Water Policy 14 (2012) 9-20

Religious approaches to water management and environmental conservation

Emilio Chuvieco

Department of Geography, University of Alcalá, Colegios 2, 28801 Alcalá de Henares, Spain. Email: emilio.chuvieco@uah.es

Abstract

The goal of this paper is to identify points of convergence between the great religious traditions in addressing human-nature relations, as well as presenting a critical evaluation of whether these approaches have in fact affected environmental conservation in representative countries. Christianity, Islam, Judaism, Buddhism and Hinduism have been considered. The main traditions considered are: (1) dominion: humans at the top of Creation and using natural resources as needed; (2) stewardship: humans having a delegate dominion over Creation and being responsible and accountable for their use of natural resources; (3) empathy: nature is affected by human misbehaviour; (4) analogy: nature is an image of God; (5) God worshipper: nature gives glory to God; (6) cosmic humility: nature is beyond human comprehension; (7) natural mysticism: union with God is accomplished through contemplation of the created world; (8) worship: nature is sacred. These approaches are not necessarily conflicting but rather they can be considered in some cases as being complementary. Their actual impact on water and environmental conservation should be further researched.

Keywords: Environmental conservation; Ethics; Moral; Religion; Water management

The role of religion in environmental conservation

As part of the growing trend towards secularism, a significant proportion of Western scholars tend to consider religious traditions and practices as being constrained to the sphere of personal values, with minor social implications. Even if this statement were true for the Western world, which in my opinion is debatable, it certainly does not hold for many other societies which still regard religion as a very important component of their everyday lives.

Most people will probably agree that none of the world's larger religions can properly be considered as an environmental ideology. In other words, none of them are really 'ecocentric' in the way that some recent philosophical movements claim to be (such as Deep Ecology: www.deepecology.org/movement. htm, accessed 25 January 2012). Religions should rather be considered 'theocentric', since they intend to provide a framework for guiding the relations between human beings and God, and subsequently,

doi: 10.2166/wp.2012.000

© IWA Publishing & the Botín Foundation 2012

among humans as well. Environmental consequences of the way we conceive the role of nature in God's Creation or in serving human needs have a second-order importance in most religions. How we communicate with God (prayer, worshipping), how we know the will of God for us (revelation), how we access life after death (eschatology), or how we should deal with others (morality), are surely more important questions for the great religions than are environmental concerns. Having said this, we can still point out two clear connections between religions and nature conservation, one at a theoretical and the other at an ethical level.

All religions include a particular Cosmology that tries to explain the beginning and development of the universe, and the role of human beings in the natural world. Whether humans have a leading role in God's design for Creation, or are just equals among other animals, has profound implications for the environmental equilibrium of our planet. It affects our sense of who we are in the universe, how we should relate with other species, and how we should use natural resources to make our life more equilibrated and sustainable.

The connection between religion and environment is also related to the sphere of personal behaviour. Few experts doubt that solving the current ecological problems is not only a matter of technology but also implies deep changes in our way of living, which is in turn affected by our ethical or moral values. Since religions provide sound principles for attaining a certain ethical/moral behaviour, it is clear that recourse to religious principles could be very important in supporting new attitudes towards the environment. For instance, the reduction of water use and the human ecological footprint are affected by consumer habits, which are very much related to how individuals regard material versus spiritual values. Obviously, this does not imply that religious reasons alone will change people's minds in terms of environmental sustainability, but they will obviously help with the bounding force of religious moral principles. Consequently, many authors have recognized the importance of ethical/moral values in environmental conservation and the potential of world religions to shape them (Schumacher, 1973; McDonagh, 1986; Tucker & Grim, 2003).

At a first glance, religious traditions are very diverse and lead to very different conclusions, both from theoretical (worldview conceptions) and practical (ethical consequences) points of view. However, when they are analysed in more detail, many common concepts and values can be identified between the great religious traditions. Most human beings share central ideas on who we are, from where we come and where we aim to be after life on earth. In the field of environmental concerns, identifying these commonalities may be very helpful in fostering cooperation between religions in providing sound answers to the current ecological crisis.

In searching for the common religious principles related to environmental conservation, I have reviewed the basic beliefs of Christianity, Judaism, Islam, Hinduism and Buddhism. After presenting this revision, I will briefly reflect on whether these principles are in fact put into practice, by commenting on the environmental problems of representative countries of those religious. This paper should be considered as a first approach to a vast topic, rather than as a comprehensive evaluation.

Human-nature relations in the main religious traditions

Religious traditions are very rich and have a long history, with a wide range of variations even within their mainstream. Religions' worldviews tend to be summarized by assigning them a general adjective: Muslim, Christian, Buddhist, etc., but in fact there are many different worldviews within Islam,

Christianity or Buddhism. Within Christianity alone, and according to the Oxford Dictionary of the Christian Church, there have been more than 28,000 distinct denominations at one time or another since the Reformation, even though the few best-known churches (Catholic, Orthodox, Lutheran, Anglican...) comprise the vast majority of Christians. Taking into account the internal diversity within each great religious tradition would obviously make my attempt to summarize common religious concepts related to environmental conservation much more complicated. For this reason, I will focus on what have been proposed as the basic concepts within each religion, mostly derived from their sacred books and the main traditions: the Bible¹ (Judaism and Christianity), the Koran² (Islam), the Vedas and the Bhagavad Gita (Hinduism), with other references to complement them.

I have tried to classify the religious conceptions of human-nature relations in a few categories, to summarize the great diversity of approaches. These approaches are not necessarily conflicting but, rather, can be complementary and are not exclusive of a particular religion but may be shared by different faiths. Additionally, the same religion shares different categories, depending on how the sacred texts have been interpreted thorough history or on the existence of different internal factions within each religion. The identified religious attitudes to environment are: dominion, stewardship, empathy, analogy, God worshipper, cosmic humility, natural mysticism and worship. More detailed explanations follow in the next sections.

Dominion

According to this attitude, humans are the centre of Creation, the only ones who are created in the image of God, and the only ones to have a direct connection with Him. The main purpose of the other creatures is to serve human needs, and therefore resources may be exploited only for the benefit of humans. The only limitations are the respect of other humans needs, both present and future.

Some authors have accused the Judaeo–Christian tradition of being behind the current ecological crisis, since this dominion tradition has grounded the massive exploitation of natural resources (White, 1967). This thesis has been the subject of intense controversy in the last decades (Berry, 2006). The most controversial aspect is what should be the correct interpretation of the first chapter of Genesis: 'God blessed them (humans), saying to them, "Be fruitful, multiply, fill the earth and subdue it. Be masters of the fish of the sea, the birds of heaven and all the living creatures that move on earth". God also said, "Look, to you I give all the seed-bearing plants everywhere on the surface of the earth, and all the trees with seed-bearing fruit; this will be your food. And to all the wild animals, all the birds of heaven and all the living creatures that creep along the ground, I give all the foliage of the plants as their food". And so it was' (Genesis 1: 28–30). Obviously, a literal interpretation would justify the exploitation of resources for the benefit only of humans, but several Christian exegetes have supported a different interpretation, since the dominion concept is not absolute in the Jewish tradition, but rather a delegate mandate (similar to the Israel Kings' mission to govern His people).

In spite of this milder interpretation, it is fair to recognize that the Judaeo–Christian tradition includes many other references to this clear pre-eminence of human beings over the rest of the Creation. For instance: 'What are human beings that you spare a thought for them, or the child of Adam that you

¹ I have used the Jerusalem Bible for quotations of Christian–Jewish Sacred Scriptures.

² For the Koran, I have used Malik (2007)'s English version.

care for him? Yet you have made him little less than a god, you have crowned him with glory and beauty, made him lord of the works of your hands, put all things under his feet' (Psalm 8: 4–8). Only humans are the image of God, only humans are free and only humans can actually turn against God (commit sins); only humans, too, deserved the incarnation of God (Jesus Christ) to save us from the original fall. The consequences of this idea may be diverse, but it implies a pre-eminence of human needs over other species. The practical consequences of this approach imply that potential ecological problems are of second-order importance when conflicting with human development (i.e. solving poverty), or even limiting population growth, particularly when demographic policies compel mandatory practices on people's family values. This idea has been very controversial at some recent UN-sponsored population conferences.

Other religious traditions follow similar considerations on the pre-eminence of humans over other creatures. This is the case of Islam, which follows the Judaeo–Christian tradition in considering the link between God and humans as the core of the religious message. Nature was created in this conception to mostly fill human needs, as several paragraphs of the Koran state: 'O men, adore your Lord who has created you and those who were before you, and fear God, who has made the earth a carpet for you and of the sky a castle, and has made water come down from the sky with which to extract from the earth those fruits that are your daily food' (Surah 2: 21–22). 'It is He Who has made the earth subservient to you, to walk through its tracts and eat of His provided sustenance' (Surah 67: 14).

Stewardship

Following the controversy over the ecological attitudes of Christianity caused by White's paper, several Christian scholars have pointed out that the proper interpretation of the Bible requires the comparing of any one particular text with others, since there is consistency within the whole scripture. In such a case, the interpretation of the first chapter of Genesis should be complemented by the second one, which includes a different account of Creation: 'Yahweh God shaped man from the soil of the ground and blew the breath of life into his nostrils, and man became a living being (...) Yahweh God took the man and settled him in the garden of Eden to cultivate and take care of it' (Genesis 2: 7–15). In this version, humans are clearly portrayed as part of the natural world. Adam comes from the Hebrew word *Adamah*, meaning soil. We humans are part of the soil and will go back to it ('as you were taken from it. For dust you are and to dust you shall return', Genesis 3: 19). The second interesting aspect of this chapter is that God assigns humans to cultivate and take care of the land. Therefore, the dominion of humans on the land is limited in two respects: we are part of the land, and we are assigned by God to care for the land. Our dominion over the rest of Creation is not absolute but delegated, and therefore we cannot use it arbitrarily but rather with proper responsibility.

These ideas have crystallized into the concept of *environmental stewardship*, which is now the most standard approach amongst those Christians concerned with the environment, although it was first used by Sir Matthew Hale in the 17th century (Attfield, 2006). Following this tradition, we should act as the steward acts in the Gospel, when they are asked by the lord of the house to provide proper account of their administration (Luke 12: 42–46; Matthew 24: 45–51). We do not have natural resources at our own disposal or much less our pleasure, but rather we received them as gifts from God and therefore we are accountable before God for our actions on the Earth. 'Man often seems to see no other meaning in his natural environment than what serves for immediate use and consumption. Yet it was the Creator's will

that man should communicate with nature as an intelligent and noble 'master' and 'guardian', and not as a heedless 'exploiter' and 'destroyer' (John Paul II, 1994).

The concept of environmental stewardship is also connected to Judaism, and we find references both in the Torah and in comments on the sacred Scriptures by significant rabbis. God's command to humans to care for creation is illustrated in the norms referring to the sabbatical year, which are included in Leviticus (25, 23): 'Land will not be sold absolutely, for the land belongs to me, and you are only strangers and guests of mine'. Psalms also include various references to the providential care of God to Creation. In the framework of other Jewish tradition, we can also find testimonies of this concept of environmental awareness. For instance, in the *Ecclesiastes Rabbah*, we can read: 'When God created the first human beings, God gave them the Eden garden and said: 'look to my Works! See how beautiful they are. I have created them for your own good. Do not destroy my World, because if you do so, there will be nobody to repair it' (quoted by Schwartz, 2002).

Islam also includes different texts that support the environmental responsibility of human beings. Some Muslim scholars use the term caliph Allah (vice-chancellors) to refer to the role of humans in taking care of the land (Ozdemir, 2003). Humans will be judged by God on their relationship with the land, in a similar way as they are with respect to their families, which have also been entrusted to them by God. Some hadiths include sayings of Mohamed prohibiting the wasteful use of resources, most importantly of water, which is a very valuable resource in Arab lands. A significant hadith in this regard includes an admonition by a God Messenger to a devout Muslim who is wasting water in holy ablutions (Ozdemir, 2003). This implies a clear condemnation of sumptuous attitudes with regard to natural resources, since the carelessness deserves a reproach even when the water is wasted during worship. Some Muslim scholars reject the concept of environmental stewardship because they consider it too anthropocentric to guide human–nature relations (Afrasiabi, 2003), and a similar criticism has also been made by some Christian thinkers (Palmer, 2006).

The environmental responsibility of humans is very relevant to Hindu traditions, especially in rural communities, which have a strong conviction about caring for the land. Humans should avoid any form of pollution and alteration of the natural balance. For instance, when somebody needs to dig the ground, they should fill the hole afterwards to repair the land and keep the original equilibrium. Human care is especially critical with trees, which are the main reservoirs of life (Deva Diwivedi, 2003). Forests are considered sources of life and protectors of the land against soil degradation. This caring for trees has recently been manifested in two environmental movements, very active in India in the last decades: Chipko and Appiko. Both try to protect the forests from industrial exploitation and are a clear manifestation of this close relation with the land (Gosling, 2001).

In the Buddhist tradition, environmental responsibility is a consequence of the natural interaction between humans and nature. One of the delusions that preclude humans for reaching happiness is the false consideration of their own importance. As a consequence, humans lose their links with nature, destroying valuable resources as a result of their greed. Overcoming greed will provide a better internal equilibrium, as well as a better preservation of natural resources. Humans should be like bees that take the nectar of flowers without destroying them (Thakur, 2003).

Empathy

This tradition considers that humans and nature share a similar dependence on God, and are dependent on each other. However, only humans have free will and therefore are the only ones able to challenge God's designs. When humans do so, nature is also affected by human weakness and, consequently, the ideal equilibrium between human and nature vanishes. Following this tradition, humans are somehow the 'principals' of Creation, and our decisions affect the moral well-being of the whole environment.

This religious tradition is clear in several passages of the Bible, where nature joins human destiny. For instance, the original sin of Adam and Eve implies a cursing of the land: 'To the man he said, "Because you listened to the voice of your wife and ate from the tree of which I had forbidden you to eat, accursed be the soil because of you! Painfully will you get your food from it as long as you live. It will yield you brambles and thistles, as you eat the produce of the land. By the sweat of your face will you earn your food, until you return to the ground, as you were taken from it'' (Genesis 3: 17–19). The same idea appears in others passages of the Old Testament: 'I shall make such a desolation of the country that your enemies who come to live there will be appalled by it' (Leviticus 26: 32). Human-caused disorder impacts all creation, since when man is not at peace with God, he is not at peace with the Creation either: 'Yahweh indicts the citizens of the country: there is no loyalty, no faithful love, no knowledge of God in the country, only perjury and lying, murder, theft, adultery and violence, bloodshed after bloodshed. This is why the country is in mourning and all its citizens pining away, the wild animals also and birds of the sky, even the fish in the sea will disappear' (Hosea 4: 1–3).

If nature is affected by human sin, recovery of the original balance requires a moral conversion too. This conversion will be fulfilled at the end of time, when the Messiah will come to judge all things and restore their original harmony. A significant passage of Isaiah relates the messianic times with the ideal equilibrium between humans and nature and within nature itself: 'The wolf will live with the lamb, the panther lie down with the kid, calf, lion and fat-stock beast together, with a little boy to lead them (...) No hurt, no harm will be done on all my holy mountain, for the country will be full of knowledge of Yahweh as the waters cover the sea' (Isaiah, 11: 6–10). This text implies that the new heaven and earth will resemble the original equilibrium, not only between God and humans, but also between humans and other creatures. A similar idea is included in this controversial passage of Saint Paul's letter to the Romans: 'for the whole creation is waiting with eagerness for the children of God to be revealed. It was not for its own purposes that creation had frustration imposed on it, but for the purposes of him who imposed it with the intention that the whole creation itself might be freed from its slavery to corruption and brought into the same glorious freedom as the children of God' (Romans, 8: 19–21).

In Hindu culture, the moral relations between humans and nature can be found in some sacred texts. The earth answers as a living organism to the humans' ways of using its resources, being gentle and fertile when they take proper care of her, and violent and cruel otherwise. Therefore, humans have a moral responsibility not to harm the earth in any way, avoiding pollution and using natural resources properly (Narayan, 2003). When humans abuse their privileged position, the earth produces all sort of natural disasters (droughts, earthquakes, floods and epidemics). Since the earth is also a creature of God, it rejoices when humans are faithful to God, offering Him proper sacrifices and worship.

Buddhist culture also acknowledges a moral fellowship between humans and nature. The land will yield proper fruits when humans deal properly with her. Human greed causes division and ownership conflicts, which implies violence and destruction (Prasad, 2003). The moral behaviour of humans affects the biological and physical equilibrium: when moral standards decline, hunger, epidemics and violence increase, while increasing moral values carry along abundance and prosperity. One of the most ancient Buddhist texts, *Digha Nikaya*, illustrates this idea: 'Self-growing rice appeared on earth and, out of laziness, people began to hoard food rather than collect each meal. As a result, the growth rate of food could

not keep pace with demand. Therefore land had to be divided among families. After private ownership of land became the order of the day, the more greedy people started robbing from others' lands. When they were detected, they denied that they had stolen ... The richness of the earth diminished and self-growing rice disappeared. People had to till the land and cultivate rice. This rice grain was coated in chaff; it needed cleaning before it could be eaten' (quoted by Thakur, 2003: 59).

Analogy

Most religions recognize in one way or the other that the natural world's wonders are a manifestation of God's power and bounty. God manifests himself through His word, but also through His works. Observation of nature has traditionally been considered as a natural way of approaching God, as recognition of the bounty and beauty of the created world inspires a similar recognition of the Creator. By contrast, within the framework of natural theology, a better understanding of how nature works has a religious purpose, since it also provides knowledge of God's characteristics.

The consideration of nature as an image of God is very clear in the Judaeo–Christian and Muslim traditions, and it is also accepted in polytheistic religions. For instance, the Bible includes many references to the role of nature as a revelation of God. The Book of Wisdom expresses it very precisely: 'From the greatness and beauty of created things comes a corresponding perception of their Creator' (Book of Wisdom, 13: 4–5). Saint Paul in his letter to the Romans echoes the same idea: 'Ever since the creation of the world, his invisible nature, namely, his eternal power and deity, has been clearly perceived in the things that have been made' (Romans, 1: 20). The Gospels are full of natural images, which Jesus used in his preaching: the beauty of 'the lilies of the field' is an image of God's providence to his creatures; doves represent simplicity, and snakes cunning. The Kingdom of God is like a mustard tree (it begins very small), or like a field containing both wheat and chaff (good and bad men live together). It is clear from these references that these images were used not only to facilitate the grasping of spiritual concepts from the ordinary experiences of his disciples, but also because nature itself reflects the virtues of the Creator.

Jewish tradition also explored natural theology as a way to approach God, although, as in the Christian tradition, it is regarded as subordinate to Sacred Scripture. Even though Jewish natural theology is much less developed than the Christian, there was a clear understanding that natural truth cannot contradict the revealed one, and that observation of the natural world could benefit the interpretation of scriptures. This is the position of Maimonides (1134–1204), philosopher and scientist from Cordoba, who tried to avoid a purely anthropocentric view of the natural World, separated from the Torah, as a fully independent way of achieving knowledge (Schwartz, 2002).

In Islam, the use of analogies to describe God properties through creatures is commonly used. In fact, different chapters of the Koran are named as animals (the cow, the ant, the spider), although the text always insists upon the importance of avoiding idolatry, which implies worship of a creature in place of God. The study of nature as a way to better understand God is also suggested as a way to confirm the revelation included in the Koran.

Hindu tradition is very rich in providing natural images of God. In fact, Gods can be revealed in animals or plants, in the form of different icons (avatars). One of the sacred texts of Hinduism portrays this very graphically: 'In the kingdom, the rivers are the veins of the Cosmic Person, and the trees the hairs of his body. The air is his breathing, the hills and mountains are his piled bones and the passing ages his movements' (quoted by Narayan, 2003: 33).

Nature as God worshipper

In recent decades, the controversy between religion and ecology has raised much discussion as to whether nature has an intrinsic value beyond serving human needs. As previously commented, critics of the Judaeo-Christian traditions claim that their anthropocentric approach has led to a very utilitarian view of nature, and has therefore justified its exploitation. However, the Bible includes many references that imply a consideration of the created world as an end in itself, most commonly by showing that the diversity and marvellous working of creatures manifest God's power and bounty. God saw that all he had created was good (Genesis 1:1, 1:12, 1:13, 1:18...), even before he had created humans, which seems to recognize that creatures also have a role to play in God's plans. They show His love and generosity, which pours out in multiple forms of life. Even though only humans have a spiritual-intelligent being, the rest of creatures also glorify God through their own existence. Psalm 148, well known to Christians after being used for centuries as part of the official daily prayer of the Church, includes a clear reference to this worshipping attitude of nature: 'Praise him, sun and moon, praise him, all shining stars, praise him, highest heavens, praise him, waters above the heavens (...) Praise Yahweh from the earth, sea-monsters and all the depths, fire and hail, snow and mist, storm-winds that obey his word, mountains and every hill, orchards and every cedar, wild animals and all cattle, reptiles and winged birds, kings of the earth and all nations, princes and all judges on earth, young men and girls, old people and children together' (Psalm 148: 3-13).

If all creatures give glory to God and they follow God's providence, a clear consequence is that we should avoid harming them, much less destroying them for spurious reasons, as we will thus be diminishing somehow the glorification of God that they will otherwise give. Even though this tradition is not very strong in the Western world, we can find examples of religious appreciation of nature in some texts of the early Christian writers, as well as in the first medieval monasteries, especially the Benedictine and Cistercian ones (see, for instance Sorrell, 1988).

For Islamic scholars, the Koran shows an appreciation of the role of each creature in God's plan and in giving him glory. Nothing created is a fruit of a random process, but has been wanted and has a particular purpose to achieve. Therefore, everything has a goal beyond serving human needs, and glorifies God in its own way: 'The seven heavens, the earth and all beings therein declare His glory. There is not a single thing but glorifies Him with His praise, but you do not understand their hymns of His glory' (Koran 17, 44).

Cosmic humility

Following Schwartz (2002), the Jewish tradition of the relationship between humans and nature includes an approach that he names 'radical admiration', meaning a deep sense of interior humility as a result of difficulty in understanding the created world. This tradition is clearly observed in the wisdom books of the Bible (Sirach, Job). For instance, after having lost his family and property and being tempted by despair, Job tries to make sense of his situation, and to answer his friends who challenge him. But Yahweh reproves this attitude, asking Job and his friends to recognize their ignorance and trust in the designs of God: 'Where were you when I laid the foundations of the earth? Who determined its measurements? On what were its bases sunk, or who laid its cornerstone, when the morning stars sang together? (...) Do you know when mountain goats give birth? Have you ever watched deer in labour? Have you ever counted the months that they carry their young?' (Job, 38–39).

Natural mysticism

A natural continuation of the sense of awe that comes from the contemplation of nature with a religious perspective is finding a mystical union with God through that contemplation. The best example of this attitude in the Christian tradition is Saint Francis of Assisi's *Canticle of the Sun*, which is also one of the most remarkable examples of medieval poetry (Saint Francis Assisi, 1225):

We praise You, Lord, for all Your creatures,

Especially for Brother Sun,

Who is the day through whom You give us light.

And he is beautiful and radiant with great splendour,

Of You Most High, he bears your likeness.

We praise You, Lord, for Sister Moon and the stars,

In the heavens you have made them bright, precious and fair

Several authors have argued over the proper meaning of 'for', which Saint Francis uses throughout the canticle when referring to the natural world. Some interpret it as referring to 'through', meaning that Saint Francis is asking that God be praised by the creatures. This concept would follow the 'Nature as worshipper' tradition previously noted. However, other authors interpret the 'for' as meaning 'because of', which would imply that Saint Francis is praising God for the gifts of creation. In other words, he is finding a motive for praise to God in the contemplation of creatures, a mystical union of God through rejoicing in His created works. This interpretation is more coherent with the thoughts of Francis, following the most reputed historians (Sorrell, 1988).

Judaism also includes a certain natural mysticism, mostly in the Hasidi tradition (Schwartz, 2002).

Worship

The final attitude towards nature is adoration, implying that God is assumed to be part of nature. This tradition is followed by those religions that accept pantheism or polytheism but is strongly opposed by the three monotheistic religions (Judaism, Christianity and Islam). In fact, idolatry (identifying any creature with God) is one of the gravest sins condemned in both the Bible and the Koran: 'You shall not have other gods before me' (Exodus, 20:2); 'O'Allah! You Alone we worship and You Alone we call on for help' (Koran, 1: 1–5).

The oriental traditions are closer to polytheism or pantheism, although not all accept worship of creatures. In Vedic literature, the sky is our father and the earth our mother, commonly personified in the goddess Bhumi or Prithvi. Sun gives fertility to the earth bringing energy and life. In the Atharvaveda, probably written in the 10th–12th centuries BC, we read: 'The earth, which possesses oceans, rivers and other sources of water, and which gives us land to produce food grains and on which human beings depend for their survival – may it grant us all our needs for eating and drinking: water, milk and fruit' (Gosling, 2001). The clearest manifestations of nature worship come from pagan religions, which were widespread in pre-Christian eras in Europe and America. For example, several authors have pointed out that Celtic and native American spiritualities include many references to sacred places that are worshipped, or have a special meaning for communities. Other authors consider that pagan religions are also in contact with the natural mysticism previously commented on (Berry, 1988).

Do religious traditions modify environmental attitudes?

We have shown that all great religions include a sound consideration of nature, which make it possible to guarantee a more harmonious relationship between human activities and nature preservation. However, in practical terms, the impact of religious values on environmental policies is still marginal. If Lynn White's criticism were true, only countries with more anthropocentric religions (such as Christianity and Islam) would have serious environmental problems, while those following oriental religious traditions should have created more eco-friendly societies. However, this is not evident at all. Does the United States (mostly a Christian country) have worse environmental policies than Saudi Arabia (a typical Muslim country), China (a predominant Buddhist country) or India (a stereotypical Hindu country)? Most probably not. In fact, the US is an important world polluter because of its large percapita ecological footprint, even though the country promotes strict environmental regulations in terms of air quality and water management - most of them strongly supported by Christian groups. The several ecological problems currently faced by India, Pakistan or Thailand, for instance, are not mainly caused by Christianity, since Christians are a very small minority there, and they have very little impact in forming national policies (although it is certainly true that the environment problems of these countries are influenced by the high consumption of natural resources from other rich – and mostly Christian - countries). In any case, the ecological problems are apparently independent of the very different religious backgrounds of those countries, and the solutions are apparently disconnected from them as well.

Why do different religious values not imply different internal environmental policies? Is it because those countries are in fact not as religious as we suppose, or rather because the environmental concerns are not a religious priority? In the case of Islam, some Muslim scholars have criticized the lack of concern on environmental issues by national policies and religious leaders, even in those countries that claim to follow Islamic (*sharia*) law (Afrasiabi, 2003; Nasr, 2003). In a similar way, even though the Buddhist tradition is recognized as being closest to environmental conservation, many experts point to China as the most polluted country on earth. Of course, China is not officially a Buddhist state but a large proportion of its population has Buddhist convictions and follows Buddhist practice, and many thousands of temples are found in China. What are the practical implications of this?

In contrast, mostly Christian countries (or at least traditionally Christian countries) are in the vanguard of environmental conservation, and their populations are becoming more aware on the need to change their lifestyle and reduce their ecological footprint (though certainly not yet in a very extended way). Is it a consequence of the new 'green' theology, or rather a consequence of having a higher standard of living, that makes it possible to achieve meta-material goals once basic needs are covered? A complementary example would be South Korea, which has almost doubled its forested area in the last decades. Is it related to its Buddhist tradition (in fact, widely mixed with Christianity), or it is rather related to its economic prosperity?

Conclusions

Even if religious traditions are not currently a leading force behind national environmental policies, it is clear that they have a large potential for shaping new attitudes to nature. This paper has tried to reflect on some of these attitudes, which are a basis for change. Part of the change should come from a greater religious involvement in environmental issues, and a growing appreciation of the rich religious traditions that relate humans and nature. Some of these have been identified here; still more could be considered.

Many religious leaders have already pointed out the connection between environmental sustainability and the need to change our way of living, which is closely linked with moral decisions. As the current Pope recently stated: 'It is becoming more and more evident that the issue of environmental degradation challenges us to examine our life-style and the prevailing models of consumption and production, which are often unsustainable from a social, environmental and even economic point of view' (Benedict XVI, 2010). At the end of the day, the change required in our current economic model would imply a resolute renunciation of many comforts we currently enjoy. Religious values are a solid ground on which to base those sacrifices – a recognition that spiritual joy and not material goods are the source of happiness.

Acknowledgements

I thank Claire Red and Colin Bell for their interesting suggestions on the manuscript, as well as the information provided by Prof. Young Woo Chun.

References

- Afrasiabi, K. L. (2003). Toward an Islamic ecotheology. In: *Islam and Ecology*. Folz, R., Denny, F. & Baharuddin, A. (eds). Harvard University Press, Cambridge, MA, pp. 281–296.
- Attfield, R. (2006). Environmental sensitivity and critiques of stewardship. In: *Environmental Stewardship*. Berry, R. J. (ed.). T&T Clark International, London, pp. 76–91.
- Benedict XVI. (2010). *Message for the Celebration of the World Day of Peace*. Available at: www.vatican.va/holy_father/bene-dict_xvi/messages/peace/documents/hf_ben-xvi_mes_20091208_xliii-world-day-peace_en.html (accessed 25 January 2012).
- Berry, R. J. (ed.) (2006). Environmental Stewardship. T&T Clark International, London.
- Berry, T. (1988). The Dream of the Earth. Sierra Club, San Francisco.
- Deva Diwivedi, K. (2003). Ecological thoughts in the Vedas. In: *Ecology and Religion*. Narayan, R. & Kumar, J. (eds). Deep & Deep Publications Ltd, New Delhi, p. 7.
- Gosling, D. L. (2001). Religion and Ecology in India and Southeast Asia. Routledge, London.
- John Paul II. (1994). *Redemptor Hominis*. Available at: www.vatican.va/edocs/ENG0218/_INDEX.HTM (accessed 25 January 2012).
- Malik, F. (2007). *English translation of the Qur'an*. MidEastWeb for coexistence. Available at: http://www.mideastweb.org/ quran.htm (accessed 5 December 2011).
- McDonagh, S. (1986). To Care for the Earth: A Call to a New Theology. Geoffrey Chapman, London.
- Narayan, R. (2003). Ecological crisis and Hindu religious thought. In: *Ecology and Religion*. Narayan, R. & Kumar, J. (eds). Deep & Deep Publications Ltd, New Delhi, pp. 25–37.
- Nasr, S. H. (2003). Islam, the contemporary Islamic world, and the environmental crisis. In: *Islam and Ecology*. Folz, R., Denny, F. & Baharuddin, A. (eds). Harvard University Press, Cambridge, MA, p. 87.
- Ozdemir, I. (2003). Towards an understanding of environmental ethics from a Qur'anic perspective. In: *Islam and Ecology*. Folz, R., Denny, F. & Baharuddin, A. (eds). Harvard University Press, Cambridge, MA, p. 4.

- Palmer, C. (2006). Stewardship: a case study in environmental ethics. In: *Environmental Stewardship*. Berry, R. J. (ed.). T&T Clark International, London, pp. 63–75.
- Prasad, R. K. (2003). Ecology and Buddishm. In: *Ecology and Religion*. Narayan, R. & Kumar, J. (eds). Deep & Deep Publications Ltd, New Delhi, pp. 41–54.
- Schumacher, E. F. (1973). Small is Beautiful. Economics as if People Mattered. Harper & Row, New York.
- Schwartz, E. (2002). Mastery and stewardship, wonder and connectedness: a typology of relations to nature in the Jewish text and tradition. In: *Judaism and Ecology*. Tirosh-Samuelson, H. (ed.). Harvard University Press, Cambridge, MA, pp. 93–106.
- Sorrell, R. D. (1988). St. Francis of Assisi and Nature: Tradition and Innovation in Western Christian Attitudes Toward the Environment. Oxford University Press, New York and Oxford.
- Thakur, V. K. (2003). Ecological perception of Buddhism in India. In: *Ecology and Religion*. Narayan, R. & Kumar, J. (eds). Deep & Deep Publications Ltd, New Delhi, pp. 58–59.
- Tucker, M. E. & Grim, J. (2003). Series foreword. In: *Islam and Ecology*. Folz, R., Denny, F. & Baharuddin, A. (eds). Harvard University Press, Cambridge, MA, p. xvi.
- White, L. (1967). The historical roots of our ecological crisis. Science 155(3767), 1207.