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Holy Cow!

The Apotheosis of Zebu, or Why the Cow is Sacred in Hinduism*

Abstract

This essay revisits a debate that took place in the social sciences over the “sacred-cow controversy” for the purpose of ecological musing. The debate was stimulated largely by Marvin Harris, whose cultural materialist position reduced the symbolism of the cow in Hinduism to a set of irrational beliefs. His alternative was to see the cow’s sacredness in terms of a calculus of calories. Needless to say, his work led to criticism from both anthropologists and humanists. In the first part of the paper, I trace the history of the controversy, then move on to consider the cow herself from a Hindu point of view. Finally, I conclude with some theoretical remarks about the need for scholars of religion to be sensitive to both texts and contexts by blurring the theoretical boundaries between the fields of religion and anthropology.

Keywords: Hinduism—ecology—cow lore—cultural materialism

The cow from whom all plenty flows,
Obedient to her saintly lord,
Viands to suit each taste outpoured.
Honey she gave, and roasted grain,
Mead sweet with flowers, and sugar cane.
Each beverage of flavour rare,
And food of every sort, were there:
Hills of hot rice, and sweetened cakes,
And curdled milk, and soup in lakes.
Vast beakers flowing from the brim
With sugared drink prepared for him;
And dainty sweet meats, deftly made,
Before the hermit's guests were laid.

—W. M. Wilkins, *Hindu Mythology*

THAT INDIA IS CURRENTLY experiencing an ecological crisis is well known in both academic and popular circles (cf HALARNKAR and MENON 1996; HALARNKAR 1997; NELSON 1998). The problem is, of course, one that needs attention from many different points of view. In addition, strategies to curb environmental degradation have to be formulated in a manner that would suit the needs and aspirations of all of India's citizens, without giving priority to any particular ethnic group or religious community. Yet this is not an easy task, given the communal tension that envelops Indian society today. In his plenary address for a conference on "Hinduism and Ecology" held at Harvard University in 1997, Anil AGARWAL (2000) suggested that Hindu beliefs, values, and practices, built on a "utilitarian conservationism," rather than a "protectionist conservationism," could play an important role in restoring a balance between environmental conservation and economic growth. I wish to add that such a utilitarian approach needs to incorporate not just the Hindu majority but also the other religious populations of the country. A utilitarian model of action would, in addition, need to draw on available symbolic resources to ground ecological awareness in a system of thought that makes indigenous sense to the people of India. To this end, an "applied theology" would be extremely useful. By applied theology, I mean a theology that is aimed at solving problems. Just as anthropologists have developed the sub-field of applied anthropology to move the discipline beyond the halls of academe, so too must scholars of religion utilize their expertise to lend to the formulation of a theology that could be used to solve problems on the ground.¹

In this essay I want to explore the possibility of drawing on the cow as a symbolic resource for creating ecological awareness in India by tracing her gradual apotheosis. The problem in so doing, however, is that the cow's rich symbolism in Hindu mythology is obviously limited to the nation's majority. Nonetheless, all Indians share the need to deal with the environmental crisis, and I would like to propose that the cow's utilitarian function is one that transcends the particular interests and political agendas of any one religious community in India. APFFEL-MARGLIN and PARAJULI (2000) develop the notion of "ecological ethnicity" to draw attention to the fact that people inhabiting the same biome share concerns that transcend the ideologies of any given group. Similarly, all Indians rely on products of the cow for sustenance and succor, even though some may not accept the belief system that has elevated her status from a mere animal to a divine entity.² Hindus, on the other hand, have taken charge of nurturing a rich mythology about the cow's quintessential importance for Hindu society. Therefore, I wish to present an overview of the literature on the cow from the dual perspectives of the study of religion and anthropology in order to raise the possibility of understanding how the complex symbolism of the cow might be used to create an indigenous ecological consciousness. Such "ecological consciousness," it is hoped, would benefit everyone concerned with India's environmental problems. To make this point, I need first to review the role that the cow has played in academic debates concerning her function in India before suggesting an alternative approach to understanding her utility.

OF SCHOLARS AND COWS

Ever since the publication of Marvin HARRIS's first article on the sacred cow in 1965 (1965, 217–28), there has been a wide array of articles and books written concerning the subject of why cows are perceived to be holy in India. HARRIS's insistence that the role of the cow is determined by ecological variables (1966, 51–66)—what Ariel GLUCKLICH (1997, 189) calls a "calculus of calories"—has led to severe criticism of his culturally materialistic point of view by scholars in assorted disciplines. As a result of this ongoing controversy, we have a political approach (DIENER, NONINI, and ROBKIN 1978; ROBB 1992, 123–56; YANG 1980), an economic approach (HESTON 1971; AZZI 1974), a psychoanalytical approach (DUNDES 1997, 98–104), and even a phenomenological approach that attempts to establish a *sui generis* model for studying the "ecology of religion" (HULTKRANZ 1966).³ Still others have dealt more directly with Harris's position through critiques of his theories (SIMOONS 1979, 467–76).⁴

At present, more than three decades after the initial arguments were made, the controversy continues "behind the scenes," so to speak, albeit in a

more subdued manner, with no end in sight. Yet, in my opinion, there seems to be a distinct sense of drudgery involved in the whole polemical process. The “sacred-cow controversy,” as it has come to be known, continues within the halls of academe, and seems to bear little on the average Hindu. As Stewart ODEND’HAL has suggested,

Given the environmental constraints, I firmly believe that the villager in India is managing his cattle and plots of land far more efficiently than by any means anthropologists, sociologists, geographers, or economists can suggest. It is a source of amusement to me to consider that the typical Indian villager will remain unaffected by whatever conclusions are derived from the great “sacred-cow controversy.” (1979, 485)

It seems to me that much of the literature on this controversy has taken on the air of personal vendettas. No longer is there any intent to solve the bovine puzzle, but rather to move to a level of scholarly discourse at which the existential problem becomes obscured in favor of academic discourse itself. In other words, it is not the object of the controversy that seems relevant anymore; rather, it is the method of argumentation through which opinions are being expressed that serve as the common ground for debate. Given the fact that S. N. MISHRA (1979, 484) has stated “that the sacred-cow controversy can ever be resolved in a scientific spirit is unlikely,” there is certainly a need to return to what Hindus themselves say and believe, a point Indologists have made repeatedly. With the current ecological crisis impacting upon India’s environment, a reappraisal of the cow as a symbolic resource for an appreciation of nature is all the more necessary.

All of the approaches mentioned above tell us something about the nature of the cow (zebu, *Bos indicus*) in its cultural context. However, they all fall short of a complete interpretation, in one sense or another, by attempting to understand and explain the role of the cow from within the narrow confines of their own respective disciplines. This is not to say, however, that these approaches are invalid because of this oversight. Each does, after all, provide a particular way of looking at the problem of why the cow has such an exalted status in Hindu India. But what they all seem to overlook is the uniqueness of the cow as a deeply felt religious symbol in India. Nowhere else in the world has an animal maintained such status in the realm of the divine. In this essay, I do not intend to refute the numerous positions briefly alluded to above, nor do I intend to critique them. This is based upon two premises. First, they reflect specific points of view from within given scholarly traditions. I consider these relative truths as opposed to absolute ones, for in the sociology of knowledge no theory, irrespective of its level of empiricism,

can be regarded as absolutely true. Because of this, theories must be seen as interdependent. The value of one theory can only be assessed as a part of the totality of all related theories. Second, a true hermeneutic approach in the social and human sciences must feed on the data provided by all disciplines to live up to Clifford GEERTZ's (1980) unrealized prediction of an academic climate within which humanities play an important role in "social" interpretation.⁵

In lieu of the above, my intent here is to present an integrated point of view concerning the cow that draws on both textual and ethnographic sources. I would like to look at the development of the cow's status as a sacred symbol within its religious and mythological context. Viewing her through this lens will enable me to avoid reductionism and expose the emic or indigenous understandings of the nature of the cow as a religious symbol in Hindu thought. It is this insider's view that has often been overlooked in the past by anthropologists who have focused too narrowly on the functional and economic aspects of the cow's role in Indian society.⁶ As Frederick J. SIMOONS (1994, 142) concedes, "Whatever combination of factors may have contributed to the rise of the sacred-cow concept, textual evidence strongly supports the primacy of religious concerns." Thus, I am in agreement with Gabriella EICHINGER FERRO-LUZZI when she states that spiritual phenomena must be explained in religious terms (1987, 101). My approach, then, is intended to be one more oblation to add to the fire that fuels the sacred-cow controversy, which has been smoldering for some years now but could be revived for the purpose of environmentalist musing. As AGARWAL (2000) has suggested in a serious yet comical tone, cow dung should become the emblem of ecological activists in India. I would like to return to dung in the third section of my essay, but for now let me pursue some of the problems and prospects of textual sources dealing with the cow.

The cow's long development as a sacred symbol can be traced textually from the earliest corpus of Hindu literature: the Vedas. It can be argued viably that historical tracing uncovers the viewpoint of only a small body of a society's elite members who composed the texts in question. This point of view, however, is only an assumption, since texts always reflect popular opinion either by opposition to them, or by adapting the beliefs and rituals expressed therein. The issue has been addressed in detail by Indologists and historians of religions who employ the historical-critical method of textual analysis. Nonetheless, it is precisely the reliance on texts, however firmly embedded in specific contexts, that has led to criticism of this school of thinking. It has often been said that the historian of religions cannot see beyond the binding of her books. On the other hand, a reverse argument could be made for certain social scientists who may ignore texts altogether.

Of course, neither of these positions can claim predominance over the other, as I have already suggested. We must therefore see the text/context interface as a methodological form of what the literary critic Mikhail BAKHTIN (1981) calls “dialogism,” for a true interpretation can only result if a dialectical relationship between numerous disciplines exists. Stated plainly, dialogue is a most crucial aspect of the interpretive sciences. Hopefully my effort will provide one more point of view to be considered in the sacred-cow controversy, providing common fodder for interdisciplinary consumption in the great cattle pen that has served as the arena of bovine debate over the past few decades.

My essay is divided into three parts. The first section deals with the status of the cow in Hindu religious texts.⁷ The second section complements the first by elaborating on the mythical content of the texts that have led to the apotheosis of the cow. The third section briefly reviews some of the ritual uses of the cow and her products, as well as some of the popular attitudes associated with these. The three sections as a whole suggest a unique position for the cow in the Indian *Weltanschauung*. Taking these aspects into consideration, one would hope, could stimulate new modes of exegesis pertaining to the milky problem at hand, or, in this case, at hoof

BOVINE APOTHEOSIS

One can only speculate as to when the cow became a popular image in Indian folklore. Although there is some evidence that the cow was already a symbolic motif before the Aryans crossed the Hindu Kush on their way to the Indian subcontinent (JACOBI 1914, 224–25; CROOKE 1911, 281), the scholarly consensus indicates that the extant documentation in the Avestan texts is too scant to conclude that cattle had any special status in ancient Persia. This notwithstanding, they were a valued economic commodity throughout the Persian-speaking cultural zone during the second millennium BCE. We can be certain, however, that the cow had a somewhat elevated position in the earliest phase of Vedic literature (ca. 1500 BCE). This is not to say that the cow was inviolable at that time, but only suggests her use as a symbolic motif during the early Vedic period.⁸ The use of the cow symbolically is no less important than her inviolability, as I would like to suggest in greater detail below, for pious attitudes surely play a crucial role in the apotheosis of zebu. Moreover, the “symbolic capital” (BOURDIEU 1977 and 1989) of the cow can, in some sense, have far-reaching consequences beyond the domain of economics.

Sir Mortimer WHEELER (1953) and other archaeologists attempted to account for the sanctity of the cow by accrediting it to the influence of the indigenous people inhabiting the Indus Valley during the influx of Aryan

invaders.⁹ The status of the cow, however, seems to be influenced only tangentially by these non-Aryan cultures, for cattle in general and cows specifically are not represented as frequently as the unicorn on the Harappan seals dating from the third and second millennia BCE (PFEIFFER 1977, 209–13; BROWN 1964, 245; see also ALLCHIN and ALLCHIN 1982, 210). During the Vedic period, as already mentioned, the cow plays a more important role as symbol. In fact, cattle, collectively represented, are depicted in the Vedic literature more often than any other members of the animal kingdom.

The early Vedic literary usage of the cow resonates with both sacred and profane allusions. The economic aspects of the cow are heavily stressed in the Vedas, as is the role she plays in the *yajña* (sacrifice). The sacrifice played a quintessential role in Vedic religion. Its continuance meant the very maintenance of cosmic order (*ṛta*) in the universe (HOPKINS 1971, 17–35). Indeed, the nature of creation was innate within the sacrifice. Thus creation as a recurring cosmogonic act was seen as only possible through the successful and continuous performance of the *yajña*. Without maintaining it properly, the universe could not function. If the sacrifice ended, then *ṛta* would fall out of balance and the universe would regress into a chaotic state. The cow, then, takes on cosmic proportions by being at the center of the sacrifice. Not only were cattle the major sacrificial victims, but their products were used for oblation (*havis*) as well. One thing that we can discern from the portrayal of the cow during this period is that she was identified with the totality of the universe. The *Atharvaveda* (10.10.1), for example, calls the cow the “all-producing and all-containing universe.” This mystical relationship between the cow and the universe is alluded to several times in the *Rgveda* (JACOBI 1914, 225) as well.

These cosmic associations were an important element in the cow’s eventual sanctification. But such use of metaphor did not foreshadow the cow’s later intimate relationship to the Gandhian conception of nonviolence (*ahimsā*), as the Indologist Norman BROWN (1964, 246–47) has suggested.¹⁰ On the contrary, Brahmans, the priestly caste and custodial performers of the sacrifice, ate readily of the consecrated beef. One interesting passage in the *Śatapatha Brāhmaṇa* accredits beef eating to the sage Yajnavalkya when he says, “I, for one, eat it, provided it is tender (*aṃsala*)” (BROWN 1964, 246; JACOBI 1914, 225; KEITH 1925, 191–92).

The Vedic literature is relatively silent concerning nonviolence directed toward the cow. Not until the very end of this period do we find even the slightest allusions concerning the matter. There is only one reference to *ahimsā* in the mystical corpus of writings concurrent with this period. In the *Chāndogya Upaniṣad* (3.17.4), we read, *atha yat tapo dānam ājivam ahimsā satyavacanam iti tā asya dakṣiṇāḥ* (“Austerity, almsgiving, uprightness, harm-

lessness, truthfulness; these are one's gifts for the priests" [HUME 1977, 213]). Here "harmlessness" or nonviolence is used as a virtue, along with a number of other traits that suitably qualify as "gifts" to give to priests in payment for sacrificial duties rendered (BROWN 1964, 247). In short, at the close of the Vedic period, we can surmise that the cow was still being eaten, but nevertheless served as a powerful symbol.

But with the advent of Buddhism and Jainism at the beginning of the fifth century BCE, the notion of *ahimsā* slowly rose in prominence within Brahmanical circles (BASHAM 1959, 48–54). The sacred texts and law books from this period make ample mention of it. The *Bhagavadgītā*, for example, mentions the term four times (10.5, 13.7, 16.2, 17.4), but it is not used in a doctrinal sense, for it is defined as one quality among others. The *Manusmṛiti* explicitly prohibits eating meat for Brahmans, but does not prohibit its consumption by other castes. The text does state, however, that a person who eats the meat of an animal in this lifetime will be devoured by the very same one in the next world (5.55). But in the verse (5.56) immediately following this passage it clearly states that "There is no sin in eating meat" (BÜHLER 1886, 177). Elsewhere in the tome, harming a cow is discouraged (4.162) and slaughtering her (*govādhā*) is considered a crime (11.60).¹¹ The law book is, however, ambiguous on this point. As BROWN suggests, it supports *ahimsā* in some passages and denies it in others (1964, 247). Other law books are also ambivalent on the question of the murder of cows. The *Arthasāstra*, for example, says that selling meat is legal, but cattle are not to be slaughtered (2.26). In the Sanskrit epic literature as well, we find passages that protect cows, but condone other sorts of meat for consumption. The *Mahābhārata* states that he who kills a cow lives as many years in hell as there are hairs on the cow's body (13.74.4; also see BROWN 1964, 247–49).¹²

After his conversion to Buddhism (ca. 262 BCE), the great king Ashoka became a staunch advocate of *ahimsā*, as is attested by his famous "pillar edicts" (BASHAM 1959, 57, 219, 348). Pillar edict IV suggests that he had to institute laws in order to enforce this decree (NIKAM and MCKEON 1959, 31–33). After Ashoka's death, there was a resurgence of animal sacrifice, which went on as a popular observance until medieval times. By this time the Brahmanical literature began treating *ahimsā* as dogma, but the idea of practicing nonviolence on a mass scale was still met with popular resistance by the subaltern classes. It was not until Mahatma GANDHI utilized the cow as a "poem of piety" (1954, 3) for his nonviolent struggle during the freedom movement that her position and status as a sacred symbol was firmly implanted in Indian soil. As he wrote in 1921 to *Young India*, cow worship is a "worship of innocence" (GANDHI 1954, 3), which I take to mean a humbleness before all of nature.

At present, however, the epic texts—especially the *Mahābhārata*—as well as *purāṇas* (mythological texts) and a great deal of ancillary literature, are used to justify the sanctity of the cow as an orthodox position (BROWN 1964, 249). As an aside, let me say that we need only look at the recent resurgence of militant Hindu nationalism in India to begin grasping the complexity of the cow as a political symbol (cf. VAN DER VEER 1994, 83–94). Indeed, the cow has often been the cause of communal violence in the modern era (e.g., YANG 1980),¹³ yet the historical development of the cow as a symbol of welfare and compassion pervades the history of colonial India. Perhaps it was the rupture created by colonial rule that facilitated the need to “invent” (cf. HOBBSAWM and RANGER 1983) the cow as a Vedic object of veneration, one that endures even more vividly today.¹⁴

In summary, it is certainly appropriate to conclude the first section by suggesting that symbolic notions of the cow date as far back as the earliest written texts in India. Indeed, the idea may be pushed back to pre-Aryan times, as Ludwig ALSDORF (1961, 609) suggests.¹⁵ But the sanctity of the cow itself has a distinct social genealogy that must be understood historically to make sense. In other words, contrary to some pious accounts (e.g., CREMO and GOSWAMI 1995) that suggest a Vedic origin for cow protection, it was not until the early centuries of the Common Era (i.e., mid-Epic period) that the cow began to take on the aura of inviolable sanctity in India. The position achieves a strong doctrinal grounding during the fourth century CE when the *Mahābhārata* is completed, and *ahimsā* becomes firmly established as a doctrine during the post-Epic Paurāṇik period. From then on it diffused down to the popular level of piety. What this brief survey suggests is that the cow had a long period of prestige before its apotheosis because of her exalted status as a sacred symbol, which I define here in its conventional sense as anything standing for something other than itself. Not until the Christian era, however, was the cow revered in its own right (BASHAM 1959, 319).¹⁶

FIGURATIVE USES OF THE COW

Metaphor is a powerful device by which humans can create linkages between different levels of reality and meaning (cf. FERNANDEZ 1986, 28–72). For this essential reason, we must delve into the non-empirical ways in which the cow is thought about in Hindu India if we want to understand her important role in daily life and religious belief. Metaphorical uses of the cow are deeply ingrained in the Hindu psyche. Classical poetry evokes her eyes as an image of compassion and piety, while popular practice utilizes her products in an earthy utilitarian sense.¹⁷ The cow is a symbol that reifies faith and belief in Hindu practice on both the individual and community levels, thereby providing a common ground for worship. At the turn of the century,

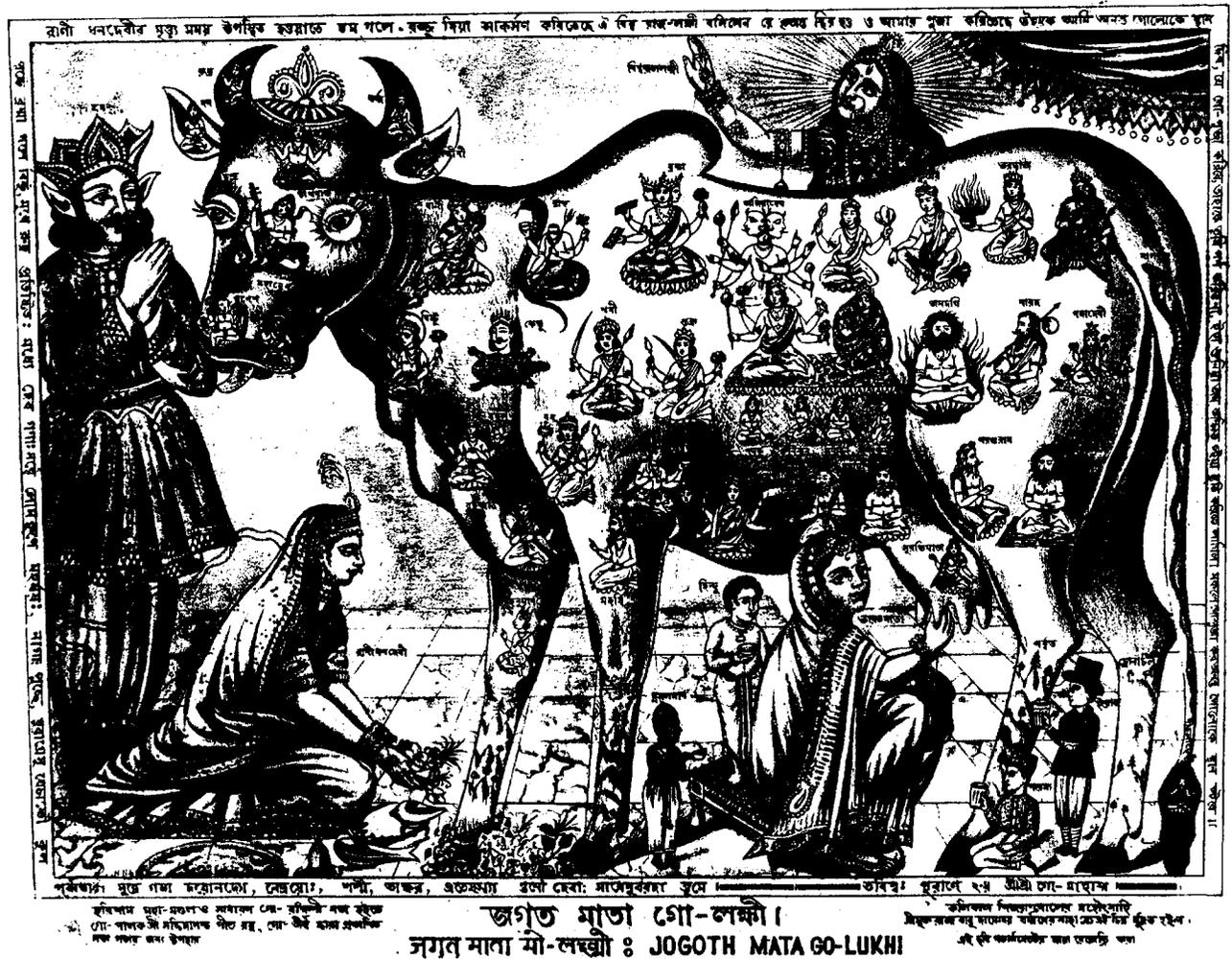
William CROOKE had already noticed that reverence for the cow is “the most powerful link which binds together the chaotic complex of beliefs which we designate as Hinduism” (1911, 279). Seeing it in this way helps us to accept the notion of the cow as a “key symbol” (cf. ORTNER 1973) in pan-Hindu culture, one that unites the diverse backgrounds of regional Hindus into one core set of beliefs and practices. To put it plainly, it is a central belief that the cow is good, whole, pure, and embodying all aspects of the cosmos within her. This idea is often portrayed visually in popular Hinduism, as is the case in the mid-twentieth-century Bengali print included here, which depicts the divine pantheon residing within her and all religious faiths offering her praise (see Plate 1). Such diverse uses of the cow are grounded in what I call “allegorical association.”

Allegorical association does not mean that the cow merely represents something, but rather that she connects with it in a mystical sense through metalinguistic parallelism. A list of Vedic synonyms called the *Naighaṇṭuka* of Yaska equates the cow with a wide range of things in the manifest universe. The Sanskrit word for cow (*go*) is listed as a synonym of earth, heaven, rays of light, speech, and singer, while classical lexicographer Hemachandra adds sun, water, eye, heavenly quarter, kine, thunderbolt, and arrow in his *Anekārthasaṃgraha* (1.6; cf. JACOBI 1914, 225). This seemingly diverse cluster of meanings falls within a semantic range united by a common myth of creation in which all of these things are first produced.

In a Vedic creation myth the cosmic waters from whence all originates are seen as cows. The divine hero, Indra, is sent to create order (*ṛta*) from the primordial, chaotic waters. They are being held captive in a cave guarded by Vritra. Indra slays Vritra and the waters gush forth like lowing cows. In the *R̥gveda* (1.32.2) we read: “Like lowing kine in rapid flow descending the waters glided downward to the ocean” (GRIFFITH 1976, 20). It just so happens that these cows are pregnant and give birth to the sun (=calf/*vatsa*). In this way, water, heat, and light are created. Law and order is established, and the rest of creation is completed. The earth is set in place and the vault of the sky is spread as a canopy above it, the heavenly bodies are put into motion, and the deities as well as the demigods and human beings are given their own functions (*vratas*). All things, according to this myth, came into existence like lowing cows (BROWN 1964, 251). Water in India is considered to be sacred and purifying. All life, of course, depends on water, since it purifies and heals. It provides both physical succor and spiritual purity. Water is thus holy, and because the cow is associated with its release, it too takes on this holiness.¹⁸

The cow, as suggested above, is a microcosm of the universe. As a spatial symbol her legs stand implanted at the four corners of the universe. In

PLATE 1: *Jagat Mātā Go-Lakṣmī*, a mid-twentieth-century poster from Calcutta depicting the “world mother cow of good fortune.” Based originally on the story of Rani Dhanadevi (doing *pūjā* while kneeling in front of the cow) in the *Bhaviṣya Purāna* (narrated around the border), this visual depiction narrates a national and political discourse not articulated in the text; namely, that everyone benefits from the cow. We see *Bhārat Mātā* (Mother India) milking the cow, while a Hindu and a Muslim stand behind her. An Englishman and a Parsi are in front of her, all eagerly awaiting a glass of milk. Yama, the god of death, stands with folded hands in front of the cow, and emerging from her side is *Vishvarajlakshmi*, telling Yama that he can make no claim upon anyone who worships the cow. Within the cow we witness the Hindu pantheon.



(Museum of New Mexico Collections, Museum of International Folk Art, Santa Fe. Photo by Blair Clark)

this posture she encompasses the four directions, which by definition includes engulfing all space. Firmly established on her four legs (*catuḥpāda*), the cow is seen as “complete and self-contained” (ZIMMER 1962, 13). As such, the cow represents perfection. This is a time when dharma (duty, law) is seen as functioning smoothly and efficiently. But such a condition is understood as only a temporary state of affairs, since the Hindu notion is that time is always moving through repetitive cycles—each of which consists of four *yugas* (ages)—one corresponding to each leg of the cow. As each *yuga* passes and dharma degenerates, one leg of the cosmic cow is lifted until she collapses. This collapse ends one major cycle. The universe is then renewed, dharma is restored, the cow regains her balance, and the process begins anew (ZIMMER 1962, 13).

Now, surely no human being could exist without having some sort of temporal and spatial framework upon which to base one’s conception of reality. But different societies construct and perceive space differently. Psychologists tell us that since people create space, it is culturally bound. Therefore, “space” as a phenomenal category can only remain nonexistent outside of given cultural contexts (HALLOWELL 1977, 131–32). For the Hindu the cow serves this function. Relating time, space, and law to the cow is a manner by which to add concrete meaning to an otherwise abstract cognitive category. On a theoretical level, then, the cow is a constant reminder of the age and place in which Hindus exist, as well as the moral order by which they must live.

Many agrarian cultures throughout the world have created narratives relating to the origin of agriculture and plants. Such stories confer fecundity upon the earth through their ritual telling. The earth’s fertility is often identified as feminine, and in many cases the earth is described as mother (cf. GILL 1987). This is also true in India. But added to these ideas is the cow’s association with the earth. The *Atharvaveda* contains the earliest version of this myth, but a more complete version is contained in the *Viṣṇupurāṇa*:

Pṛthu, son of Vena, having been constituted universal monarch, desired to recover for his subjects edible plants, which, during the preceding period of anarchy, had all perished. He therefore assailed the earth, which, assuming the form of a cow, fled from him, and promised to fecundate the soil with her milk. Thereupon Pṛthu flattened the surface of the earth with his bow, uprooting and thrusting away hundreds and thousands of mountains. Having made Svāyambhūva Manu, the calf, he milked the earth, and received the milk into his own hands, for the benefit of all mankind. Thence proceeded all kinds of corn and vegetables upon which people subsist now and always. By granting life to the

earth, Pṛthu was her father; and she thence derived the patronymic appellation Pṛthivī (daughter of Pṛthu). Then the gods, the sages, the demons, the Rākśasas, the Gandharvas, Yaksās, Pitr̥s, serpents, mountains, and trees took a milking vessel suited to their kind, and milked the earth of appropriate milk. And the milker and the calf were both peculiar to their own species. (JACOBI 1914, 225)

This passage suggests that in primordial times the milk of the cow provided sustenance for all classes of beings and fertilized the soil.¹⁹ Only through this cosmogonic act could food grow on the earth. All beings and things must thus honor the earth cow by milking her. This primal event serves as a paradigm or model for ritual action performed today. In one sense, every time a cow is milked the creation of plants is being reactualized. Each milker plays the role of Pṛthu in the original act of milking the earth. Through reenactment the creation is continually renewed in the repetition of the mythic paradigm (ELIADE 1959, 1–92).

Many more examples could be drawn from the vast corpus of Hindu mythology, but these few examples should suffice to illustrate the important mythological role of the cow as an embodiment of life itself. So far, I have suggested some of the deep associations that intimately merged the symbolism of the cow with some fundamental aspects of Hindu cosmology. We have seen that the cow represents two basic categories: space and time. Because of its association with these, and with primal events such as creation, the cow not only reflects Hindu reality but also embodies and defines it. Understanding the mythical aspects of the cow will aid us, then, in comprehending her ritual usage today.

RITUAL USES OF THE COW AND HER PRODUCTS

Śrī, the goddess of Fortune, who had left the demons for the gods, came to the cows, desiring to reside in them. They would, however, have nothing to do with the fickle deity, but in the end they were moved by her entreaties and consented to honour her: “Do thou live in our urine and dung; both these are sacred, O auspicious goddess!”

(JACOBI 1914, 225)

The modern concern for ritual purity in India has deep roots.²⁰ I suggested earlier that the products of the cow were offered as oblations (*havis*) for the Vedic sacrifice. The elements of the cow were chosen for this purpose because of their purity. *Pañcagavya*, the five products of the cow (i.e., milk, curd, clarified butter, urine, and dung), is viewed by Hindus as the purest

substance available for ritual use. This is because, as the anthropologist Edward HARPER, writing about the Havik Brahmans, has reported, cows are seen as deities or inhabited by deities (1964, 151–52). Because the cow is a theophany, her feces (*gobar*) is purer than any other kind, as is witnessed by the virtually daily cleansing of floors throughout village India with its dung. In his research on *gośālās* (cow shelters) in the sacred city of Banaras, cultural geographer Deryck LODRICK confirms Harper's statement by noting that his informants felt that 330 million gods reside in every atom of the cow (1979, 242).²¹ When I inquired about the ritual use of cow dung, I was quite often answered with a question: "How can anything from God (*bhagwān*) be impure (*aśuddha*)?"²²

Maintaining ritual purity is an ever-present concern for high-caste Hindus, and losing it is a fearful danger. Substance pollution is always a threat, so one must constantly be cautious about contact, consumption, commensality, etc. (cf ORENSTEIN 1965). If one's physical and spiritual essence becomes polluted, then a purification ritual using cow dung can take place in order to put the individual back at the level of purity that he or she was prior to being polluted. Thus, ritual status is relative to the degree of the actor's purity.

Cow dung is always used in some purificatory context. In Bengal, for example, a diluted cow dung mixture is used to replace water from the most sacred river in India, the *gaṅgā* (SIMOONS 1974, 26). The ethnographic literature suggests that such mixtures are used throughout India to clean polluted areas.²³ Any human bodily discharge or waste is considered polluting. Thus, contact with cut fingernails, as well as blood, urine, feces, and spittle, place one's ritual status in danger. Any area in which these elements might be found must be purified by the use of *gobar*. It is also used daily throughout India's villages to clean individual houses and places of worship, as mentioned above.

Cow dung ash is also considered highly purifying. This is due to the double effect of fire and dung. Since fire is regarded as purifying by Hindus, dung that is burnt becomes intensified in quality. Dung offered to a fire is a sacrifice (*yajña*), and, as such, its sacred quality is enhanced. This is one reason why Hindu ascetics (*sādhus*) smear their body with ash. It not only purifies them but aids in their identification with the great ascetic (*mahāyogī*) Shiva. There is a sense of female power (*śaktī*) gained from ash as well. The spiritual strength of Shiva's consort is transferred to the individual who is wearing the ash, since he is portrayed in iconography as smeared with ash.

Cow urine is also seen as a purifying and healing agent. The *Viṣṇudharmaśāstra* states that in the urine of cows dwells the *gaṅgājal* (Ganges water) (SIMOONS 1974, 21). Water from this sacred river is used for *pūjā* (worship)

everywhere within the sacred city of Banaras. Pilgrims (*yātrī*) take sealed containers of *gaṅgājāl* along with them when they return home. This is so that they may use it during daily rituals performed in their homes. But it is not rare to see a person, even in Banaras where the water is always available, reach out and wet their hand while a cow is urinating. This hand is then brought to the lips and then rubbed through one's hair. If this were done with the urine of any other animal the situation would obviously be highly polluting, but with the cow, pollution is not even a possibility.²⁴ The popular attitude is in accordance with the aforementioned statement from the *Dharmaśāstra*. Wherever *gaṅgājāl* is used, such as for purification of a well (SIMOONS 1974, 27), urine from a cow may be substituted.

Cow urine is also used as medicine. One ritual formula in the *Atharvaveda* (6.57.1–3) provides a cure for removing tumors with *gālāśa* (urine). Maurice BLOOMFIELD's translation of the commentary on the verse explains: "The practice consists of moistening the tumour with the foam of [cow's] urine, throwing the urine itself upon it; next, washing it off..." (1897, 489). Cow urine is also used in the making of *gorochanā*, a tonic used primarily to cure "spirit diseases" (SIMOONS 1974, 27, 33). Using *gorochanā* is said to drive out the *bhūt* (spirit) that is causing the disease. HARPER reports that among the Havik Brahmans, ritual objects such as a *yantra* (a medal with mantras inscribed on it to ward off spirits) worn around the neck, are kept pure by sprinkling it with cow urine (1964, 168).

Cow dung and urine may be used as a mixture, and in this form it is often taken internally as a cure-all for purificatory reasons. But by far the most powerful purificatory agent is the *pañcagavya* mentioned earlier. Since each derivative of the cow is pure in and of itself, the combined effect of the "five products" is greater than that of any other. The use of *pañcagavya* in India today is widespread. It is held that this concoction "has the capabilities of cleansing comparable to those of fire and water from the Ganges and other holy rivers" (SIMOONS 1974, 28).

Examples of this type are numerous, and could fill a complete volume.²⁵ The ones already given, however, will suffice for the intended purpose of this essay. The paradox here is a curious one. In all other contexts, feces and urine are seen as highly polluting, but yet that of a cow is seen as sacred and pure. This belief and the behaviors evoked by it, can only be seen as a continuing part of the process that led to the gradual sanctity of the cow. It is not possible to understand the symbolic power of the cow and her elements without placing the whole complex of ideas associated with her in a specific ritual and mythical galaxy of meaning. Devoid of these dimensions, the cow would have no special religious connotations. She would be, like the water buffalo, just another beast of burden.

If we want to understand the sacred meaning of the Indian cow, and why it was chosen for apotheosis, we cannot overlook her role in the religious context. Moreover, seeing her in a symbolic light would enable us to understand her potential role as a symbol of ecology, which has, by the way, been the agenda of the International Society for Kṛṣṇa Consciousness (cf. CREMO and GOSWAMI 1995). The cow is first and foremost a religious symbol. Attempting to explain her sanctity through any other means falls short of the overall goal, for as some historians of religions tell us, the category of the sacred is *sui generis*, and as such is irreducible to other categories of social behavior. While I do not completely agree with this position,²⁶ the stories, myths, and ritualistic behavior discussed in this essay cannot be pushed aside as what Harris refers to as mere “irrational, non-economic, and exotic aspects of the Indian cattle complex” (1966, 51). Instead, mythological associations and ritualistic functions must be seen as critical in a study of the cow in India. Rejecting the rich body of lore associated with the cow as superstitious or magico-religious might just be missing the essence of the sacred-cow controversy when viewed from the perspective of the average Hindu practicing his or her daily dharma.²⁷

CONCLUSION

Anthropology has for too long ignored doctrine in its study of the religions of literate societies such as India. However, in the 1990s, after the publication of *Writing Culture* (CLIFFORD and MARCUS 1986), a more open climate for the cultural analysis of texts emerged, signaling the discipline’s willingness to return to textual scrutiny. Given the fact that the cow is such a powerful and pervasive image in India, it would be unwise to separate ecology from theology in this instance. Textual legitimacy is, of course, only one aspect of any given phenomenon. However, it is a crucial one, for it allows for the canonization of a given concept or practice. If we are to construct a holistic understanding of the cow in India, we need to broaden the scope of study by applying a hermeneutic method to the problem of the cow’s apotheosis, which I have outlined above, for no theory can claim precedence over others in the interpretive marketplace.²⁸ Only by seeking out multiple interpretations of bovine divinity can we hope to derive an overall, multidisciplinary picture of the cow in India, without excluding data that may be able to shed some light on the nature of the cattle complex in India.

Understanding the role of the cow from a symbolic perspective, as well as from an ethnographic one based on participant observation, might allow us to draw on her historically traceable apotheosis to serve as a powerful symbol for Indian ecological awareness in the sense GANDHI described when he wrote that “Man through the cow is enjoined to realize his identity with

all that lives" (1954, 3). Without getting enmeshed in what Stephen ELKINS (1989-1990) has termed the "politics of mystical ecology," perhaps this would allow for the development of a nonsectarian approach to confront the ecological crisis that faces India at present. Of course, this predominantly Hindu symbol would still need to be translated in a way that would empower all Indians who share the same "ecological ethnicity," be they Hindus, Muslims, Jains, Parsis, Sikhs, Christians, Jews, Dalits, or indigenous peoples. The cow alone can not save India's threatened environment, but she may provide a focus for further musing on mankind's spiritual relationship to nature.²⁹

NOTES

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1. In this sense applied theology parallels the concerns and interests of the deep ecology movement, which seeks "a new metaphysics, epistemology, cosmology, and environmental ethics of person/planet" (DEVALL 1980, 299). In other parts of the world, such as in Thailand (cf. DARLINGTON 1998), the use of religion for ecological goals is already well under way.

2. The idea of a "national cow" is not new, as is evinced in pre-Independence popular posters of *jagat mātā go lakṣmī*, the "world mother cow of good fortune," in which we witness people of all faiths partaking in the products of the cow. See Plate 1.

3. The political approach is a most intriguing one that I can not delve into here. But it is precisely in the political arena that the cow's religious symbolism and ritual use become most forceful for rhetorical purposes. In addition to the references cited, SIMOONS (1973) is useful for understanding the role of the cow in politics, as is PEREL (1965).

4. HARRIS's position (1965; 1966; 1978, 6-27) is primarily a Marxist one, but as many critics have pointed out, it is a misused application of Marxism for the purpose of what FRIEDMAN (1974) has termed "vulgar materialism." Moreover, the controversy emerged at a time when ecology and culture were being explored within a systems analysis paradigm. But as FREILICHI (1967, 40) points out, the ecological approach to culture can devolve into "barren demography" and "geographic determinism." On systems analysis in general, see RODIN, MICHAELSON, and BRITAN (1978).

5. A balanced treatment of the issue based on over twenty years of interdisciplinary research is geographer Frederick J. SIMOONS's 1994 study (see pp. 103-43).

6. This is not to say that the cow did not have any significant economic importance, for the earliest written evidence suggests the contrary (SRINIVASAN 1979, 17-25). However, SRINIVASAN (1979, 1) points out that the term cow "is mentioned twice as often in ritual and mythological contexts as in economic contexts."

7. In this section I draw primarily on the works of ALSDORF (1961), BROWN (1957, 1964), CROOKE (1911), JACOBI (1914), and SRINIVASAN (1979). But see also EICHHINGER FERRO-LUZZI (1985). In the next two sections I rely on the voluminous mythographic and anthropological literature, as well as on my own observations.

8. For the most extensive study of Vedic sources in relation to the cow, see SRINIVASAN (1979).

9. The theory of Aryan invasion has, of course, been challenged recently by a school unconvincingly claiming the indigenous origin of Aryans. The debate, however, is beyond the scope of this paper. For the alternative point of view, see RAJARAM and FRAWLEY (1995).

10. The relationship between *ahimsā* and cows in India during the life of Gandhi is explored further in SCHNEIDER (1948).

11. The *Atharvaveda* (10.13.56) adds that even kicking a cow is a sin!

12. More on the cow in Manu, Vyasa, and the *Mahābhārata*, can be found in MACKENZIE BROWN 1968, 33, 42–43, 39, 71 and 74, and 166 respectively.

13. For an extended case study of the cow and social conflict in South Asia, see ROY (1994).

14. HOBBSAWM and RANGER (1983, 4) contend that the invention of tradition is most apparent under adverse conditions. As they write, invention occurs most frequently “when a rapid transformation of society weakens or destroys the social patterns for which ‘old’ traditions had been designed.”

15. “Es bleibt wohl kaum eine andere Antwort übrig als die, dass sie zu jenen vorarischen, wenn man will ‘ur-indischen’ Elementen gehört die, durch die arische Eroberung zunächst verdrängt und für lange Zeit überdeckt, allmählich wieder an die Oberfläche kommen und in ihrer immer stärkeren Durchsetzung eben den Wandel des Ariers zum ‘Hindu’ bewirken.”

16. However, an earlier generation of scholars understood the status of the cow in a more ancient light. A. B. KEITH, for example, citing the *Atharvaveda* (12.4.5), asserts that the cow’s sacred character in the text “points to that animal having become in itself an object of worship” (1925, 192). This conflicting opinion, now revised by the more recent scholarship drawn upon in this essay, should suggest the earlier complicity of Orientalists in forging a nationalist rhetoric around the cow. This is an intriguing topic that can not be taken up here. But see TRAUTMANN (1997) for a detailed study of the dialogic construction of Orientalist knowledge in colonial India.

17. In addition, popular belief associates cow with mother. As SAX (1996, 64) notes, “Cows are associated with mothers because they give milk; people refer to them as mothers in colloquial speech; thus to abuse a cow is like abusing one’s own mother.” In her analysis of Vedic similes (*upamānas*), SRINIVASAN (1979, 37–55) provides a number of ancient precedents for this contemporary understanding (see especially p. 45).

18. For more on this creation myth, see SRINIVASAN 1979, 82–88.

19. The notion of fertilizing soil with milk is also related to the “self-milking cow” motif in the Hindu tradition. For an extensive study of this theme, see EICHINGER FERRO-LUZZI (1987).

20. I do not wish to make too much of this point here, other than to note that the emphasis placed on purity and social hierarchy by DUMONT (1980) has influenced much thinking about caste structure and ritual performance in India. Although his major contention is overstated, there are still those who defend his position on the basis of contemporary ethnographic data (e.g., FITZGERALD 1996), while others argue cogently against it in terms of the multivocalic nature of the concept of purity in antiquity (e.g., OLIVELLE 1998). Whatever the case may be, there can be no denying that a concern for ritual purity is an important factor in everyday life among Hindus.

21. See also LODRICK’s lengthier study published in 1981. On this point, BEALS (1974, 39) writes, “Animals are also ranked in the spiritual hierarchy. Cattle, who serve as the home of the gods and also give milk and pull plows, stand highest.”

22. The Sanskrit textual vocabulary for the purity/impurity dichotomy is quite vast, as is suggested by OLIVELLE (1998, 192–209). For an anthropological study of the “grammar” of

this vocabulary, see ORENSTEIN 1968.

23. BABB (1975, 48–49), for example, writes that in Chhattisgarh “Certain substances or things seem to have the ability to ameliorate pollution directly. Cow dung appears to have this property, and is widely used as an agent of purification.”

24. This is not, of course, the case with Muslims. I remember very clearly an incident in Banaras during 1981 when I was accompanying a Muslim friend to his local mosque to perform *namāz*. Along the way, we passed through a narrow *gali* (alley) in which a cow was urinating. Unfortunately for him, some of the urine splattered on his pant leg, and he insisted that we return home so that he could bathe and change clothes before performing prayers in his place of worship.

25. DAS (1953) and MARGUL (1968) contain an assortment of other rituals associated with cows on the popular level.

26. See, for example, the powerful argument against phenomenology by PENNER (1970). For a recent and cogent critique of the notion of *sui generis*, see MCCUTCHEON (1997).

27. I am aware that the term *dharma* has a long and nuanced history in Indian thought (HALBFASS 1988, 310–48), but here I use it in its general, everyday sense to refer to an individual’s daily religious duty.

28. Holism, however, may be an ideal not attainable in the lived world. SIIRADER-FRECHETTE (1996, 64) recently has proposed the viable notion of an integrated position she terms “hierarchical holism,” based on three principles: “(1) that it is based on a metaphysical rather than merely a scientific notion of the biotic community; (2) that it relies on an ethics that is both anthropocentric and biocentric; and (3) that it includes some second-order ethical principles capable of adjudicating conflicts among human versus nonhuman interests.”

29. Indeed, much of the literature on the cattle complex in India suggests that “cow protection” may actually be a detriment to the physical environment. Explaining the cow symbolically, then, is a major challenge for humanists, as SCIIWABE (1978) has pointed out.

REFERENCES CITED

AGARWAL, Anil

2000 Can Hindu beliefs and values help India meet its ecological crisis? In *Hinduism and ecology: The intersection of earth, sky and water*, eds. A. Sharma and C. Chapple 165–82. Cambridge, MA: Harvard University Press.

ALLCHIN, Bridget and Raymond ALLCHIN

1982 *The rise and fall of civilization in India and Pakistan*. Cambridge: Cambridge University Press.

ALSDORF, Ludwig

1961 Beiträge zur Geschichte von Vegetarismus und Rinderverehrung in Indien. *Abhandlungen der geistes- und sozialwissenschaftlichen Klasse von der Akademie der Wissenschaften und der Literatur in Mainz* 6: 557–625.

APPFEL-MARGLIN, Frédérique and Pramod PARAJULI

2000 “Sacred grove” and ecology: Ritual and science. In *Hinduism and ecology: The intersection of earth, sky and water*, eds. A. Sharma and C. Chapple, 291–316. Cambridge, MA: Harvard University Press.

AZZI, Corry

1974 More on India’s sacred cattle. *Current Anthropology* 15: 317–21.

BABB, Lawrence. A.

1975 *The divine hierarchy: Popular Hinduism in central India*. New York: Columbia University Press.

- BAKHTIN, Mikhail M.
1981 *The dialogic imagination: Four essays*. Austin: University of Texas Press.
- BASHAM, A. L.
1959 *The wonder that was India*. New York: Grove Press, Inc.
- BEALS, Alan
1974 *Village life in south India*. Chicago: Aldine Publishing Company.
- BLOOMFIELD, Maurice, trans.
1897 *Atharva Veda*. Sacred Books of the East 42. Oxford: Clarendon Press.
- BOURDIEU, Pierre
1977 *Outline of a theory of practice*. Cambridge: Cambridge University Press.
1989 Social space and symbolic power. *Sociological Theory* 7(1): 14–17.
- BROWN, Norman W.
1957 The sanctity of the cow in Hinduism. *Madras University Journal* 28: 29–49.
1964 The sanctity of the cow in India. *The Economic Weekly* (Bombay). Annual Number 245–55.
- BÜHLER, Georg, trans.
1886 *The laws of Manu*. Sacred Books of the East 25. Oxford: Clarendon Press.
- CLIFFORD, James and George MARCUS, eds.
1986 *Writing culture: The poetics and politics of ethnography*. Berkeley: University of California Press.
- CREMO, Michael A. and Mukunda GOSWAMI
1995 *Divine nature: A spiritual perspective on the environmental crisis*. Los Angeles: The Bhaktivedanta Book Trust.
- CROOKE, William
1911 The veneration of the cow. *Folk-Lore* 23: 275–306.
- DARLINGTON, Susan M.
1998 The ordination of a tree: The Buddhist ecology movement in Thailand. *Ethnology* 37(1): 1–16.
- DAS, S. K.
1953 A study of folk cattle rites. *Man in India* 33: 232–41.
- DEVAL, Bill
1980 The deep ecology movement. *Natural Resources Journal* 20: 299–322.
- DIENER, Paul, Donald NONINI, and Eugene E. ROBKIN
1978 The dialectics of the sacred cow: Ecological adaptation vs. political appropriation in the origins of the Indian cattle complex. *Dialectical Anthropology* 3: 221–41.
- DUMONT, Louis
1980 *Homo hierarchicus: The caste system and its implications*. Chicago: University of Chicago Press.
- DUNDES, Alan
1997 *Two tales of crow and sparrow: A Freudian folkloristic essay on caste and untouchability*. Lanham: Rowman and Littlefield Publishers, Inc.
- EICHINGER FERRO-LUZZI, Gabriella
1985 Divieti alimentari e sacralità del bovino in India. *L'Uomo* 9: 161–70.
1987 *The self-milking cow and the bleeding lingam: Criss-cross of motifs in Indian temple legends*. Wiesbaden: Otto Harrassowitz.
- ELIADE, Mircea
1959 *Cosmos and history: The myth of the eternal return*. New York: Harper and Row, Publishers.
- ELKINS, Stephen
1989–1990 The politics of mystical ecology. *Telos* 83: 52–70.

- FERNANDEZ, James W.
1986 *Persuasions and performances: The play of tropes in culture*. Bloomington: Indiana University Press.
- FITZGERALD, Timothy
1996 From structure to substance: Ambedkar, Dumont and Orientalism. *Contributions to Indian Sociology* 30: 273–88.
- FREILICH, Morris
1967 Ecology and culture: Environmental determinism and the ecological approach in anthropology. *Anthropological Quarterly* 40: 26–43.
- FRIEDMAN, Jonathan
1974 Marxism, structuralism, and vulgar materialism. *Man* 9: 444–69.
- GANDHI, Mohandas K.
1954 *How to serve the cow*. Ahmadabad: Navajivan Publishing House.
- GEERTZ, Clifford.
1980 Blurred genres: The reconfiguration of social thought. *The American Scholar* 49: 165–79.
- GILL, Sam
1987 *Mother earth: An American story*. Chicago: University of Chicago Press.
- GLUCKLICH, Ariel
1997 *The end of magic*. New York: Oxford University Press.
- GRIFFITH, Ralph T. H., trans.
1976 *The hymns of the Rgveda*. Delhi: Motilal Banarsidass.
- HALARNKAR, Samar.
1997 The rivers of death. *India Today* 15 January: 118–23.
- HALARNKAR, Samar and Subhadra MENON
1996 Gasping for life. *India Today* 15 December: 38–47.
- HALBFASS, Wilhelm
1988 *India and Europe: An essay in understanding*. Albany: State University of New York Press.
- HALLOWELL, Irving A.
1977 Cultural factors in spatial orientation. In *Symbolic anthropology: A reader in the study of symbols and meanings*, eds. J. J. Dolgin, D. S. Kennitzer, and D. M. Schneider, 131–50. New York: Columbia University Press.
- HARPER, Edward. B.
1964 Ritual pollution as an integrator of caste and religion. In *Religion in South Asia*, ed. E. B. Harper, 151–96. Seattle: University of Washington Press.
- HARRIS, Marvin
1965 The myth of the sacred cow. In *Man, culture, and animals*, eds. A. Leeds and A. P. Vayda, 217–28. Washington: American Association for the Advancement of Science.
1966 The cultural ecology of India's sacred cattle. *Current Anthropology* 7: 51–66.
1978 *Cows, pigs, wars, and witches: The riddles of culture*. New York: Vintage Books.
- HESTON, Alan
1971 An approach to the sacred cow of India. *Current Anthropology* 12: 191–209.
- HOBBSAWM, Eric and Terence RANGER
1983 Introduction: Inventing traditions. In *Invention of Tradition*, eds. E. Hobsbawm and T. Ranger, 1–14. Cambridge: Cambridge University Press.
- HOPKINS, Thomas J.
1971 *The Hindu religious tradition*. Belmont, CA: Wadsworth Publishing Company.

- HULTKRANZ, Åke
 1966 An ecological approach to religion. *Ethnos* 31: 131–50.
- HUME, Robert E. trans.
 1977 *The thirteen principal Upanishads*. Madras: Oxford University Press.
- JACOBI, Hermann
 1914 Cow (Hindu). In *The encyclopedia of religion and ethics*, ed. J. Hastings, vol. 4, 224–26. New York: Charles Scribner's Sons.
- KEITH, Arthur B.
 1925 *The religion and philosophy of the Veda and Upanishads*. vol. 1. Cambridge, MA: Harvard University Press.
- LODRICK, Deryck
 1979 On religion and milk bovines in an urban setting. *Current Anthropology* 20: 241–42.
 1981 *Sacred cows, sacred places: Origins and survivals of animal homes in India*. Berkeley: University of California Press.
- MACKENZIE BROWN, D.
 1968 *The white umbrella: Indian political thought from Manu to Gandhi*. Berkeley: University of California Press.
- MARGUL, Tadeusz
 1968 Present-day worship of the cow in India. *Numen* 15: 63–80.
- MCCUTCHEON, Russell
 1997 *Manufacturing religion: The discourse on sui generis religion and the politics of nostalgia*. New York: Oxford University Press.
- MISHRA, S. N.
 1979 Comment on: Questions in the sacred-cow controversy, by F. J. Simoons. *Current Anthropology* 20: 484–85.
- NELSON, Lance, ed.
 1998 *Purifying the earthly body of god: Religion and ecology in Hindu India*. Albany: State University of New York Press.
- NIKAM, N. A. and Richard MCKEON, eds. and trans.
 1959 *The edicts of Aśoka*. Chicago: University of Chicago Press.
- ODEND'HAL, Stewart
 1979 Comment on: Questions in the sacred-cow controversy, by F. J. Simoons. *Current Anthropology* 20: 485.
- OLIVELLE, Patrick
 1998 Caste and purity: A study in the language of the dharma literature. *Contributions to Indian Sociology* 32: 189–216.
- ORENSTEIN, Henry
 1965 The structure of Hindu caste values: A preliminary study of hierarchy and ritual values. *Ethnology* 4: 1–15.
 1968 Toward a grammar of defilement of Hindu law. In *Structure and change in Hindu society*, eds. M. Singer and B. S. Cohn, 115–31. New York: Wenner-Gren Foundation for Anthropological Research.
- ORTNER, Sherry
 1973 On key symbols. *American Anthropologist* 75: 1338–46.
- PENNER, Hans
 1970 Is phenomenology a method for the study of religion? *Bucknell Review* 18: 29–54.
- PEREL, Anthony
 1965 The political symbolism of the cow in India. *Journal of Commonwealth Political Studies* 7: 179–203.

- PFEIFFER, John E.
1977 *The emergence of society: A prehistory of the establishment*. New York: McGraw-Hill Book Company.
- RAJARAM, Navaratna S. and David FRAWLEY
1995 *Vedic 'Aryans' and the origins of civilization*. Québec: World Heritage Press.
- ROBB, Peter G.
1992 *The evolution of British policy towards Indian politics 1880–1920: Essays on colonial attitudes, imperial strategies, and Bihar*. New Delhi: Manohar.
- RODIN, Miriam, Karen MICHAELSON, and Gerald M. BRITAN
1978 Systems theory in anthropology. *Current Anthropology* 19: 747–53.
- ROY, Beth
1994 *Some trouble with cows: Making sense of social conflict*. Berkeley: University of California Press.
- SAX, William
1996 Hinduism: Reverence for the natural world. In *Can humanity survive? The world's religions and the environment*, ed. J. Veitch, 51–68. Auckland: Awareness Book Company Ltd.
- SCHNEIDER, Burch H.
1948 The doctrine of *ahimsa* and cattle breeding in India. *Scientific Monthly* 67: 87–92.
- SCHWABE, Calvin W.
1978 Holy cow—provider or parasite? Problem for humanists. *Southern Humanities Review* 13: 251–78.
- SHRADER-FRECHETTE, Kristin
1996 Individualism, holism, and environmental ethics. *Ethics and the Environment* 1(1): 55–69.
- SIMOONS, Frederick J.
1973 The sacred cow and the Constitution of India. *Ecology of Food and Nutrition* 2: 281–96.
1974 The purificatory role of “The Five Products of the Cow” in Hinduism. *Ecology of Food and Nutrition* 3: 21–34.
1979 Questions on the sacred-cow controversy. *Current Anthropology* 20: 467–93.
1994 *Eat not this flesh: Food avoidances from prehistory to the present*. Madison: University of Wisconsin Press.
- SRINIVASAN, Doris
1979 *Concept of the cow in the Rigveda*. New Delhi: Motilal Banarsidass.
- TRAUTMANN, Thomas
1997 *Aryans and British India*. Berkeley: University of California Press.
- VAN DER VEER, Peter
1994 *Hindu nationalism: Hindus and Muslims in India*. Berkeley: University of California Press.
- WHEELER, Mortimer
1953 *The Indus civilization*. Cambridge: Cambridge University Press.
- WILKINS, W. J.
1978 *Hindu mythology*. Calcutta: Rupa and Company.
- YANG, Anand
1980 Sacred symbol and sacred space in rural India: Community mobilization in the “Anti-Cow Killing” riot of 1893. *Comparative Studies in Society and History* 22: 576–96.
- ZIMMER, Heinrich
1962 *Myths and symbols in Indian art and civilization*. New York: Harper and Row.