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Is Zoroastrianism an Ecological Religion?

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Abstract

In recent years a number of Zoroastrian scholars have sought to characterize Zoroastrianism as the 'world's first environmental religion', pointing to a number of rituals and injunctions aimed at safeguarding nature from activities seen as polluting. However, while the tradition does indeed enjoin Zoroastrians to respect and protect many aspects of nature, pollution is seen in ritual terms, not ecological ones. Moreover, in the dualistic Zoroastrian worldview, which posits an ongoing struggle between the forces of good and evil, many animal and plant species are seen as being on the side of evil and are thus to be destroyed whenever possible. This worldview can at times set Zoroastrianism in opposition to that of contemporary science that, generally speaking, does not distinguish between good and bad species, but sees all species as integral to the healthy functioning of ecosystems.

Following the performance of a Zoroastrian *gahanbar* ceremony[1] to which we were invited in Montréal, Canada in October 2005, one of the three celebrant priests of this ancient faith let fall a comment striking in its contemporary sensitivity: 'We are trying to restrict our use of sacrificial sandalwood [burnt as an offering during the ceremony] so as to be more environmentally conscious. After all it must be imported from India…'

1. Zoroastrians historically celebrated seven *gahanbar* festivals throughout the year, in honor of the Divine Heptad and the Seven Creations. See Boyce 1992: 104-107, 179-82.

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The theme of Zoroastrianism as nature-friendly is not new. As early as 1974 a well-known Parsee scholar from India, Homi B. Dhalla, advanced the claim that Zoroastrianism is 'the first environmentalist religion', emphasizing the positive views of nature found in the Avesta, Zoroastrianism's ancient revealed scripture (Dhalla 1991).[2] More recently, at a conference on Religion, Culture, and the Environment held in Tehran in 2001, the official government sponsors, Iran's Department of the Environment, made a point of inviting a member of the national council of Zoroastrian priests, Jehangir Oshidari, to present a paper on environmental values in Iran's original pre-Islamic national religion. In keeping with the overall aims of the conference, Oshidari's paper attempted to highlight those aspects of Zoroastrianism—whose rituals include many devoted to nature deities and whose laws require reverence for and protection of water, fire, soil, and air—which could be used to derive a religiously inspired environmental ethic (Oshidari 2001).

An Iranian Zoroastrian scholar living in the United States, Farhang Mehr, takes up the theme of ecology in his 2003 book *The Zoroastrian Tradition*:

> It is not surprising that Mazdaism (another term for Zoroastrianism) is called the first ecological religion. The reverence for *Yazata*s (divine spirits) emphasizes the preservation of nature (Avesta: Yasnas 1.19, 3.4, 16.9; Yashts 6.3-4, 10.13). In that respect, the introduction of *Yazata*s into the Younger Avesta (presumably a later addition to the original Avestan text) has served the purpose of bringing the importance of the protection of nature to the attention of all, particularly the populace, for whom religious commandments are more meaningful than scientific and governmental recommendations (Mehr 2003: 77).

One of the most ambitious recent attempts to recognize Mehr's observation about the importance of religion in teaching environmental values is the two-volume *Encyclopedia of Religion and Nature*, edited by Bron Taylor. The entry on Zoroastrianism was contributed by Jamsheed Choksy, a scholar of Parsee origin who lives and teaches in the United States. Choksy, who has written extensively on the issue of ritual purity and pollution in Zoroastrianism, echoes the observations of Dhalla, Oshidari, and Mehr by emphasizing the importance given in the tradition to 'safeguarding nature from the symbolical harm thought to be produced by demonic forces that supposedly cause death and decay' (Choksy 2005: 1814).

2. 'Parsee' is the term used in South Asia to refer to Zoroastrians, in reference to the community's Iranian ('Parsian') origins.

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Zoroastrianism in Pre-History and History

Much of what appears in Zoroastrianism to constitute nature-reverence (or even nature-worship) presumably dates from the common religious heritage of the pre-Avestan (and pre-Vedic) Indo-Iranian peoples (ca. 2000 BCE), and some of it perhaps even earlier to proto-Indo-European times (ca. 5000 BCE). The Indo-Iranian notion of mainyus (Sanskrit *manyu*) as supernatural forces animating not only all observable natural phenomena but also abstract qualities such as bravery, truthfulness, and so on, bears a strong resemblance to the notion of kami in traditional Japanese culture, suggesting that the common inheritance may even extend beyond the Indo-Europeans.

While Zoroastrianism does not figure among the world's major religions today, counting no more than a few hundred thousand followers worldwide,[3] in its heyday centuries ago it apparently exerted a major influence on other religions, especially Judaism, Christianity, and Islam—the three so-called 'Abrahamic' faiths. Such basic concepts as linear history culminating in a cataclysmic restorative event, the world as a battleground between the forces of good and evil, the resurrection of the body after death and a final judgment determining whether individuals will spend eternity in a paradise of reward or a hell of punishment, the existence of angels and demons, and the attribution of evil to the workings of an evil deity, all appear in old Iranian religion earlier than in the Abrahamic traditions, and in many cases the vectors of transmission are clear. (For example, the word 'paradise' is derived from the ancient Iranian term *paira daeza*.)[4] Insofar as Zoroastrianism preserved and in some cases passed on even earlier Indo-European attitudes about reverence for nature, generally speaking it may be said to have retained a sense of nature's sacredness to a greater extent than have the Abrahamic religions.

3. The Zoroastrian population of Iran, the religion's original homeland, currently stands at between 30,000 and 50,000. Perhaps 100,000 Zoroastrians live in India, especially Mumbai (Bombay), and diaspora communities ranging from the hundreds to several thousand now exist in North America, Western Europe, Australia, and elsewhere. The Indian Zoroastrian community—the world's largest—is descended largely from tenth-century immigrants fleeing Muslim persecution in Iran. Famous contemporary Zoroastrians include music conductor Zubin Mehta, cultural studies theorist Homi K. Bhabha, and the late rock singer Freddie Mercury.

4. For an elaboration of how Iranian ideas were likely transmitted into Judaism (and thence into Christianity and Islam) following the conquest of Babylonia by Cyrus the Great in the sixth century BCE, see Foltz 2004, especially Chapter 3.

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The shared Indo-Iranian cultural inheritance also provides many parallels between Zoroastrianism and Hinduism—and, by extension, Buddhism as well—although the two represent to a large degree divergent interpretations of the same original worldview. The common Aryan ancestors of the Indo-Iranians were pastoral nomads who most likely occupied the steppes of Central Asia, roughly the area north of the Caspian Sea, in what is now eastern Ukraine and western Kazakhstan (Mallory 1989). As such, their worldview and attitudes toward nature mirror those generally found among 'indigenous peoples' both past and present, especially pastoral nomads such as the ancient Israelites, the pre-Islamic Arabs, and others. Specifically, they saw the natural world as divided between Earth and Sky. These were conceptualized in terms of female and male divine principles, with the latter—personified as Dyaus/Deus/Ju(-piter)/Tiw—eventually emerging as supreme, reflecting the Aryan society's patriarchal values.

The prehistoric Central Asian Aryans,[5] sharing their steppe environment with several species of large grazing mammals, were the first humans to domesticate the horse and thereby became highly mobile (Anthony and Brown 1991). (The horse also figures prominently in proto-Indo-European religion, as evidenced in manifestations ranging from Apollo's winged steed to Scythian gold figurines and the Vedic horse sacrifice.) Environmental pressures such as seasonal temperature extremes and drought were probably a major factor motivating the Aryans to take advantage of their unique mobility and migrate out of Central Asia in successive waves, establishing themselves as far afield as Ireland to the west and the marshes of China to the east.[6] As eventual contacts between the nomadic Aryans and settled peoples led to trade, regional disparities in the availability of natural resources provided an additional incentive for the movement of peoples; iron and jade, for example, prized by the Mesopotamians and the Chinese, occurred in areas that privileged traders of Central Asian origin. The transmission of metallurgy and transportation technology from the Caucasus to China

5. The reconstructed self-designation **aryo* appears to have meant something like 'the noble ones'.

6. Mummies recently discovered in the Tarim basin region of China, some of which are as much as four thousand years old, are of the Caucasian physical type; their woolen clothing shares the Tartan weaving patterns of the Celts thousands of miles to the west (see Barber 1999). The environmental context affecting the development of Central Asian cultures is acknowledged and discussed in Christian 1998. The continuity of environmental influences on culture in this region is evident in the discussion of Fletcher 1986.

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by Aryan-speaking Central Asians in ancient times is also part of the history of mining, resource depletion, and air pollution (Foltz 2003: 15).[7]

The Zoroastrian Cosmic View

Zoroastrianism is named for its putative founder, a prophetic figure named Zarathushtra (*Zoroastres* in the Greek sources), whose life details remain a matter of debate. (Followers of the faith call themselves 'Mazda-worshippers', and refer to the religion itself simply as 'the Good Religion'.) He is believed to have lived anytime from 1800 to 600 BCE and anywhere from western Iran to present-day Kazakhstan. A reasonable, though unproven thesis would place him somewhere in northeastern Iran around 1000 BCE.[8] Zoroaster lived in a pastoral-nomadic society where patriarchal and militaristic values were dominant. His teaching seems largely aimed at criticizing the central rituals of his society—bull sacrifice and the consumption of a hallucinogenic beverage known as *haoma*—as being inappropriately orgiastic, violent, and excessive. Another major theme in Zoroaster's teaching is his opposition to the taking by force of livestock and other wealth by the strong from the weak and the ravaging of pasturelands, which he saw as disruptions of the natural order.

Zoroaster's teaching is believed to be most directly expressed in seventeen hymns, called Gathas, which are attributed to him and included in a sacrificial liturgy known as the Yasna (cf. Sanskrit *yajna*). Together with a somewhat later body of devotions called Yashts and a manual of rituals known as the Vendidad—literally, 'Laws Against Demons'—this material is collectively known as the Avesta. Later Zoroastrian priests apparently reintroduced many aspects of the ancient Iranian polytheistic religion which Zoroaster himself had opposed. Among the most important later Zoroastrian sacred texts (compiled around the ninth century CE) are the Bundahishn, which contains the Zoroastrian creation myths, and the Denkard, or 'Acts of Faith'.

Zoroastrians believe that the world is originally good in that it was created in proper order and harmony (*aša*, later understood as 'Truth') by a beneficent supreme deity, Ahura Mazda (literally 'Lord Wisdom'). As such, nature serves as a proof for the existence of the Divine Creator, Ahura Mazda (Avesta, Yasna 44.3-6). Humans are meant to see nature as

7. Victor Mair's argument that these technologies were first introduced to China by proto-Iranians is supported on grounds of linguistic borrowings into ancient Chinese (see Mair 1990).

8. The various arguments are surveyed in Boyce 1992, Chapter 2 (though Boyce herself favors what is probably an unrealistically early date).

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a source of joy (Yasna 38.1), and the material world as something to be perfected, not escaped. Indeed, Zoroastrianism would appear to be the earliest example of a worldview in which good and bad are seen as absolutes, free of the contextual relativities and nuances that typically characterize morality in other ancient societies. Zoroastrian ethics consist of freely choosing that which is good (or 'True', in Zoroastrian terms), and rejecting that which is not ('the Lie').

Zoroastrian cosmology accounts for the existence of evil in the world by recounting that following Ahura Mazda's primordial act of Creation, the *mainyu* of Fury, Angra Mainyu (Ahriman), chose evil over good and dedicated himself henceforth to causing harm and disorder whenever and wherever possible. According to the Zoroastrian creation myth found in the Bundahishn, the primordial man, Gayumars, was killed by Ahriman and his entourage, though his 'seed' was then purified by the Sun and grew from the soil into a rhubarb plant which became the first man and woman (Bundahishn 14.5-6, 10).

The world is thus a stage upon which a cosmic battle is being waged between the forces of good and the forces of evil—or, in Zoroastrian terms, between the Truth and the Lie—and humans must each make an individual choice which side they will support. The original purpose of creation—the sky, the water, the soil, the first plant, the first animal, and the first human—was to help in the fight against the Lie, to help Ahura Mazda to destroy the demonic forces. According to Zoroastrian mythology, Ahriman responded by attacking the world with all his might, darkening the sky and sending demons out across the earth. The earth shook and mountains rose up. Ahriman then destroyed the primordial plant, the primordial animal (the bull), contaminated the sacred fire with smoke, and killed the primordial human.

In Zoroastrian belief, all contamination of created things is due to demonic forces. It is the duty of Zoroastrians, who are Ahura Mazda's foot-soldiers in the ongoing cosmic battle, to purify and maintain the purity of fire, water, and the soil, to cultivate 'good' plants and raise 'good' animals. Humans have a special and unique role to play, in that, as the Bundahishn tells us, Ahura Mazda enlisted our species to aid in the struggle against evil, promising eternal life to those who choose to do so (Bundahishn 3.23-4).

The struggle between good and evil will ultimately be resolved in a final cataclysm known as Frasho-kereti, literally the 'making glorious', when the forces of evil will be vanquished and utterly destroyed.[9] This

9. This belief, which is the basis for Jewish, Christian, and Muslim apocalypticism, is also found in other Indo-European traditions such as the Scandinavian Ragnarök.

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event will usher in an idealized age in which the forces of good will reign unopposed. According to later Zoroastrian interpretations, history must first pass through three millennial stages, each one successively altered and improved by a savior figure so as to make the world more prepared for the final victory of good. In the third, and thus 'most improved' millennium, humans will give up eating meat, living on a diets of plants and milk, and eventually just on good spirit (*mainyu*) (Dhanbar 1913). As in the Hebrew book of Genesis, the human ideal would seem to be vegetarianism, with meat-eating a sign of decadence. This ideal is preserved in the Zoroastrian practice of abstaining from meat and slaughter for four days (called '*nabor*') every month.

Thus, though it is understood that the cosmic struggle's ultimate resolution may be far in the future, Zoroastrians believe that by their choices and actions in their individual and collective lives, they can hasten its advent. While the Zoroastrian ethical system does not fail to address issues of peace, justice, and truthfulness among human beings, in comparison to many religious traditions the significant amount of attention devoted in Zoroastrianism to proper relations with the natural world can seem surprising. Specifically, Zoroastrian laws concern themselves to a large extent with maintaining the 'purity' of fire, water, metal, and soil, though their concern is ritual purity, not ecosystem health *per se*. Where plants and non-human animals are concerned, Zoroastrian teaching is mixed, since a distinction is made between good and evil species.

Fire

The first Yasna, or 'sacrificial liturgy' of the Avesta clearly associates fire with the Supreme Deity, Ahura Mazda: 'I announce and complete my worship to thee, the Fire, O Ahura Mazda's offspring, together with all the fires… (Yasna 1.12). In the so-called 'Younger Avesta', fire is praised as Ahura Mazda's son (Yasna 4.2). Fire has been personified as a deity since pre-Zoroastrian times, known as Agni in the Rig Veda. In Zoroastrianism, fire is one of the warriors in Ahura Mazda's army. Reflecting ancient Indo-European ordeals, Ahura Mazda uses fire and molten metal to test people's truthfulness (Yasna 51.9). Several distinct *mainyu*s are associated with fire: Berzisavah, who is illuminated before Ahura Mazda; Vohufaryana, who exists inside of the bodies of people and animals; Urvazishta, who exists within plants; Vazishta, who lives in the clouds; and Sepanishta, who lives between families. Vazishta, fire of clouds (the light of the tundra) fights against the demon of drought by helping Tishtar, the deity of rain and the source of water; that is, he is a rainmaker, which, in an arid country like Iran, is very important. The light of the fire is a symbol of the presence of Ahura Mazda, which is why fire

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has always been central to Zoroastrian ceremonies. It is of supreme importance to Zoroastrians to maintain the purity of fire, which is done through a complicated ritual known as Bahram.

Historically the element of fire has played such a central role in Iranian religion that outsiders have often seen Zoroastrians as 'fire-worshippers'. Although Zoroastrians themselves reject this label, it is clear that fire possesses a significant symbolic value in Iranian religion which derives from prehistoric proto-Indo-European associations with the Sun and with the notion of purity. Light is seen as pure and fire as a purifying agent, and accordingly, the Sun as the epitome of purity as well as the ultimate purifier.

Indo-Iranian death rituals reflect these ideas in various ways. In Hindu India, corpses are cremated as a way of 'purifying' them. In Zoroastrianism, they were exposed in funerary towers (*dakhma*s), where vultures would pick them clean of their decaying meat leaving the remaining bones to be bleached 'pure' by the sunlight. The purified bones could then safely be left to disintegrate over time, as was done in Iran, or be placed in ossuaries as was the case in pre-Islamic Central Asia (Trinkhaus 1984). Since the 1960s, Zoroastrians in Iran have taken to burying their human remains in shrouds as the Muslims do, while Zoroastrians elsewhere have increasingly opted for cremation, in part because declining vulture populations have been unable to fulfill their traditional role.

The latter practice is seen by some as problematic since, unlike Hindus, Zoroastrians historically did not use fire to 'purify' things that had been ritually 'polluted', on the basis that doing so would pollute the fire itself. (Again, it should be emphasized that while notions of purity and pollution underlie much of Zoroastrian ritual practice [Choksy 1989], these are ritual notions and not necessarily ecological ones.) The priestly Zoroastrian text known as the Vendidad provides detailed instructions of what must be done to ritually purify a sacred fire that has been contaminated by 'impurities'. The divine aspect associated with fire is Aša Vahishta, or Ardibehesht, the Amesha Spenta of truthfulness, reflected in the ancient practice of determining whether a person is telling the truth by subjecting them to a fire ordeal.

Ancient Iranians performed many of their rituals on mountaintops, most likely reflecting a desire to draw near to the sacred power of the sky. Even today in Iran, one can see the remains of mountaintop altars virtually everywhere in the country, if one knows what to look for. Climbing up to these sometimes barely accessible sites, one often finds evidence of fire in the form of centuries-old black marks on the rock.

Zoroastrian religious buildings are sometimes called 'fire temples,' no doubt because a fire invariably occupies their center. In ancient Iran

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some fires—such as those at the temples of Adur Burzen-Mehr in Parthia, Adur Gushnasp in Media, and Adur Farnbag in Pars—were kept going for many centuries. Today, less than 200 Zoroastrian fire temples exist worldwide, though some new ones are being built by diaspora communities.

Water

In the absence of maps, it is not surprising that the periodic migrations of Central Asian nomads followed the ecological transition zone between mountain and steppe that runs roughly across Eurasia to the Hungarian plain in the west and to Mongolia in the east; in such an arid environment, the most reliable source of water would be where streams of runoff come down from the mountains but before they dissipate into the dry steppelands. Water was—and to Zoroastrians, remains—valued to the extent of being held as sacred, and desecrating it in any way was deemed one of the most serious sins possible. Much later in history, the Mongols (who are not Indo-Europeans but came to occupy much of the same region as their Aryan predecessors) considered even bathing in a running stream as a form of desecration meriting capital punishment.

The oldest Iranian water deity appears to be Apam Napat (lit., 'seed of the waters'), who was gradually superseded by a female deity of presumably Mesopotamian origin, Anahita, goddess of rivers.[10] The deity of rain, Tishtar, is worshipped in the Tishtar Yasht of the Avesta. At the time of the Creation, Tishtar, assisted by Fire (in the form of lightning) waged battle against drought. His rain, sent down to cleanse the earth from Ahrimanic poisons, created the primordial sea, which is salty and bitter because of the 'poisons' it contains.

Zoroastrian ritual requires a traveler coming upon a watercourse to recite a prayer to the appropriate water deity, and Zoroastrian religious law prohibits urination near a stream or any other kind of defilement of the water's ritual purity.[11] The fifth-century BCE Greek traveler Herodotus reported of Iranians that 'They greatly revere rivers. They will not urinate, spit, or wash their hands therein, nor allow anyone else to do so' (Herodotus, *Histories* 1.138). Four centuries later, Strabo offered the following corroboration: 'Iranians do not bathe in water, do not throw a cadaver or a corpse into it. All in all they do not throw anything unclean into it' (Strabo, *Geography* 15.3.15). Though in prehistoric times Iranians

10. 'Anahita' means 'without fault, powerful'. She bears some resemblance to the Vedic Saraswati.

11. The invocation recited is the Ardvisura Banu, or Abzavar, taken from the Aban Yasht in the Avesta.

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apparently did not build temples, under Greek influence the first religious buildings in Iran were temples to Anahita, the goddess of the waters, whom the Greeks associated with Aphrodite, and of whom the Aban Yasht says, 'She purifies the waters' (Yasht 5.5).[12] The Avesta indicates that water—and by association Anahita herself—was seen as the source of life and fertility: 'I will praise the water Ardvi Sura Anahita, the wide-flowing and healing in its influence…furthering all living things…' (Yasna 65.1). Water is also represented by Haurvatat, or Wholeness, one of six aspects (Amesha Spentas, or 'Bounteous Immortals') of the Divine Heptad (Ahura Mazda constituting the seventh).

Water is arguably the most revered natural resource in Zoroastrianism. In the Zoroastrian ritual calendar a commemoration of the primordial creation of water is a central feature in the Paitishahem festival marking the Fall harvest. The religious texts describe how Zoroaster himself received his first vision while bringing water from the river as part of a springtime ritual (Yasna 43; Denkard 7.3.51; Zadspram 21.1-27).

Some ancient Zoroastrian rituals connected with water have survived in present-day Islamic Iran. Ancient Iranians, having settled on the plateau region south of the Caspian where they have lived up to the present day, invented a technology for bringing mountain snowmelt to the plains on a regular basis by digging underground channels called *qanat*s. In Iran today some Muslim villages practice an annual ritual known as a '*qanat* wedding', in which the village women prepare a special soup which is then poured into the water channel by a woman dressed up as a 'bride'. (The belief appears to be that the *qanat* will then continue to bring water for another year for the sake of its 'bride'. Men are barred from participating in this festival.) In another ritual, a young boy brings about a 'marriage' between two water sources by carrying water from one channel to another (Foltz 2002: 360). In all of these rituals the principal actors carry fire, another natural element associated with the sacred world of Zoroastrianism, the traces of which continue to be seen in many aspects of popular culture among Iran's Muslims.

Soil (Earth)

The ancient nomadic Pre-Indo-European peoples of the Eurasian steppe seem to have conceptualized the primary supernatural forces in terms of earth and sky, the first being associated with female power and the

12. Indeed, purification was her major function. She was also believed to purify such vital liquids as milk, the blood of the womb, and sperm. The Aban Yasht gives precise descriptions of her great beauty, her clothes, and her ornaments. She is depicted as riding on a chariot pulled by four horses of wind, rain, clouds, and dew (Yasht 5.101-102).

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second with male (Mallory 1989; Gimbutas 1974). In Zoroastrianism the divine aspect representing the soil is Spenta Armaiti, or Spendarmad, the Amesha Spenta of devotion. A feminine force, Spenta Armaiti bears similarities in function and symbolism to the 'earth goddess' in many ancient religions.[13] She is a protector of farmers, who, given Zoroastrianism's positive attitude towards cultivation of the soil as a way of making the world more habitable, are seen as being among the *ašavān* ('doers of good').

Zoroastrians are thus called both actively to work the soil as a way of 'improving' it, and to abstain from activities which are seen as polluting or degrading it. The Zoroastrian tradition of exposing corpses to be picked clean by vultures stems from their aversion to 'polluting' the soil with dead bodies, which are seen as ritually impure.

Metals

The divine aspect representing metals is Khshathra Vairya, or Shahrevar, the Amesha Spenta of dominion. There would seem to be a connection here with waging just war, reflecting that the proto-Indo-Europeans had access to iron mines which gave them the edge (so to speak!) in military technology such as swords, chariots, and so on.[14] Molten metals, like fire, were also used in ancient times as an ordeal to determine a person's truthfulness (*aša*). In a more general sense, Khshathra Vairya's physical aspect expresses the bounty of useful mineral resources to be found in nature.

Plants

The Avesta specifically names plants among the holy aspects of creation which are to be worshipped. In Yasna 1 the speaker declares his devotion to fire, water, '…and to all the plants which Mazda made' (Yasna 1.12). In keeping with the socioeconomic context of the religion's founder, Zoroastrian texts place a special emphasis on the preservation of pasturelands. The deity most often associated with this task is Mithra, or Mihr, as indicated in the following Avestan passage: 'I shall audibly worship him, Mithra of the wide pastures, who grants peaceful and good dwellings in Iranian territories' (Yasht 10.4). The divine aspect representing plants is Ameretat, the Amesha Spenta of immortality. It may be significant that in Zoroastrian mythology, Ahriman's first evil act of destruction was to cause the withering of the primordial plant. Fortunately,

13. She can be identified with Armati, an earth goddess in the Sanskrit Vedas.

14. The Avestan word *khshathra* is cognate with the Sanskrit *kshatriya*, the term applied to the warrior caste.

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Ameretat, together with the rain deity Tishtar, restored its substance which was then rained down all over the earth. Another divine force, Aša Vahishta (Ardibehesht), the Amesha Spenta of truthfulness, is also associated with safeguarding the growth of plants, particularly wheat (a grain likely first domesticated in Central Asia, homeland of the Iranians' ancient ancestors).

One of the oldest Zoroastrian rituals, the preparation of a sacred drink called *haoma* (Sanskrit *soma*) begins with the *barsom* rite, in which a 'bundle of twigs'—today symbolized by metal rods—is lain as if to serve as a tablecloth. (This recalls the strewing of grass in Vedic sacrifice, indicating a common Indo-Aryan origin.) Holy water is then sprinkled upon the 'twigs', thus symbolically fertilizing the vegetal matter of the earth. A similar cross-fertilizing of water and plant power can be seen in the *aiwyaongham* or 'tying' ritual, and in the *urvaram* or 'plant' ritual, in which a pomegranate twig is washed in holy water. The *haoma/soma* itself was originally derived from a plant—possibly a Central Asian variety of ephedra, later unavailable to the priests of Iran and India—that had hallucinogenic properties.[15]

Another ancient ritual, a purification rite called the *bareshnum*, includes the use of thirty types of flower; each species is associated with a particular deity (Bundahishn 16). In Iran this ritual, which is usually carried out for the purification of priests, is sometimes performed on pomegranate trees. Such trees are made 'ritually pure' by tying knots of colored thread around the trunk and reciting prayers (Boyce 1977: 137-38). This ritual recalls the 'tree ordination' ceremonies performed by some contemporary Buddhist monks in Thailand, though it is unclear whether the two religions' common Indo-Aryan heritage could in any way account for the resemblance.

Animals

In keeping with an essentially positive attitude toward the world of creation, the Zoroastrian view on non-human animals is mostly one of respect. The traditional accounts of Zoroaster's life contained in the ninth-century text known as the Denkard provide several accounts of animals protecting the prophet during his childhood. In one case a bull is said to have stood over him to keep him from getting trampled by the herd; in another a stallion is reported as doing the same thing during a stampede. At another point a wolf, instead of attacking the young Zoroaster, takes him in along with her own cubs (Denkard 7.3.8ff.).

15. The effects are vividly depicted in a surviving Vedic hymn to Soma; see *The Rig Veda* (trans. Doniger O'Flaherty 1981: hymn no. 10.119, 131-32).

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Animals are considered to have souls and Zoroastrians pray for those species that are 'harmless' (Yasna 39.2). On the other hand, Zoroastrianism distinguishes between 'good' and 'bad' animal species. The 'best' animal is no doubt the cow, whose voice Zoroaster assumes in a famous verse, Yasna 29 in the Avesta, sometimes referred to as 'The Cow's Lament'.[16] In another passage, the cow ranks first among those aspects of creation for which the speaker is especially thankful to Ahura Mazda: '…who created the cow and order, who created water and good plants, who created light, Earth, and all good things' (Yasna 37.1). Special importance is also accorded to dogs, especially in later texts such as the Vendidad. The thirteenth and fourteenth sections of this work praise the dog and state that it is a crime to kill one. Dogs, who are believed to have special powers of sight, are brought in as witnesses at Zoroastrian funerals. After death they are also said to guide the righteous into the afterlife.[17] (Iranian Muslims, who saw dogs as ritually unclean, often taunted their Zoroastrian neighbors by torturing dogs in the street.) In the *Arda Viraf Namag*, a Sasanian-era text which was the ultimate model for Dante's *Divine Comedy*, among those sinful souls being most severely tortured in hell are those who have abused their domestic animals, whereas paradise is full of those who have treated them with kindness.

Like plants, 'good' animals are among the elements of creation that the Avesta describes as worthy of worship: 'And we worship all the holy creatures which Mazda created…' (Yasna 71.6).[18] The divine aspect representing animals is Vohu Manah, or Vahman, the Amesha Spenta of 'good mind'. The catch is that, in Zoroastrian cosmology, the world is also full of 'bad' animals that were not created by Ahura Mazda.

One aspect of traditional Zoroastrian belief and practice with which contemporary ecologists might take issue is the traditional imperative to kill 'impure' animals (*khrafstras*) whenever possible, including such species as snakes, lizards, frogs, scorpions, and many kinds of insects (Vendidad 19.1-3; cf. Herodotus, *Histories* 1.30). The tradition teaches that such creatures are the work not of Ahura Mazda but of the evil

16. The voice is that of Geuš-urvan (lit., 'the Soul of the Cow'), a female deity associated with the moon (cf. 'the cow jumped over the moon'), who is the *mainyu* of useful quadrupeds.

17. That is, across the Chinvat bridge which connects this world to the next (Vendidad 19.30).

18. Domestic animals being 'good'—and death being 'polluting'—one might ask how Zoroastrianism justified killing and eating them. It would seem that this was one of the roles of sacrifice, and there are priestly writings which seem to abjure the eating of domestic animals for this reason (though perhaps not wild animals that have been hunted). See Zaehner 1976: 111.

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deity, Ahriman, and as such exist only to cause harm in the world (Bundahishn 3.15; Zadspram 2.9).[19] The same is said of certain plants (Bundahishn 3.16, 3.24, 27.1; Zadspram 2.11). Thus, to destroy them is a holy act, since one thereby reduces the instruments available to the forces of evil.[20] Needless to say, such actions conflict with the understandings proffered by contemporary ecological science in which species play vital roles in ecosystems, and biologically speaking, no species can be considered globally undesirable, much less 'evil'.[21]

Conclusion

Zoroastrianism is often claimed, especially by its followers, to have been the world's first monotheistic religion. This claim is complicated by two factors: (1) the exact time of Zoroaster's existence (if he existed at all) is not known, and (2) many prefer to see Zoroastrianism as dualistic rather than monotheistic. In terms of Zoroastrianism's attitudes toward nature, some of those who consider Zoroaster as an originator of monotheism see his elevation of Ahura Mazda to the status of Supreme Deity as having come at the cost of earlier Aryan nature-worship, in which case the nature-reverence apparent in the tradition could be seen as a re-infiltration of earlier pagan elements into Zoroaster's 'purified' monotheism.

Environmentalist language occurring in works by the Zoroastrian scholar-practitioners mentioned above is to be placed within a distinctively contemporary discourse on religious values and environmental ethics. It is unlikely that earlier Zoroastrians (or followers of any faith, for that matter) associated their beliefs and practices with ecological considerations in the way many do today. While these contemporary authors all note that the emphasis in Zoroastrian sacred texts is on maintaining ritual purity as part of the struggle to help good to prevail over evil (or order over chaos), their own references to 'nature-protecting' elements of Zoroastrianism have emerged within the specific context of inserting their tradition into the contemporary discussion on religion and environmental values in a way that presents their faith in a favorable light. None of these writers has called attention to the ecologically

19. Farhang Mehr, taking a revisionist view, rejects this belief as 'un-Gathic', attributing it to later priestly interventions in the textual tradition (Mehr 2003: 103).

20. As Herodotus reports: 'The magi with their own hands kill everything except dog and man, and make great rivalry therein, killing alike ants, snakes and other creeping things and flying things' (*Histories* 1.140).

21. The spread of non-native species, of course, can disrupt ecosystems and are viewed by many ecologists to be undesirable when they negatively impact ecosystems where they did not originally evolve.

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problematic aspects of Zoroastrianism. In this regard at least two major issues should be noted: Zoroastrianism's call to extirpate 'ahrimanic' species, and its strong aversion to death and decay; the first, because ecological science tells us that all animal and plant species have a vital function, and the second, because death and decay are necessary, inevitable natural processes.

Zoroastrian tradition, as has been noted, is greatly concerned with preventing the *ritual* pollution of Ahura Mazda's 'good' creation. As with some other religions, however (notably Hinduism, Judaism, and Shi'i Islam), it is important to distinguish between ritual pollution in a traditional religious sense and ecological pollution as defined by contemporary science, since the two rarely coincide. In Zoroastrianism pollution is principally associated with death and decay, which are seen as the work of evil forces. The maintenance of ritual purity, therefore, is merely an aspect of the struggle between good and evil; ultimately, it is a moral effort and not a biological one.

Thus, for contemporary ecologists concerned with maintaining the overall integrity of ecosystems, the reverence for nature that is undeniably to be found in the Zoroastrian tradition would nevertheless be seen as unacceptably selective. An uncritical reading of Dhalla, Oshidari, Mehr, and Choksy's remarks on Zoroastrianism's alleged concern for nature could lead one to assume that Zoroastrianism is indeed more nature-friendly than other religions, but this would be a hasty conclusion. Contrary to the Zoroastrian tradition, nature does not distinguish between 'good' and 'bad' species, and all organisms are dependent on the waste, death, and decay of other organisms. The dualistic Zoroastrian worldview which posits an ongoing battle between the forces of good and evil is very different from the amoral worldview of contemporary ecology, and has distinctly different priorities.[22]

Nature preservation in Zoroastrianism, where present, is not an end in itself but merely one element within its vision of cosmic struggle. In this sense, it would seem that what Zoroastrianism seeks to preserve is an idealized, 'purified' nature, stripped of all its aspects which are disagreeable to humans, which, of course, is not nature at all.[23] In this respect one may call attention to the ancient Iranians' contribution to the development of gardens, which became the image of paradise in the

22. And, of course, different explanations for observable phenomena as well; e.g., the decomposition of bodies as being due to Ahriman's acting upon them.

23. The tendency of contemporary Zoroastrian apologists to gloss over the tradition's characterization of many natural phenomena as 'evil' or 'impure' is especially pronounced in Mehr's discussion of 'Nature and the Environment', where he states inaccurately that in Zoroastrianism 'Any act ravaging nature is forbidden' (2003: 77-79).

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religious imagination of many neighboring peoples. (The Old Persian term *paira daeza* originally meant 'walled garden'.) Gardens, while appearing to be representations of nature, are actually an expression of human attempts to manipulate and control. The priestly author of the *Shkand Gumanik Vičar*, a ninth-century apologetic work, admits as much when he writes that 'Ohrmozd (Ahura Mazda) is like the owner or a gardener in whose garden noxious and destructive beasts and birds are intent on doing harm to its fruits and trees. And the wise gardener, to save himself trouble and to keep those noxious beasts out of the garden, devises means to capture them' (*Shkand Gumanik Vičar* 5.63).

It may be observed that the Zoroastrian tradition compares favorably to some other traditions (Christianity, for example), in terms of explicit attention to nature in the textual sources, attention which in most cases emphasizes respect, reverence, and a sacred obligation to protect and preserve the elements which make up the natural world. Nevertheless, it is anachronistic to project the kind of ecological consciousness that is emerging in the world today onto societies of the past. The global environmental crisis we now face is without precedent in human history and we cannot interpret ancient peoples' reverence for nature as evidence that they were concerned about the integrity of habitats or the depletion of species in the way ecologists are today. Moreover, as has been shown to be the case in some Hindu contexts as well, a perceptual gap between understandings of ritual pollution and ecological pollution would seem to be more of an obstacle than an aid to environmental protection (Alley 1998). For example, ecologists consider that decomposing plants and animal bodies (including human ones) do not 'pollute' the soil, but on the contrary, they enrich it.

While the assertion by Mehr that for many people 'religious commandments are more meaningful than scientific and governmental recommendations' may well hold true even in the postmodern age, if they hope to remain relevant, religious teachings may need to be re-interpreted in terms of the knowledge made available by contemporary science. There does seem to be a significant amount of re-interpretation going on among Zoroastrians today, especially within the diaspora community, concerning matters such as intermarriage, 're-conversion' by Iranian Muslims, and other issues; such efforts, predictably, have met with strong resistance in traditional Zoroastrian circles.[24] Be that as it

24. Most Zoroastrians would likely consider the very survival of their religion as a more pressing issue than environmental preservation. Zoroastrian numbers are steadily decreasing, hampered by low birth rates and a traditional resistance to accepting converts. Some have speculated that the ancient faith may soon disappear altogether if more is not done to accept converts into the fold (Goodstein 2006).

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may, as far as ecological ethics are concerned, that traditional Zoroastrian values of nature cannot accommodate our present knowledge of how ecosystems work suggests that those who would hope to see Zoroastrianism as an 'ecological religion' have important (re)interpretive tasks ahead of them.

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