# COSMOLOGY, RELIGION, AND SOCIETY

by J. W. Bowker

Abstract. It is a mistake to assume that science and religion are competing accounts of the same subject matter, so that either science supersedes religion or religion anticipates science. Using the question of cosmic origins as an example, I argue that the basic task of religion is not the scientific one of establishing the most accurate account of the origin of the universe. Rather, as illustrated from Jewish, Hindu, Chinese, and Buddhist thought, religion uses a variety of cosmologies to help specify the necessary terms and conditions on which human social life is possible in particular ecological niches.

Keywords: cosmology; creation stories; religious systems; tasks of religion and science.

In this paper I want to argue that it is a fundamental mistake to look at science and religion as if they are competing accounts of the same subject matter. If we make that mistake, we waste time and energy in the wrong kind of discussion: either we discuss religions as attempting to do the same thing as science, but getting it wrong; or we give religions a high value only if they agree with, or anticipate in their own language, the things that science is saying now.

In fact, even when religions seem to be concerned with the same issues as science is today, what they are doing in relation to those issues is very different. In the main part of this paper, I will take one particular example to illustrate this, the origin of the cosmos. The reason for this example is that here, if anywhere, it would seem that religion and science are attempting to do the same thing, namely, to give an account of how the cosmos came into being. But in fact, as we

John W. Bowker is the Dean of the Chapel, Trinity College, Cambridge University, Cambridge CB2 2TQ, England. This paper is an expanded version of the one presented at the Thirty-fifth Annual Conference ("Cosmology and the Meaning of Human Existence: Options from Contemporary Physics and Eastern Religions") of the Institute on Religion in an Age of Science, Star Island, New Hampshire, 30 July-6 August 1988.

will see, the religious interest in the origin of the cosmos is not in origins—not, that is, in giving a correct account of how things originated—meaning by "correct," an account which resembles or fails to resemble our own. Instead, some religions tell many different stories, all at the same time, of how the cosmos began; moreover, religions often change their stories and see no contradiction in doing so.

#### RELIGION IN RELATION TO SCIENCE

The purpose of the Institute on Religion in an Age of Science (IRAS), from its outset, was to discover what different sort of wisdom religions are transmitting; IRAS did not make the mistake of supposing that the only wisdom in the world is the scientific. In the first editorial in Zygon: Journal of Religion and Science, IRAS founder Ralph Wendell Burhoe put it as follows:

We respond to the growing fears that the widening chasm in twentieth-century culture between values and knowledge, or good and truth, or religion and science, is disruptive if not lethal for human destiny. In this split, the traditional faiths and philosophies, which once informed people of what is of most sacred concern for them, have lost their credibility and hence their power. Yet human fulfillment or salvation in the age of science requires not less but more insight and conviction concerning life's basic values and moral requirements (quoted from Peters 1987, 44–45).

Thus IRAS pioneered new territory. It did not look on science and religion as competing to give the best or the most accurate account of how the universe works, or of how it came into being, or of how we happen to have two legs rather than eight; because in those terms, science will inevitably "win"; and religion will be thrust back into the defensive and dangerous refusals of fundamentalism—of insisting on a superior and incorrigible knowledge, guaranteed by revelation.

In contrast, IRAS paid religion the fundamental respect of trying to understand its power and pervasiveness in human life, on its own terms. IRAS has been attempting to understand what religion does for individuals and for societies, what has made religion so extensively important as a human fact. IRAS has recognized, of course, the stupidity, cruelty, and wickedness of much religious history and behavior. But all the more for that reason, it has acknowledged the immense virtues of religion in enabling human survival and flourishing, in contrast to those who dismiss religion as a folly belonging to the infancy of the human race, which we have now outgrown.

In this way IRAS has avoided the dead-end, no-exit street (down) which so many people make so many wasted journeys) of comparing

religions with contemporary science and of trying to validate religious wisdom because it anticipates, or coincides with, a particular scientific enterprise or proposition. No one, I suppose, doubts that the religious imagination will frequently coincide with the scientific, because the religous imagination is so prolific that at some point it has imagined virtually everything. But the value of religions to their adherents does not lie in the extent to which they can be attached to the theories of science (because these, in any case, are approximate, provisional, corrigible, and always in the process of change). The fundamental value of religions lies in the ways (immensely different among themselves) in which they have enabled people to live successfully in the circumstances of their time. Much within those circumstances is nonnegotiable. Those who do not respect the nonnegotiable conditions of the universe (which alone enable them to live) generally end up dead. Religions mediate, through myth and ritual, the terms on which a particular community has to live: their success is evident in their long survival. Whether IRAS will succeed in providing a myth fit for our meaning in the twenty-first century is another matter. It has at least seen the point, that religions are not, as Frazer of The Golden Bough supposed, bad technology in the case of magic and puerile science in the case of religion. They are systems coding the terms and conditions on which alone social life is possible in particular ecological niches. The transformation of the codes when circumstances change is a challenge to all religions, but that does not alter the profound success whih they have achieved in the past in mapping the cosmic conditions of survival onto community and individual life.

No theme makes this more spectacularly clear than the theme of this year's conference. Conceptions of cosmology, space, time and cosmic evolution are exactly the ones which most persistently evoke this mistaken or "dead-end" way of evaluating religions in relation to science: religions are seen to be offering cosmologies and accounts of cosmic origins; they are then evaluated either, first, by seeing to what extent they agree with or anticipate scientific accounts, or, second, by seeing to what extent they disagree with scientific accounts, in which case they can be dismissed as curious nonsense. As two brief examples of the first, we can take the Vatican approval of "big bang" over against "steady state" on the grounds that the former is compatible with the Book of Genesis, or the remark of Amaury de Riencourt, typical of many: "The new picture of the universe disclosed by contemporary physics appears to be largely in accord with Eastern metaphysics. . . . It might well be that mankind

is now on the threshold of a psychological and physiological revolution of a magnitude that will overshadow all the social and political revolutions of our century—made possible by the seemingly incongruous, yet perfectly logical marriage between science and Eastern mysticism's insights' (de Reincourt 1980, 165; see also 174, 196).

Of the other strategy (emphasizing how wrong religions are in relation to science), we can take the physicist, Robert Stoneley, in Naomi Mitchison's Outline for Boys and Girls and Their Parents. Having said of religions that they came into being because people reasoned falsely, he went on to say: "Now, we might write all sorts of beautiful stories about how the world began, something like the Indian story that the earth is carried on the back of an elephant, which stumbles every now and then, and so causes earthquakes. The trouble would be that, as more and more facts were found out, it would get harder and harder to write the stories, for they would begin to contradict one another. On the other hand, the scientist. . ." (Mitchison 1932, 363).

What I want to suggest, in contrast, is that IRAS was correct when it recognized that religious stories and behaviors were not addressed to the same aims or purposes as modern science: they were (amongst much else) mapping the cosmos in ways that made it habitable, particularly by mythologizing and often personifying the nonnegotiable constraints. We can see this very clearly if we take the single issue of cosmic origins: religious accounts of the origins of the cosmos were not much concerned with origins as such: they were linking the cosmic context, however imagined, to the local context in which particular people had to live. Religious cosmologies (never divorced from their anthropologies, their accounts of human nature) relate communities to the nonnegotiable terms in the cosmos, terms they must respect—or perish.

In no way, therefore, can religious accounts of the origin of the cosmos, or of its process, be competitive with some later scientific account, as though both are attempting to describe the same vent or process (how, if one had, per impossibile, been an observer of the event, it would have looked descriptively). In religions, the descriptive account of origins is subordinate to the way in which the conceptualization of cosmos and cosmic origins contributes to the salus (the health and salvation) of the society which it sustains. That this is the correct account of the matter is immediately supported by the fact (as we shall see with Hinduism) that a single society can tell many "beautiful stories" (to use Stoneley's phrase) about origins which are manifestly contradictory of each other, and can live happily with the

conflict because the achieving of one correct descriptive account of origins is not the purpose of the stories. It is supported also by the fact that another society (as we shall see in the case of China) may have no beautiful stories, and yet still regard the theme of cosmic nature and origins as a basic determinant of society. And it is supported further by the fact that the account of the cosmos (including the account of origins) can be transformed or even displaced within the history of a society and its religion, because, once again, the issue of whether the account of origins is descriptively correct is not primary.

## COSMIC CREATION AND THE HUMAN SOCIAL ORDER

What is meant, then, by the hypothesis that the conceptualization of creation is a strong determinant of social form and enterprise? It can be seen in miniature in Paul Wheatley's immensely detailed study of the cultic architecture of ancient China. Identifying the Chinese with "those religions which hold that human order was brought into being at the creation of the world," and which, therefore, "tend to dramatize the cosmogony by reproducing on earth a reduced version of the cosmos," he argued:

Before territory could be inhabited, it had to be sacralized, that is cosmicized. Its consecration signified its "reality" and, therefore, sanctioned its habitation; but its establishment as an imitation of a celestial archetype required its delimitation and orientation as a sacred territory within the continuum of profane space. This could be effected only in relation to a fixed point, namely the village, city, or territory of the particular group, whence the sacred habitabilis necessarily took its birth (unsanctified, that is "unreal" territory being uninhabitable), and whence it spread outwards in all directions. This central point, this focus of creative force, was thus quintessentially sacred, and as such the place where communication was likely to be effected most expeditiously between cosmic planes, between earth and heaven on the one hand, and between earth and the underworld on the other (Wheatley 1971, 417).

Thus cosmology literally created society, because around the cult centers grew the first cities—much as, in a more general way, the zoologist J. Z. Young has argued that the creation of society required the creation of both the places and the symbols of association: "One of the clearest pieces of evidence that we have about early social man is that he soon began to build large artificial hills. Objects nearly as big as anything we build now were the product of some of the early agricultural communities, nearly 10,000 years ago. . . . Mankind has gone on assembling and building assembly places ever since. It is assuredly one of the features that the biologist should notice about him" (Young 1951, 95).

From the outset, it is already clear that the function of creation in a religious system is a great deal more extensive than a concern for a correct account of how the apparent world came into existence. Still, it would be absurd to go to the opposite extreme and suppose that the narrators or composers of creation stories had no interest in origins at all, as Helen Kenik proclaims rather too firmly, "The creation account in Gen. 2: 46-3:24 records realities about humanness. This report was not written to describe historical beginnings" (Kenik 1981, 49). As a matter of fact, we have no idea why any early account of creation was written: what any writer intended, when she or he set out to compose or record a particular account, is a matter of guesswork; and it may well be that the intention was to give an account of historical beginnings, and that the writer simply got it wrong—wrong, that is, in the empirical sense, so that if per impossible you had been there to witness the event, it would not have been like that.

However, the basic point remains that the function and relation of creation-beliefs to religious systems and to societies have always been a great deal more extensive than a mere concern for origins. Consequently it is possible for a religious system to maintain several different accounts of *origins* and yet still allow them (in harness, so to speak, and not in competition) to be profoundly determinative in society. This was made very clear in the three recent Chicago conferences on "Cosmogony and Ethical Order" (see Lowin and Reynolds 1985). Here we have pioneering studies on exactly this theme of the way in which commitments on cosmogony work out into the approval or disapproval of particular behaviors. The contribution made by Douglas Knight on "Cosmogony and Order in the Hebrew Tradition" analyzes not just one or two types of creation story in the Hebrew Bible but six, and he concludes:

The six types . . . all coexist in what is conventionally called Yahwism, but each stems from socially distinct groups or from different sociohistorical periods. They thus give voice to the viewpoints and values prevalent in diverse settings: priestly, agrarian, sapiential, prophetic, cultic, apocalyptic. Considered individually, each one has counterparts in the ancient Near East—usually in its basic structure, but at least in its motifs and elements, However, viewed as a group, they constitute a distinctive set of conceptions not to be found elsewhere. This corresponds to the distinctive historical, social, political, environmental life of the Israelite people (Knight 1985, 151–52).

These different accounts are not in competition with each other in the sense that "steady-state" was in competition with "big-bang" in the 1950s. Knight makes the further point: "These six main types form a

varied profile for ancient Israel's cosmogonic conceptions. They cannot all be collapsed into a single intellectual idea or ideology without doing them violence. . . . As perplexing as it might at first seem to us to find six very different cosmogonic myths in one culture. it becomes understandable when we consider that ancient Israel's history spanned some one thousand years and that during that period there was a full range of political, social, economic, institutional, and religious variations" (Knight 1985, 136-37).

What is being argued here is that the stories of cosmic origins work in two directions. It is not simply that creation stories are introduced or adapted to give an account or justification for particular social groups, but that the autonomy of creation stories, located in the context of revelation and authority, determines the style of a society and sets a limit on what is possible within it. This, for example is how Robert Gordis has interpreted the values of ritual in Conservative **Judaism:** 

These are the observances that bind us to the universe and lend a cosmic significance to the events of our ordinary lives. Beautiful and meaningful ritual places such occasions as birth, puberty, marriage, and death against the background of a vital universe and its Creator. They no longer remain accidents of animal existence. Such activities as eating, resting, inhaling a fine fragrance, putting on new clothes, or the enjoyment of other pleasures are, by means of a blessing, associated with an awareness of the Divine. The physical and nervous rebuilding of an organism through the Sabbath rest becomes part of the cosmic process. Meaningful ritual invests human life with a sense of holiness. It declares, with the unanswerable logic of beauty, that man counts in the universe (Gordis 1970, 34).

It follows that the intentional-fallacy of hermeneutics (that the meaning of a text is to be located in the intention of the author when he wrote it) is particularly disastrous in relation to creation texts, since they are (and always have been, so far as we can see) in a dynamic relation to the societies which preserve and transmit them. The intention of the author is irrelevant; early myths are all anonymous. That is why the same story can change diachronically (without any question or uproar about the literal correspondence to origins) and why synchronically different and thematically incompatible stories can lie side by side and be harnessed to a coherent purpose in relation to society—far beyond the ethical consequences reviewed in the Chicago conferences.

### THE "SOCIOCOSMIC" UNIVERSE IN INDIA

If the above is true in Israel, it is even more spectacularly true of India, where the authority and autonomy of revelation is equally

strong. The Indian imagination is prolific, and virtually everything that can be imagined about creation has been imagined: themes such as the primordial sacrifice, the hatching of the cosmic egg, and the churning of the oceans are not competitive with each other; nor is any attempt made to reconcile one emphasis in a myth with its contradiction in another. One Indian myth expresses cosmogony as the separation of heaven and earth, another as their marriage and union. Some myths regard the separation as opportunity, others as disaster, with humans committed to appropriate behaviors (sacrifice, keeping the laws of the gods, speaking and acting honestly) if they are to stay in touch with the gods. Some texts regard the sacrifice which sustains life and the cosmos as dangerous but essential; others regard sacrifice as necessary but evil. Some myths maintain that cosmogony precedes theogony; others that they are simultaneous.

It would not be difficult to elaborate such contradictions in the Indian case, almost indefinitely. Yet as in Israel, so here: it is not artificial to see the conceptual coherence which subsists in the diversity, as Kuiper has done in his recent work, Ancient Indian Cosmogony, and, even more, to see a relation between that coherence within the understanding of creation and its social consequence, which is at least as direct and explicit as the connection between creator, king, and justice in the Psalms (e.g., Ps. 146). In the case of India, dharma, appropriateness, whether in status or in action, is as fundamental to the universe as it is to society. The root dho means "to sustain"; so it is not surprising to find in the Mahābhārata that the "dharma is so-called on account of its capacity to sustain the world. On account of dharma, people are sustained separately in their occupations and classes" (xii.110.11). Everything, whether animate or inanimate, has its appropriate way of being or behaving, so that dharma is not only the means by which maya, appearance, becomes possible, but it is (as the Taittiriya Aranyaka puts it) "the foundation of the whole universe" (x. 79).

That is why it makes sense to describe what we call in the West "Hinduism" as the map of *dharma*: what the schools and the practices and the organization of society offer to the Indian is an account of how to behave appropriately in the circumstances into which she or he happens to have been born in this particular appearance in the long process of *samsara*, rebirth. Therefore the *Manu Smriti*, a law-code of particular weight and authority, takes the ordering of society into four classes, each with *Sva-dharma* or its own way to proceed, back into the original creation, and sees the nature of society as a continuation of the cosmogonic process: "For the sake of the preservation of this entire creation, the exceedingly resplendent One [Purusha] assigned

separate duties to the classes which had sprung from his mouth, arms, thighs, and feet" (i. 87).

India is the most accessible and obvious example of what Topitsch called "the 'sociocosmic' universe": "The whole world is conceived as a state, a city or a well-ordered household, and the regularities of nature correspond to the rules that govern civil life" (Topitsch 1954).

### CONCEPTS OF NATURE AND SOCIETY IN CHINESE THOUGHT

The proliferation of myths about creation illustrates the importance of religion in mediating the conceptualization of nature into the forms and organization of society. However, the same is true where there are virtually no myths of creation at all, as in the case of China, Of course there are Chinese myths and legends of creation. But they are insignificant in establishing the connection between conceptualized nature and consequent society. Of the early dynastic legends of China. Sarah Allan has observed that the Chinese "did not narrate legend but abstracted from it. Aware that the legends were structurally similar, [they] paralleled them to make repeating themes apparent and continually sought to derive the concepts associated with the signs' (Allan 1981, 18). In other words, mythological themes are evident in Chinese rituals and texts, and they may well provide fundamental points of reference and control in the understanding of self or society. But no myth or mythological complex is isolated as the single template. Yet in China there is just as strong a connection between nature and society, but reached by an entirely different route. Consider the famous passage from Chuang Tzu, a Taoist of the fourth century B.C.E.:

How endlessly the heavens turn! And yet the earth remains at rest! Do the sun and moon quarrel as to their positions? Who rules over and orders all these things? By whom are they held together in harmony? Who effortlessly causes and maintains them? Is there, perhaps, some hidden tension which prevents them from being other than as they are? Must the heavenly bodies move as they do, powerless to do otherwise? Look how the clouds drop rain! And how the rain rises again to form the clouds! Who moves them to this abundance? Who effortlessly produces this primary job and stimulates it? The winds rise in the north and blow to the east and west. Others move upward uncertainly. Whose breath moves them? Who effortlessly causes them to blow? What is the cause (Chap. 14)?

Some of the earliest answers to these questions were in terms of ti and t'ien, understood in highly personal terms of agency. In the Chou dynasty, t'ien, sky or heaven, is still a powerful agent of effects, ruling by means of accessible and reasonable norms the destinies of human beings. But already the decrees of t'ien, the decrees of Heaven, were becoming impersonal, and the proper cultivation of t'ien is no longer by sacrifice or divination but by conformity to those decrees in conduct and social order. We see this transition exactly, in the Shih ching (Book of Odes) on King Wen:

The leaders of Chou became illustrious;
Did not the decrees of Heaven come at the appropriate time?
King Wen ascends and descends
On the left and right of God.
August was King Wen,
Continuously bright and reverent,
Great, indeed, was the appointment of Heaven.
The descendants of the sovereigns of Shang
Were in number more than a hundred thousand,
But when the lord on high gave his command
They became subject to Chou.

The charge is not easy to keep;
May it not come to an end in your persons:
Display and make bright your good fame,
And consider what Yin had received from Heaven.
The doings of high Heaven
Have no sound, no smell.
Make King Wen your pattern
And all the states will trust in you.

In the case of t'ien in China, there is an oscillation between a personified and an impersonal understanding. It is comparable to the way in which, in Israel, the understanding of wisdom in relation to God oscillates between the impersonal ("She is a breath of the power of God, pure emanation of the glory of the Almighty. . . . She is a reflection of the eternal light, untarnished mirror of God's active power, image of his goodness," Wis. 8:25) and the personal—so much so that it has been for years a standard academic issue how far the image of Wisdom was hypostatized ("The Lord created me when his purpose first unfolded, before the oldest of his works. . . . I was by his side, a master craftsman, delighting him day after day" [Prov. 8:22, 30]). In Israel, wisdom becomes the connecting link between creation and society via the king. What Psalm 72 says of the just and faithful king ("For he shall rescue the poor man when he cries out, and the afflicted when he has none to help him. He shall have pity for the lowly and the poor. The lives of the poor he shall save." [Ps. 72:12-13]) is spelled out at length in the books of Proverbs and of Wisdom. As Helen Kenik summarizes the point:

The task given to the king, as his special responsibility for preserving the intended order of creation within the society, is clearly stated. No one can claim that the duty is ambiguous or that the focus is uncertain. The desired end is life; and the king, whose realm is the society of his world, works to preserve life through his task as ruler" (Kenik 1981, 43).

As in Israel, so comparably (though clearly not identically) in China. The Book of Odes is an anthology and therefore difficult to date; but the Chou dynasty came to power a little earlier than the time of Saul and David. Here already the connection—between the decrees of Heaven producing all that is, and the response in appropriate behavior in self and in society—is apparent. Another of the Odes states:

> Heaven in producing humans Attached its laws to every faculty and relationship. Humans possessed of this nature Should strive to develop the endowment to perfection.

Even when the much more materialistic (or at least impersonal) notion of ch'i was introduced (which deliberately contested the idea of a personal God as agent of creation), the same sense of discerning the appropriate order for one's own activity and for one's society remains. Ch'i meant, in origin, something like the hebel of Ooheleth, "Vanity of vanities, saith the Preacher." The Hebrew word hebel denotes the steam that rises in the bathroom; similarly ch'i meant vapor, breath, or steam. But whereas the meaning of the Hebrew went in the direction of the ephemeral and transient, the Chinese saw the potential of the steam to condense further into order and substance, at least for a time.

Steam to us, bothered by humidity and condensation, may not seem a strong candidate for an image of creation. But Katherine White saw the connection immediately when collecting African art in the delta terrain of West Africa: "From a water-woven land came creatures of convoluted imagination. They know where the power lies—in essences of female and reptile. From slime, disease, insects, the sludge of earth and river come composite formations as natural as oil. It's a subterfuge, the making of articulate spirit and lucrative heat" (Price 1984, 104). In a similar way, in India, the conjunction of heat and water is a pervasive symbol of creativity, as Jyoti Sahi reports: "The overflowing pot is nature itself in its abundance. . . . In the festival of Pongal the pot boiling over with rice is nature overflowing with goodness through contact with fire. Heat, we recall, is itself the magical and sacrificial force which brings the emotive world boiling up through the body of the yogi, till it boils over, and he passes into samadhi. Here we have a truly indigenous symbol of evolution (parinama) and the creation of a natural surplus' (Sahi 1980, 173). It is, therefore, not so surprising to find the observation of the Sung neo-Confucianist, Chang Tsai (roughly the contemporary of Thomas Aquinas): "Through the condensation and dispersion of ch'i the universe pushes forward along a hundred different roads; its principle for doing so is orderly and real. . . . The Great Void cannot but consist of ch'i. This ch'i cannot but condense to form all things, and these things cannot but become dispersed so as to form once more the Great Void. The perpetuation of these movements in a cycle is inevitably thus' (quoted from Chang 1975, 63-64).

With ch'i as material opportunity is then combined li as determination of its particular form: "When a house is built it is constructed of substantial items: brick, wood, mortar. But there must be a plan whereby these substances are organized into a meaningful whole. The material is ch'i, the plan li. When the house has been constructed according to plan it manifests li in its concrete form" (Chang 1975, 65). It is not unlike the way in which James Joyce "once told Frank Budgen that he had been working all day at two sentences of Ulysses: 'Perfume of embraces all him assailed. With hungered flesh obscurely, he mutely craved to adore.' When asked if he was seeking the mot juste, Joyce replied that he had the words already. What he wanted was a suitable order" (Tindall ([1950] 1979), 96). It is a perception which corresponds to the idea of shape as a fundamental property in matter—"a property of objects which independently from their substance. For example, while the energy and mass of a potter's clay may remain constant, its shape can take on an almost infinite variety of patterns" (Calow 1976, 117). But whereas Jeremiah saw the shaping of the clay as evidence of the sovereignty of God ("Behold, as the clay is in the potter's hand, so are you in my hand, O house of Israel" (Jer. 28:6), at least some Chinese saw no need to infer theistic or personal agency: "Principle exists before its objectification. Thus before the cart, or the ship, exists, there already exist the principles of their being. Invention, thus, is merely the discovery of existing principle" (Chang, 1975, 65).

This means that the necessary properties and conditions of "wheelness" existed before wheels were invented. So at no point could a square wheel have been a happy invention. In the same manner, societies and the means of their sustenance and organization have to be invented, but the proper (i.e., appropriate in relation to the properties and conditions of creation) forms of society pre-exist their invention. The word *invenio* in Latin means literally "I come into," and it is this sense of invention which underlies the Chinese

understanding of how society and the individual are related to the context in which they live and to the process that allows them so to do. There may be passionate divisions between, say, neo-Confucianists and Taoists on the way in which to move into that perception and knowledge of how the universe came into being and what it means to live appropriately in relation to it: the Confucian School of Principle advocated immense and lengthy exertion to increase understanding and knowledge, Taoists emphasize the need to decrease conscious knowledge or at least to increase no-knowledge-to attain the attitude of Wang T'ai, whose mind was said to be so stable in its identification with the one process by which all is, that if heaven and earth fell on him, he would not move. Therefore, as Girardot has summarized the point, there is both agreement and disagreement in the Confucianist and Taoist understanding of how creation and society are linked—though for both traditions they most certainly are linked in a determinative way. In the one, there is a tendency to move back to conformity with the original state; in the other, it is to move forward to the new creation. But both see the created order as the determinant of appropriate life and society—the locus of determining what they should be:

There is something of a counterpoint between a Taoist nostalgia for the cosmogonical behavior of the "noble savage" that depends on ultimate origins and a Confucian advocacy of a progressivist doctrine of "sacred history" that classically goes back to the first appearance of a civil order—in other words, a fundamental opposition between the "uncarved" and "carved," undifferentiated and discriminatory, cultural orders. For both it is the "creation" of a new "world"—whether primitive or civilizational—that establishes the true principles of order and meaning; and for both the issue is one of the emulation of a paradigmatic model from the hoary past. The important difference is in terms of where that past is located-in myth or history; in an undifferentiated cosmogony or a hierarchical cosmology—and how it is interpreted (Giradot 1985, 78).

In the case of China, therefore, we see that, even in a system which is capable of eliminating, or contesting, mythology and is skeptical about personal agency in the process of creation, the system (religious and philosophical in conjunction) ties the imagined nature of cosmic origin and process to the forms and order of what is regarded as a desirable society.

# BUDDHIST NATURALISM, SALVATION, AND SOCIETY

The same is true in Buddhism, which was even more explicit in rejecting mythologies (in this case the prevailing mythologies in India) of how the universe came into being. Insofar as early Buddhism accepted and appropriated the prevailing mythologies which gave decisive effect to the gods in producing the cosmos or its particular details, early Buddhism did so only to show how much theistic appearances are themselves a part of the process; insofar as the gods are causative in producing the apparent forms of the universe, they do so not out of power or providence but because their merit is so far exhausted that they do not know any better. What Buddhism emphatically rejects is any sense that there is a Creator outside the process, the Unproduced Producer of all that is, which, for example, is affirmed as Brahman in Hinduism and Allah in Islam. This drastic remythologization I have summarized in *The Religious Imagination*:

The Buddha accepted an entirely straightforward naturalistic cosmology, in which the whole world-system passes through a cycle of growth and decline, until eventually it passes away. At that stage, some continuities of existence have been reborn in heavenly worlds; but as their merit is exhausted they sink into lower levels of existence until a new world-system evolves. In Dig. N. iii. 84 ff. that cosmology is described in naturalistic, non-theistic terms. There is no external creator god who is in control of this operation. The gods are within the process; they are not independent of it (Bowker 1978, 272).

But this naturalistic account of origins, with its mirror-image mythology of creation, does not mean that Buddhism is an exception to the general truth. It too illustrates that the conceptualization of how the cosmos comes into being is mediated by religion in a way that is determinative of society. That is as true of Buddhism as it is of any other religious system. It is particularly obvious in Chinese and Japanese Buddhism, but even in Theravada the fundamental affirmations about the cosmos and how it comes into being are worked out into social order. The Enlightenment of Gautama, in which he becomes Buddha, lay in his realization of how the endless experience of transience and suffering comes into being. But to know that is to realize at once how the experience of dukkha can be brought to an end: it can be brought to an end through directing and controlling the process of dependent co-origination (paticcasamutpāda):

When this exists, that exists or comes to be; on the arising of this, that arises. When this does not exist, that does not exist or come to be; on the cessation of this, that ceases. That is to say:

on ignorance depend dispositions; on dispositions depends consciousness; on consciousness depend name and form; on name and form depend the six gateways; on the six gateways depends contact; on contact depends craving;

on grasping depends becoming; on becoming depends birth; on birth depend old age and death. In this manner there arises the mass of suffering [samsara] (Vinaya Pitaka i.1).

Buddhist life, therefore, must be devoted to cessation—to ceasing the process of origination; otherwise the long process of samsara, of rebirth, will continue. But since all individual appearance will be at different stages in the process toward nirvàna, society must necessarily be organized to allow that process to be effected—whether one is a lay person or a bhikkhu (monk). It is this which leads to the most fundamental constituent of Buddhist society, the relation of mutual support through dana and merit between monk and lav person; and here again it is the system of religious ideation and action which mediates the particular [(and reduced) Buddhist understanding of creation into the particular (and most certainly not Hindu) organization of life and society.

#### CONCLUSION

on craving depends grasping;

What we have seen, therefore (albeit briefly and somewhat allusively), is that the conceptualization of creation is directly linked to consequences in society and that the maintaining of society as a coherent, cultural achievement requires an adequate ideational support in its shared understanding of creation. It is pointless to ask which way round the process works—whether doctrines of creation work into the formation of society or whether the needs of society to maintain and understand itself work into the formation of particular mythologies of creation. The interaction is constantly and continuingly transformative in both directions. Thus E.M. Zuesse concluded in his study of ritual in Africa that "society is not the core of African religions, even though it is one of the chief media through which religion is expressed" (Zuesse 1985, 127). Nevertheless, he immediately went on to say that "everyday life and society as well as the ancestors reflect transcended structures pervading the cosmos."

So what is certainly clear is that the conceptualization of creation is not a marginal "extra," a necessary but only stage-setting prolegomenon to more important issues of redemption or enlightenment. What is affirmed about creation delimits what one says about God's action in redemption and is the presupposition of differentiated theological reflection. Thus Judaism, Christianity, and Islam share what is recognizably the same creation story-and Jews and Christians do so explicitly in the sense that Christians appropriate Tanach as Old Testament in relation to New. Yet each of the three religions explicates the same story into radically divergent anthropologies; and they in turn are expressed not only in different forms of society but also in different value-systems, different architectures, different geographies, different rituals—difference. We can say exactly the same of the divergence of Buddhism, Jainism, and Hinduism. A Hindu temple is as much a cosmographical statement as a Buddhist stupa; but what different statements they are; and what different languages they have become!

It is important, then, that this conference does not restrict itself to looking at Eastern religions through our Western spectacles, seeking to discern points of agreement or anticipation of our own cosmologies. It should, rather, adhere to the IRAS principle of seeking to discern what wisdoms the religions actually were—and are—transmitting, given that they were not much concerned with identifying the one, true, universally acceptable account of how the cosmos began. The religious imaginations of the cosmos encode the terms on which we have to live, and the nature of what it is that does the living. If we wish to change the codes, so be it; but do not let us confuse the different messages which religions and the sciences are encoding by supposing that they are different versions of the same message, and nothing more.

#### REFERENCES

- Allan, S. 1981. The Heir and the Sage: Dynastic Legend in Early China. San Francisco: Chinese Materials Center.
- Bowker, J.W. 1978. The Religious Imagination and the Sense of God. Oxford: Oxford University Press.
- Calow, P. 1976. Biological Machines: A Cybernetic Approach to Life. London: Edward Arnold.
- Chang Chung-yuan. 1975. Creativity and Taoism: A Study of Chinese Philosophy, Art and Poetry. London: Wildwood.
- de Riencourt, A. 1980. The Eye of Shiva: Eastern Mysticism and Science. London: Souvenir.
- Fox, M. 1981. Western Spirituality: Historical Roots, Ecumenical Routes. Santa Fe: Bear & Co.
- Giradot, N.J. "Behaving Cosmogonically in Early Taoism." In Cosmogony and Ethical Orders, edited by R.W. Lowin and F.E. Reynolds, 67-97. Chicago: Univ. of Chicago Press.
- Gordis, R. 1970. Conservative Judaism. New York: National Academy for Adult Jewish Studies.
- Kenik, H. A. 1981. "Toward a Biblical Basis for Creation Theology." In Western Spirituality: Historical Roots, Ecumenical Routes, edited by M. Fox, 27-75. Santa Fe: Bear & Co.
- Knight, D.A. 1985. "Cosmogony and Order in the Hebrew Tradition." In

Cosmogony and Ethical Order, edited by R.W. Lowin and F.B. Reynolds, 133-57. Chicago: Univ. of Chicago Press.

Kuiper, F. B. J. 1986. Ancient Indian Cosmogony. New Delhi: Vikas.

Lowin, R.W., and F.E. Reynolds, eds. 1985. Cosmogony and Ethical Order. Chicago: Univ. of Chicago Press.

Malcolm, N. 1977. "The Groundlessness of Belief." In Thought & Knowledge. Ithaca: Cornell Univ. Press.

Mitchison, N. 1932. An Outline for Boys and Girls and Their Parents. London: Gollancz. Price, L. 1984. Praise Poems: The Katherine White Collection. Seattle: Art Museum.

Sahi, J. 1980. The Child and the Serpent: Reflections on Popular Indian Symbols. London: RKP.

Tindall, William Y. [1950] 1979. James Joyce: His Way of Interpreting the Modern World. Westport, Conn.: Greenwood Press.

Topitsch, E. 1954. "Society, Technology and Philosophical Reasoning." Philosophy of Science 21.

Wheatley, P. 1971. The Pivot of the Four Quarters: A Preliminary Enquiry into the Origins and Character of the Ancient Chinese City. Edinburgh: Univ. of Edinburgh Press.

Young, J.Z. 1951. Doubt and Certainty in Science. Oxford: Oxford Univ. Press.

Zuesse, E.M. 1985. Ritual Cosmos: The Sanctification of Life in African Religions. Athens: Ohio Univ. Press.