The divorce between science and sacred tradition is rooted in a number of things. In regards to Islam, the decline of the Islamic sciences seems tied to the decline of Islamic civilization, and there are reports today on both correlation and causation between the two.²³ Internal and external factors in Islamic civilization, such as socio-political issues in Muslim lands and the Mongol invasion of Baghdad in 1258, are held somewhat responsible for the loss of the Islamic sciences. However, the true instigating factors behind the decline of both the Islamic sciences and Islamic civilization seem to be a topic of debate in Western literature.²⁴ Regardless of these causes, it remains today that the “Golden Age” of Islamic civilization is far behind and the Islamic sciences of today are in no way near the pinnacle they had reached then.

On a universal level, the loss of a public connection between science and sacred tradition seems rooted in a number of inter-connected events. In the spread of Christianity into the West, and in its dialogue with Hellenist Greeks who seemingly had a metaphysical intelligibility of nature but not of God, a Christian movement had come about in which there was no transcendental approach to nature, but only a strictly nominalist theological way of understanding and reaching God.²⁵ As noted by the philosopher, metaphysician and Perennialist thinker, Frithjof Schuon:

If a simple and rather summary formulation be permissible, one could say that for the Greeks truth is that which is in conformity with the nature of things; for the Christians truth is that which leads to God. Thus Christian attitude, to the extent that it tended to be exclusive, was bound to appear to the Greeks as “foolishness”; in the eyes of the Christians the attitude of the Greeks consisted in taking thought for an end in itself, outside of any personal relation to God; consequently it was a “wisdom according to the flesh”... it was in some respects a dispute between a love-song and a mathematical theorem. It could also be said that the Hellenists were predominantly right in principle and the Christians in fact, at least in a particular sense that can be discerned without difficulty.²⁶

The Hellenist approach to nature was one of intellectual thought and understanding, but was restricted by the limitations of empiricism. Western Christianity saw the Hellenists’ pagan-like understanding of the world as an obstacle to their

23 Ibid., 124-129.

24 Ibid.

25 Frithjof Schuon, *Light on the Ancient Worlds: A New Translation with Selected Letters*, trans. Deborah Casey, Mark Perry, Jean-Pierre Lafouge and James S. Cutsinger, ed. Deborah Casey (Bloomington, IN: World Wisdom, 2006), 45-57.

26 Ibid., 47.

potential realization of God. Thus, according to Schuon, in lieu of intellect of this world as a path to God, Western Christianity emphasized love as the path to Him.²⁷ Consequently, the distinction between the natural and the supernatural became so strict that it deprived most people a proper understanding of nature's spiritual qualities.²⁸ The focus on nominal theology, and moreover the influence of doctrines like rationalism on this type of theology, later contributed to a European revolt against Christianity.²⁹ In turn, this aided to a mentality of secularization that permeated the scientific arena and finalized the separation of science and sacred tradition. With that said, there are peripheral exceptions to this, as evidenced by annual speeches given at the Gifford Lectures since 1888, the general field of natural theology and the beliefs of creationist scientists.

In regards to this Western Christian movement, it is important to note that it does not represent all of Christianity. The movement came about as a Christian response to a world of empirical naturalism; however, some of its principles seem at great odds with the actions and beliefs of others within the religion. On one hand, with an array of examples quite widely ranging from Saint Francis of Assisi to the contemporary Evangelical Climate Initiative,³⁰ it seems that there have always been Christians who recognized the human role of stewardship towards nature. On the other hand, studies of metaphysics can be found in the writings of Western Christian figures throughout the ages, with thinkers such as Origen, Erigena, Dante and Jacob Böhme providing prominent examples.

In his presentation at the Rockefeller Lectures and in his book, *Man and Nature: The Spiritual Crisis of Modern Man*, Nasr emphasized the need for Christians to return to a theology of nature as understood in the "intellectual light of the early Church Fathers, the Christian metaphysicians of the Middle Age, such as Erigena and Eckhardt, or in the sense of the theosophy of Jacob Böhme."³¹ He also stressed the need to learn from Oriental traditions that still studied metaphysics.³² They are steps needed so that Christians today may both regain the Christian understanding of the metaphysical domain of reality, and reestablish more of the early Christian recognition of the sacred connection between humanity and the rest of God's creation. Other thinkers, such as Mircea Eliade, Dom A. Graham and G. D. Yarnold, have voiced the same or a similar message.³³

AN ISLAMIC PERSPECTIVE ON THE TROUBLE WITH MODERN SCIENCE

Science is defined today as "the intellectual and practical activity encompassing the systematic study of the structure and behavior of the physical and natural

27 Ibid.

28 *Man and Nature*, 55.

29 Ibid., 51-75.

30 Evangelical Climate Initiative "Evangelical Climate Initiative » A Christian Call to Action on Climate," <http://christiansandclimate.org/> (accessed August 28, 2010)

31 *Man and Nature*, 37

32 Ibid., 82-83.

33 See: "The Sacred and the Profane, the Nature of Religion" (1959) by Mircea Eliade; "Zen Catholicism" (1994) by Don A. Graham; "The Spiritual Crisis of the Scientific Age" (1959) by G.D. Yarnold

world through observation and experiment.”³⁴ This definition provides a basis for great compatibility between modern science and the Islamic pursuit of knowledge, but with a few caveats. The *physical and natural world* to which this definition refers is Islamically known to embody sacred meanings; their studies are therefore welcomed in Islamic circles, but integral as well is the ability to interpret them on higher ground.

Modern science’s denial of metaphysics serves as the basis for much disparity between Islam and modern science. This disparity boils down to the great difference between Islam’s recognition of a sacredness in nature and modern science’s denial of it. The secular approach of modern science to nature has removed virtually all understanding of the sacred qualities behind it. Unlike modern scientists, the traditional scientists of old integrated theological ontology into their holistic approach to studying nature and thus regarded the study of such sacred qualities as the backbone of their work. Before this desacralization of nature, a “vision of God in nature” seemed the norm of viewing the world.³⁵ The grave ramifications of this change in approach are evident in the world today, and especially so in the environmental crisis.

Since the divorce of science and sacred tradition, the need to know God no longer served as the impetus behind scientific studies. Before this divorce, the philosophy of science was that of oneness (*tawhīd*).³⁶ The traditional sciences of all sacred traditions were unified on certain fundamental principles, and one such principle was the recognition of a hierarchy of reality.³⁷ All such levels of hierarchy alluded to the reality of God as the Real, as well as His supreme and ultimate oneness as the One (*al-Wāhīd*). In the separation of science and sacred tradition, there was a transformation of ideology from the assertion of oneness to the making of many (*takthīr*)—the very antithesis of *tawhīd*.³⁸ Everything that was seen for its reference to the supreme oneness of God became a separate entity and a “god” of its own. Rather than journeying towards the One God of mercy, justice and sustenance, these very features of God became individualized and regarded as entities of their own. No longer was there a single center, orientation, goal or purpose, nor was there recognition of just a single “god”; people worshipped whatever “gods” appealed to them.³⁹

Worry has also been expressed regarding the “neutrality” of science. Although modern science can be neutral in its study of facts, it nonetheless sets the

34 Oxford Dictionaries Online, “definition of science from Oxford Dictionaries Online,” http://oxforddictionaries.com/view/entry/m_en_us1287825#m_en_us12878 (accessed August 10, 2010).

35 F. Sherwood Taylor, *The Fourfold Vision: A Study of the Relations of Science and Religion* (London: Chapman & Hall Ltd., 1945), 91.

36 Dien, Mawil Izzi, ed. Richard C. Foltz, Frederick M. Denny and Azzizan Baharuddin, “Islam and the Environment: Theory and Practice,” in *Islam and Ecology: A Bestowed Trust* (Cambridge: Harvard Center For The Study Of World Religions, 2003), 107-108.

37 Seyyed Hossein Nasr, *The Need For a Sacred Science* (London: State University of New York Press, 1993), 97.

38 William C. Chittick, *Science of the Cosmos, Science of the Soul: The Pertinence of Islamic Cosmology in the Modern World* (Oxford: Oneworld Publications, 2007), 12 -16.

39 Ibid.

stage and plants the seeds for havoc when in the hands of the ignorant. The issue today is that most people lack sufficient knowledge of the underlying nature of existence to be able to integrate the facts of science into a proper view of reality.⁴⁰ Thus, through modern science, humans lavishly and greedily exploit the world's resources for materialistic purposes. Had there instead been an appropriate understanding of the underlying reality within nature, people could have better used science for purposes more harmonious with their environments and contributive to their relationship with God.

Moreover, it is not just modern science's narrow view of the material and physical world that Muslim philosophers have protested, but more so its dominant claim for recognition as the only acceptable science of nature.⁴¹ The enactment of such a bold statement has had radical and grave results. It has reduced other sciences, primarily those dealing with the studies of metaphysics and the sacred, to a seemingly inadequate view of the world and something along the lines of superstition—or at least in the eyes of the public and scientific world at large.⁴² In effect, there has been a loss of sacred symbolism linked to natural phenomena. This worries Islamic scholars because they recognize that without symbolic intelligibility science itself becomes vain and harmful.⁴³ The current environmental crisis bears enough evidence to justify such concern. Muslim philosophers such as Seyyed Hossein Nasr and Titus Burckhardt have expressed great unease with the movement from the traditional sciences to modern science alone. Through this move, modern science's vulgarized presentation of nature—as an entity void of any symbolic or spiritual meaning—has become the axiom through which the public and scientific communities at large see nature.

Through the secularization of nature, symbols within it became mere facts and were thus divorced from other orders of reality. The cosmos remained interestingly mysterious, but was regarded spiritually meaningless. A traditional science such as alchemy was “reduced to a chemistry in which the substances had lost all their sacramental character.”⁴⁴ Hence, traditional science's study of relatively high orders of reality was exchanged for the mere study of the manipulation of matter in its own plane.⁴⁵ In other words, science regressed into a strictly empirical and moral-free study of only the superficial aspects of the physical. Thus, the symbolism used by Native-Americans in their understanding of their natural environment, the symbolism used by Babylonians in their studies of the cosmos, the symbolism used by alchemists in their experiments of alchemical substance, were all substituted for a shallow perception that now helps fuel the superficial materialist mentality prevalent in the world today. The natural environment lost

40 Frithjof Schuon, *Light on the Ancient Worlds*, trans. Lord Northbourne (London: Perennial Books, 1965), 38.

41 *Man and Nature*, 21-31.

42 *Ibid.*, 23.

43 *Light on the Ancient Worlds*, trans. Lord Northbourne, 105.

44 *Man and Nature*, 21.

45 Titus Burckhardt, “Cosmology and Modern Science,” *Tomorrow* (Summer 1964): 186.

its symbolic significance in the eyes of the prevailing majority in science; it became simply regarded as physical property available for exploitation and consumption.

Even though modern science has the ability to provide certain kinds of information, it denies itself the interpretation of that information on any level other than that of the physical.⁴⁶ This strictly logical positivist approach may not have been an issue had there not been obstacles placed against the interpretations of others. In consequence to such obstacles, the world is provided with superficial facts regarding the many uses of the environment, but not the symbolic significances of such facts. Such symbolism had multiple interpretations from varied perspectives, but are now all forgone. Humanity therefore loses a great esoteric cosmological understanding in substitute for a virtually never-ending attempt to satiate worldly desires. The practical significance of this is that a tree today can be used for the production of paper, pancake syrup, and other consumer goods, but it is generally no longer a studied entity of harmonious purity—let alone an instrument of enlightenment and transcendence.

Despite Islamic philosophy's criticisms of modern science, Muslim governments of the East have openly welcomed it into their countries with great expectations. Given certain factors within this reception, regardless of such high expectations, these countries can ultimately only achieve bittersweet—and mostly bitter—results. This is so because Eastern governments have accepted modern science with a mentality dangerously shaped by neocolonialism.⁴⁷ More specifically, due to the technological advancements of the West, all that is produced from the East is considered—by both those in East and West—as inferior to anything Western. It is evident in the Western developer's approach to third-world countries. Traditional or practical knowledge is substituted for technological knowledge that is considered far superior, albeit results that say differently.⁴⁸ Thus, Western products, such as modern science, are welcomed to the East without question, replacing whatever was there previously.

The issue is not only in the loss of traditional knowledge, but also the latent negative impact of such an implementation. Since the science itself is implemented without question, its potential negative impact also goes unquestioned. Thus, the East suffers from the negative aspects of modern science without having taken the opportunity to learn from the mistakes of the West and hence having acted accordingly. This is all evident in the environmental problems of Muslim countries today. From the air pollution in Cairo to the infrastructural over-development of Dubai to the deforestation of many areas in Indonesia, the Muslim world today seems far from reflecting the harmonious and peaceful spirit of Islam that can be found in traditional Islamic gardens and architecture. In fact, the Muslim world's current approach to the environment seems far from Islamic.

In summary, modern science's empirical approach is compatible with aspects of the Islamic approach to knowledge, since the study of the physical world

⁴⁶ Lord Northbourne, "Pictures of the Universe," *Tomorrow* (Autumn 1964): 275.

⁴⁷ Mohammed Shihabuddin Nadvi, *Qur'an, Science and the Muslims*, trans. Khalid Irfan and Sayeedur Rahman Nadvi (Bangalore: Furqania Academy Trust, 2001), 112-113.

⁴⁸ James C. Scott, *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed* (New York: Yale University Press, 1999), 304-306.

alone is a legitimate one. However, other orders of reality are not ignored within Islamic circles. While modern science views natural phenomena as facts alone, the traditional Islamic approach is to understand them as alluding to greater orders of reality, and ultimately to God. Per Islamic philosophy, every object and all phenomena, the extraordinary and the mundane, encompass metaphysical qualities and meanings, as well as sacred references. Hence, Islamic philosophers take issue with modern science's claim for recognition as the only science of nature, for there is immensely more to study than just the physical. This dominant claim by science has fueled today's environmental crisis by stripping away the spiritual aspect of nature. When stripped of the metaphysical, all that is left is the physical, and thus a tree is viewed as nothing more than a resource for physical use and study alone; that is the issue with the environmental crisis today.

A SOLUTION

The solution to the environmental crisis does not lie in the use of environmental engineering alone. Even if humanity successfully reduces its carbon footprint through various kinds of eco-friendly technology, such a crisis shall continue until the environment is given back its sacredness in the eyes of its abusers.⁴⁹ Such a feat is only possible through humanity's making of peace with its surroundings, inner being and most importantly God.

Of great importance to note regarding this "making of peace with God" is that He is the God of all sacred traditions, despite differences in understanding the nature of divinity. Both the environmental crisis and the spiritual crisis are issues that not only affect those of all sacred traditions, but that can also be resolved with help from any of these sacred traditions. Thus, establishment of the proper mindset and performance of the proper practice are key steps to take regardless of one's religious affiliation. Such mindset and practice can be catered and customized to the thought and observance of that specific religion, since the principles behind them are universal.

THE PROPER MINDSET

Regardless of the feats of modern science in "green" technologies and developments of sustainable methods of living, humanity shall continue to mistreat nature in one way or another until nature is properly seen for its sacred qualities. This step is integral for any lasting solution to the crisis. It, however, implies the need for other steps before it. Before individuals adopt a lastingly peaceful approach to nature as a sacred entity, they must first make their way to God.

In people's realization of holiness, they realize the presence of the Holy. Before one can attribute sacredness to creation, one must recognize that all sacredness stems from the Creator. With this realization, individuals may see that all holiness within nature is but a mere reflection of God the Holy. Thus, in order to make a proper and lasting peace with nature, one must first make peace with the Lord. By doing this, individuals make peace with their selves as servants of the Lord and with the rest of creation as servants of the Lord as well.

If the masses simply make peace with creation and not the Creator, they embark on what would inevitably be a short-lived journey. The very act of doing so is inherently oxymoronic. Through it, they would attribute sacred qualities to nature, but not recognize a source of such sacredness. Nonetheless, it has happened before and the journey was in fact short-lived. Had the Hippie movement of the 1960's based their revolt on something more substantial than a love for trees, their original purpose of rebelling against modern day greed might have lived for more than just a decade or so. What is needed is the rooting of one's self in devotion to the Creator and not to creation. The fault of the Hippie movement was that its enactors based it on "peace and love,"⁵⁰ but not God the Loving, Who may have directed them into taking peace and love far past the short-term alone. Thus, the Hippie movement proved nothing more than a phase. This is evident today; not just in the ridicule of hippies in popular culture, but more so in the continued destructive practices of the very corporate world that hippies protested against. Therefore, a making of peace with God the Sustainer is needed in order to achieve a sustaining peace with nature.

THE PROPER PRACTICE

Taking into consideration that the proper mindset needed in effectively solving the environmental crisis involves a turn to God, the religious establishments of today must be at the forefront of the solution. Followers of all sacred traditions must turn to their respective religions to answer the call to environmental stewardship. This call is a universal one and is embedded in the origins of all the sacred traditions of today. In doing so, people of faith can address the environmental crisis in manners catered by and customized towards their own respective religions. Doing so shall benefit not only the environmental cause, but the followers of the religion itself as well. Through this they would involve themselves in an important part of their faith that has probably been overlooked or underrated in the public sphere for far too long. This is especially so for the Abrahamic religions of today whose mention in the public sphere lacks any substantial connotation to the natural world or environmental stewardship, when in reality the essence of their respective tenets involves much of it.

In the Muslim world, diverse groups are coming out and taking initiative. Examples, ranging from grassroots groups to private entrepreneurs to Islamic schools, include the DC Green Muslims of Washington, DC, the Islamic Foundation for Ecology and Environmental Sciences of the UK, the Wisdom in Nature group also of the UK, the Naqa'a Environmental Enterprise group of Saudi Arabia, the Ilmu Giri Pesantren Islamic environmental boarding school of Indonesia, and more.

An example of a collective Muslim response to the environmental issues of today is the Muslim Seven Year Action Plan on Climate Change; it is endorsed by Muslim leaders, scholars and civil society members from around the world, including prominent religious figures such as the Grand Mufti of Egypt and the Mufti of

50 Timothy Miller, *The Hippies and American Values* (Knoxville: The University of Tennessee Press, 1991), 104-106.

Palestine.⁵¹ The plan encompasses a number of goals intended to ameliorate Muslims' impact on the environment, including the development of a "green" Hajj, in which the annual pilgrimage would be made an eco-friendly one. Moreover, different Islamic projects around the world are adding environmental features to their agendas. The planned "Park51" Islamic community center in downtown Manhattan, New York, for example, is slated to meet LEED green building standards.⁵²

Also fundamental to an effective solution are responses from writers in both academia and the general public. Religious thinkers can help provide the impetus behind hands-on environmental stewardship by informing and educating people on the environmental aspects of their respective religions. In the Muslim world, writers such as Seyyed Hossein Nasr, writing since the 1960's, have set foundations for others to explore and continuously develop a proper Muslim response to the environmental crisis. Writers of the past decade such as Mawil Izzi Dien and Ibrahim Abdul-Matin, author of *Green Deen: What Islam Teaches About Protecting the Planet*,⁵³ have come to the fore to shed further light on the Islamic outlook and approach to nature.

Moreover, activists within the Muslim response to the environmental crisis are voicing themselves in new and more accessible ways. Their message is atavistic in meaning, yet innovative in delivery. The Internet has served as a platform in which Muslims from around the world have come to voice their opinions, especially within the blogosphere. A prime example of this is "A World of Green Muslims," a blog that posts "Green Messages from across the Muslim blogosphere."⁵⁴ There are also blog-like news outlets such as the "Green Prophet," which, though focused on Middle-Eastern environmental issues and not on the subject of Islam and the environment, reports on Muslim environmental activities.⁵⁵ The wave of online Muslim responses to the environmental crisis is increasing, as apparent with the emergence of new hands-on groups and online entities such as the "Minnesota Ecological and Environmental Muslims (MEEM)" of Minneapolis, Minnesota.⁵⁶

Muslims are responding to the environmental crisis, but much more has to be done, especially in addressing the paradoxes within this aspect of the Muslim world. Muslim countries like Iran have great reverence for Islamic gardens, but simultaneously exude critically high levels of air pollution in their capital cities. This paradoxical sight represents much of the Muslim world, and the only way to truly

51 Alliance of Religions and Conservation, "ARC - News and Features - Historic Istanbul Declaration of the Muslim 7 Year Action Plan on Climate Change," <http://www.arcworld.org/news.asp?pageID=334> (accessed August 27, 2010).

52 The Daily Beast, "Exclusive: Ground Zero Mosque Goes Green - The Daily Beast," <http://www.thedailybeast.com/blogs-and-stories/2010-08-12/exclusive-ground-zero-mosque-goes-green/full/> (accessed August 22, 2010).

53 GreenDeenBook.com, "GreenDeenBook.com," <http://www.greendeenbook.com> (accessed August 23, 2010)

54 arwafreelance, "A World of Green Muslims," <http://aworldofgreenmuslims.wordpress.com/> (accessed August 23, 2010)

55 Green Prophet, "Green Prophet | Cleantech & Environment News from the Middle East," <http://www.greenprophet.com/> (accessed August 23, 2010)

56 MEEM, "About « MEEM," <http://greenmeem.wordpress.com/about/> (accessed August 23, 2010)

solve it is in a return to the essence of Islam. The Muslim world must revise its values—including its environmental values—and the consequences of its actions in the light of Qur'anic and prophetic teachings. From such sources, Muslims can derive that they must walk on the earth with gentleness and compassion, avoid abundance and waste in resources, affirm sacredness to nature, and work with people of all backgrounds in addressing the environmental issues of today.

Past the work of hands-on groups and academic writers, there is the need for a sacred science. The loss of the metaphysical sciences, and hence the studies of higher meanings of natural phenomena as well, has contributed greatly to the vulgarized view of nature today, which in turn has contributed to its ill treatment. Since modern science sees nothing more than the physical in nature, it cannot but treat it as a physical resource alone. Thus, an affirmation of the sacredness in nature from the scientific community is needed. Given the current state of modern science, this goal might seem overly ambitious; however, it remains the reality of the situation.

If modern science is unyielding in its determination to study and collect information on only the physical, then it must at least let go of its claim as the only science and allow others to interpret such studies and information on a higher level. A revitalization of traditional and sacred sciences such as metaphysical cosmology and alchemy can help to give back nature its sacredness in the eyes of humanity. It is up to those with an understanding of natural theology or the sacred sciences to revitalize their fields in the public sphere. This can help break the cycle of modern humanity's continuous mistreatment of the environment.

Even though modern science has inflicted much harm on nature, it has recently developed ways of amelioration. This is especially found in today's conservational efforts and environmental engineering initiatives. These efforts should not be ignored, but rather supported. They represent means to a potential peace and their development must be encouraged and promoted. It is an integral part to reducing the human negative impact on the environment.

With an understanding of the religious, activist, academic and scientific approaches to the environmental crisis, it is important that the methodologies associated with them are not undertaken in an individualistic manner. Instead, they must be addressed holistically. The only methodology sustainable for both short and long-term results in addressing the environmental crisis is a holistic and interdisciplinary one that integrates each of these approaches and whatever else that may contribute.

In brief, in order to better understand the natural environment and know it for more than just its physical properties, modern humanity must turn to nature's sacred qualities. However, before the environmental crisis around us can be solved, we must solve the spiritual crisis inside ourselves, and in order to do so we must search both outwardly and inwardly for the Signs of God. In seeing the presence of God all around us, we recognize the sacredness of our surroundings. Thus, for

ultimate peace, we must reconcile with nature, our selves, all forms of phenomena and most importantly God.

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