

Do Animals Have Religion? Interdisciplinary Perspectives on Religion and Embodiment

Donovan O. Schaefer

Le Moyne College, Syracuse, USA

*Address for correspondence:
Dr Donovan Schaefer,
8-105 Comstock Ave.,
Syracuse, NY 13210, USA.
E-mail: doschaef@syr.edu*

ABSTRACT The field of religious studies has recently begun to explore a number of aspects of the relationship between animals and religion. The bulk of these explorations have been focused on reconsidering human ethical relationships with animals in light of religious values or exploring the textual and ritual meanings of animal bodies against the background of human religions. Another line of inquiry, the topic of this paper, looks at the religious experiences of animals themselves, and draws these questions into methodological conversations within the study of religion generally. This paper surveys a variety of approaches to animal religion from two disciplinary perspectives: comparative religion and cognitive ethology. From comparative religion, building on the work of Kimberley Patton, Jewish, Hindu, Buddhist, Creek, Cherokee, Christian, and Islamic understandings of the religious lives of animals are explored in turn. From cognitive ethology, two approaches are developed: a cross-species look at animal responses to death, building on the work of Marc Bekoff, and a specific look at religious practices within the order Primates. Ultimately, the paper concludes, the study of animal religion must proceed by thinking along two lines of recurring themes found throughout these accounts: the differences between animal bodies (what Jacques Derrida calls the “heterogeneous multiplicity” of animals) and the orientation of religious bodies to affect. Rather than thinking of religion as one thing, we must conceive of religion as multiple, corresponding to the multiplicity of embodied lifeways found among animals. And rather than thinking of religion as inextricable from belief, we must begin to explore the emotional patterns that make up religion among animals—human and nonhuman. These thematic anchors of animal religion have direct implications for the study of religion itself, especially in light of what Manuel Vásquez has called the “materialist shift” in religious studies.

Keywords: affect, animal religion, cognitive ethology, material religion, primatology



The first body we see in Ron Fricke's 1992 film *Baraka* is immersed in water: at the foot of a towering mountain snowdrift, a Japanese snow monkey bathes in a steaming hot spring. The

animal's dark eyes scan past the hovering frame of the screen, its reddish face dramatic and absorptive, then looks away, up towards the mountain peaks. It closes its eyes, and the film cuts to the title of the film—*baraka*, Arabic for “blessing”—over a drifting solar eclipse.¹

This early image sets up two visual motifs that are developed in conjunction over the course of the film: bodies and water. Human bodies meditate in solitude or peer out from windows and openings, their faces still and strange like that of the snow monkey. A monk tends a table of flickering candles. Bodies gather together in groups in cities, in villages, in fields and forests. Groups rock in motion, singing and dancing. Human bodies move in throngs at the Ka'aba in Makka, at the Wailing Wall, at the Church of the Holy Sepulchre, at a dervish house in Turkey. Flocks of birds and animals migrate over landscapes—flamingoes over African wetlands; impalas huddled together in a downpour on the veldt. Human bodies surge through cities; chicks surge through the culling channels of a factory farm. Shadows play across landscapes under time-lapse images of spinning stars. Water crashes against a stone arch at Big Sur. Waves become churning clouds. The towering Iguaza waterfalls of Argentina pound down. A Japanese gangster emerges from a bath, his skin a canvas of tattoos, scales meshed with bodies. Men and women wash and pray in the Ganges beneath the ghats of Varanasi at sunrise. A body is cremated on the bank. Lotus leaves holding candles are set adrift on the river.

This network of images elicits a line of continuity between the religious expressions of humans and the behavior of animals. By emphasizing the biological interrelatedness of all animal life—drawn at the very outset by the almost-human lines of the macaque's face—Fricke's *Baraka* prompts us to ask what aspects of our own embodied existence are shared with other bodies—other animals. If we accept the basic premise of evolutionary zoology, that we are in what Scott McVay, quoting Melville, calls “a siamese connexion with a plurality of other mortals” (1993, p. 5), or that, as Frans de Waal has asserted, “there must at some level be continuity between the behavior of humans and that of other primates” (1997, p. 1), we need to consider the possibility that other primates—and perhaps entire other orders, classes, or phyla of animals—possess homologues of what we name “religion” in human bodies. Along these lines, this paper will review two disciplinary perspectives on animal religion: comparative religion and contemporary cognitive ethology. Surveying the recurrent themes of these perspectives, it will argue that to explore animal religion, we will need to constitute our methodological questions about the religion of animals (human and nonhuman) around two foci, affect and difference.

The question of what “religion” means is complex, and to attempt to devise a single answer is no longer a productive exercise. That project assumes that the word has a fixed point of origin, a moment where the pin of the term “religion” first punctures the butterfly of religion as such and sticks it to a board. It assumes that the meaning of the term, since it gained currency in the English language four hundred years ago, has not changed with time. It assumes that the transplantation of that word to new contexts, where it has encountered other, equally sophisticated conceptual vocabularies, has not led to a string of irreversible transformations and annexations (in both directions) that have left its meaning fundamentally heterogeneous, irreducible to a single meaning encompassing the worldwide breadth of its use.² Rather than essay an attempt to capture this untamed multiplicity, this paper will circle around three motifs in religious studies (traditions, the encounter with death, the encounter with natural forms) and close by reflecting on the implications of animal religion for the study of religion as a whole.

Traditional Views on Animal Religion

Within religious studies, a number of authors have begun the process of re-examining the relationship between religion and animals. This work includes ethical approaches, such as Lisa Kemmerer's comprehensive primer *Animals and World Religions* (2012), in which she asks, "[w]hat do sacred teachings tell us about our responsibilities to bluefin tuna and Black Angus cattle?" (p. 3). Other authors have elaborated theological instructions surrounding human-animal relations.³ Aaron S. Gross has called this the "pragmatic rigour"—a line of questioning within the study of animals and religion that focuses on the material conditions of animal bodies and traffics easily with related fields such as ethics and policy (2009, p. 121).

Other scholars working in the area of religion and animals examine what Gross calls the "ontological rigour": taking animality seriously helps us to understand our own worlds in new ways—how it is that animals help to fashion the construction of the meaning of "human," for instance. This, indeed, is the project of what Celia Deane-Drummond and David Clough refer to as "creaturely theology"—viewing humans as creatures alongside other features of Creation in assessing our relationship with God (2009, p. 1). A third "rigour" within the subfield of animals and religion as defined by Gross is the "structural rigour," which looks at systems of meanings that are attached to animals in various religious traditions. This approach is often taken by textual, folklore, and ritual studies.⁴

In the process of elaborating these three rigors, some scholars have begun to explore a new question, perhaps most closely related to the ontological approach: the affirmation of animal bodies as *religious* by the world's religious traditions. Whereas the pragmatic and structural rigors lead into a variety of ethical, historical, textual, and related questions, I will show here that the question of whether animals have religion channels directly into methodological and theoretical conversations within religious studies, casting new light on the relationship between religion and bodies. This section will bring together recent research on animal religion as *such* to draw out what I see as the crucial thematics for this question going forward.⁵

Jewish Traditions

The earliest entry in this small but emerging subfield of a subfield looking at animal religion is Harvard comparatist Kimberley C. Patton's "'He who sits in the heavens laughs': Recovering animal theology in the Abrahamic traditions" (2000). As Patton shows, traditional perspectives on the religious orientation of animals reveal subtle, recurring themes across cultures. Where animal bodies are seen as religious in their own right, there is an acute attention to embodied difference and to affect.

Patton begins with the Jewish textual tradition, reviewing a number of documents from the Torah and Talmud. The title of her essay is taken from Psalm 104:26, in which God is said to have created Leviathan "to sport with"; the later Talmudic commentators suggested that this interspecies cosmic play made up God's evening pastime. Patton is particularly interested in the relationship of affection that seems to exist between God and the sea creature. She points out that animals in Judaism frequently act as registers of a divine presence before humans become aware of it, such as Balaam's she-ass on the road to Israel (Num 22:23–27)—a capability also attributed to animals in Islamic traditions (2000, p. 414).

Not only do animals have sensuous relationships with God, however; Patton produces a catalog of examples to illustrate that animals participate in the consummately Abrahamic thematic of the sacred community. We see glimpses of this sense of pan-creaturely community under God in the Psalms (e.g., 104 and 150), but the most striking example in this column is

found in Jonah, where animals work with God to effect his purposes (the imprisoning fish, the messenger worm), and are also incorporated into the penance rituals of the Ninevites (3:7–8). It is not only the humans of Nineveh whose salvation is of interest to God, as God confirms to Jonah at the end of the book: “And should I not have concern for the great city of Nineveh, in which there are a hundred and twenty thousand inhabitants who cannot tell their right hand from their left—and also many animals?” (4:9). Patton points out that animals are members of the city created by God, and their *participation in this community* is meaningful to God—a sense corroborated by later texts in the Talmud where God responds to prayers and appeals for mercy from animals (2000, pp. 412, 419–420).

Patton also finds within the Jewish tradition a theme that recurs throughout the writings on animal religion: the animal voice matters to God in its *distinctiveness*. Here, Patton describes “the Philonic notion of the Image of God [that] includes all of creation in its multiplicity,” in which “God’s totality comprises and requires each species He has made in order to be complete, so a kind of theological necessity attends the praise of God by every creature” (2000, p. 418; cf. Psalm 148). This is why the creatures’ choir in the medieval Jewish liturgical song the *Pereq Širah* must contribute its own voices to supplement the human contribution to the praise of God (Patton: 2000, p. 419). Religious animals in the Judaic traditions participate in the same global divine community as do human bodies, but in their own *distinct* ways.

Hindu-Derived Traditions

Patton makes passing reference to animal religion in the array of Hindu⁶ karma-based systems. In karma religions, a belief in reincarnation and the transmigration of souls from human to animal bodies points to a radical ontological continuity between human and animal. Lance Nelson develops this notion in more detail, identifying a set of “immensely complex” attitudes towards animals among Hindus and within other Hindu-derived traditions (2006, p. 180). Nelson points out, for instance, that animals such as monkeys and cows are considered to have extraordinary sacred power in Hindu traditions, yet other animals such as elephants and dogs are neglected or disdained⁷ (Nelson 2006, p. 179).

At the same time, Nelson gathers a set of examples of animals attaining *mukti* (spiritual liberation). One such is Lakshmi, a cow who followed the 20th-century holy man Bhagavan Ramana Maharshi. Although the saint was usually impassive, his devotees reported that he offered unusually heartfelt expressions of affection toward Lakshmi. The Maharshi gave the animal a blessing as she died, and on her epitaph it states she attained *mukti*, liberation—“actual liberation,” in Ramana’s words (Nelson 2006, p. 187). From the *Bhagavata Purana*, Nelson retells the story of Gajendra, an elephant chief who utters a prayer for rescue from a crocodile, and is also granted *mukti* by Vishnu (2006, p. 187). Nelson also repeats two stories of dogs expressing devotion to gods and finding liberation (Nelson 2006, p. 188). Patton’s mention of “beasts as *bhaktas*,” ecstatic followers of deities mentioned, for instance, in the origin stories of the Kalahasti temple in Andhra Pradesh, fall into this same category (2000, p. 420 fn. 48).

Nelson is quick to point out that these stories are powerful precisely for trafficking in the unexpected and the out-of-the-ordinary—animals finding liberation (2006, p. 188). In Buddhism, there is a similar skepticism towards the spiritual accomplishments of animals. As Ian Harris points out, animals are not permitted to join the *sangha* monastic communities, nor can they engage directly with the teachings of the Buddha (Harris 2006, p. 208).

And yet, in all of these karmically-oriented traditions, there is a “sense of community with all sentient beings caught in the beginningless circle of *samsara*” (Harris 2006, p. 213). What

matters in Hindu traditions is that human and animal bodies are fundamentally wrapped up in the same religious economy, the “vast, unsupervised recycling plant” (Harris 2006, p. 207) of karma. In branches of the Hindu, Buddhist, and Jain traditions that focus on karma, the animal realm is collectively incorporated into the most profound machination of the cosmos: the progressus towards enlightenment. Animal bodies are not capable of the discipline to finally eliminate their karma, but they nonetheless manifest souls inhabiting distinct locations on the cosmic map, participating in the drama of souls according to their specially assigned roles. And these roles manifest often through special attention to affect—as with Lakshmi or the ecstatic animal *bhaktas* of Kalahasti.

Creek and Cherokee Traditions

David Aftandilian points out in “Towards a Native American theology of animals: Creek and Cherokee perspectives” (2011) that there is a rich opening in studies of many Native American traditions for new examinations of the relationship between religion and animal bodies. Within the Muskogee Creek and Cherokee perspectives, Aftandilian writes, animals are invariably represented as the central figures in cosmogonic sacred stories. Animals are therefore ontologically *prior* to humans, with commensurate importance and power: “humans are *weaker* than any other animal because we appeared last on the cosmological scene” (Aftandilian 2011, p. 195).

The Creek and Cherokee conceptions of the relationship between animal bodies and religion is deeper than this, however. Animals have their own souls and their own particular relationship with divine powers. Animals appeal to these powers for protection and justice, and participate in rituals such as the Green Corn ceremony (Aftandilian 2011, p. 197). They have their own afterlife, with “animal souls, like those of the Cherokee, travel to the Darkening Land (*Usunhi-yi*) after death” (Aftandilian 2011, p. 197). Ultimately, Aftandilian explains, building off of the work of Jean Chaudhuri, “all beings, human and nonhuman alike, are part of the same continuum of energy that is at the heart of the universe” (Aftandilian 2011, p. 197). Both Creek and Cherokee traditions stress an embodied interconnection with animals—a connection that can literally manifest in transitions between human and animal bodies (Aftandilian 2011, p. 198). The upshot of this is that animals are consummately religious bodies, participating in the same matrix of sacred relationships with land, with other creatures, and with spiritual beings as humans do—and sometimes with priority over them.

Christian Traditions

In Christianity, too, there is a buried, little-discussed tradition of animals participating in religious lifeways, affirmed by Denis Edwards’s reminder that in Revelation, “[t]he animals, insects and fish of our planet are imagined as sharing in the resurrection of the Lamb and joining in the great cosmic liturgy,” and thus are part of what he calls the “redemption in Christ” advanced by Christian theology (2009, p. 81). Laura Hobgood-Oster carries this further, examining the involved and long-standing relationship between animals and Christian saints. She describes how Paul the Hermit, the first solitary Christian monk, had animal companions during his retreats, as did many other subsequent saints (Hobgood-Oster 2007, p. 189; cf. Patton 2000, p. 416). Her most fascinating account is the story of Guinefort, a dog who was deemed a “saint” after he saved a child from a snake and was interred in a sacred forest in France. Although this saint was by no means orthodox,⁸ practitioners of the tradition evidently considered him an agent of sacred power; his shrine became a local pilgrimage destination for those in need of healing (Hobgood-Oster 2007, p. 196). This participation in religious networks,

as Patton notes, exceeds simple iconography. The animal in each of these narratives “is itself a conscious, moral subject, standing in real and complex relationship both to the sanctified mortal companion *and by implication, to the sanctifying Source*” (2000, p. 416). Hobgood-Oster concludes that “the sacred history, though often obscured, suggests that animals may indeed be counted among the holy ones in the Christian tradition” (2007, p. 198).

Patricia Cox Miller, in her “Adam, Eve, and the elephants: Asceticism and animality in Late Ancient Christianity”⁹ (in press), rounds out this picture. She points out that early Christian authors writing on asceticism tended to represent the animal dimension of human bodies as antithetical to their purposes. But as Miller goes on to elaborate, early Christian authors such as the 4th century Basil of Caesarea were also capable of representing animal bodies as invested in the currents of natural force—the *physis*—of humans that could be beneficial for achieving divine nature—“the hidden presence of God’s creative word” (in press).

Miller recounts a story from the *Physiologus* of elephant mating, which is taken to be representative of the sinless copulation of Adam and Eve prior to expulsion from Eden (in press). She suggests that this work builds on a tenet of Roman zoology—held by Pliny and Aelian—that elephants are ontologically similar to humans, and sometimes morally *superior* to us; they unfailingly, Miller writes, quoting Aelian, “worship the gods, whereas human beings are in doubt whether in fact there are gods, and, if there are, whether they take thought for us” (in press). These animal bodies are evoked in this tradition as examples of a superior animal proximity to the divine: “Rather than playing on the opposition between bestiality and reason,” Miller writes, “texts like the *Physiologus* envisioned a transfiguration of the body through animal signs, based on a nostalgia, a paradisaical wish to be like the elephants, a desire for a chaste intimacy with what animals know best, the body” (in press). Elephants here are religious beings of a higher order than humans, connected to the divine by their animal intuitions.

What Miller describes in these particular early Christian approaches to animals is a “sagacity that was natural and connected to instinct,” where instinct can be “summed up in the terms *phūsis* and *aisthēsis*”—“nature” and “sensation” (in press). This sense of animals as driven by instincts that naturally bring them into the fold of religious ways of being—an Aristotelian *physis*,¹⁰ a nearness to sensation—is drawn more sharply in the Christian theological tradition through Thomas Aquinas. As Willis Jenkins explains in *Ecologies of Grace: Environmental Ethics and Christian Theology* (2008), for Aquinas, animal bodies are invested with channels of “natural desire,” and in expressing these desires they fulfill a divine purpose—they “call upon God,” as suggested in Psalm 146 (Jenkins 2008, p. 118). Distinctively, in this vision, animal bodies express their religious being in singular ways, through bodily-specific channels. The hunt of the lion is the lion’s offering to God, as is the cry of the raven or the flight of the eagle: “all things,” Jenkins writes, “each in its own way, desire to attain the divine goodness” (2008, p. 118).

Furthermore, these creatures are connected to God through a particular configuration of *affect*. Patton quotes St. Bonaventure’s famous story of St. Francis and the birds: “One time when Francis was walking with another friar in the Venetian marshes, they came upon a huge flock of birds, singing among the reeds. When he saw them, the saint said to his companion, ‘Our sisters the birds are praising their creator’” (Patton 2000, p. 420). These animals (who do not flee when a saint enters their midst) bring the “reedy marsh” alive with “their *ecstatic* song—a supremely natural image” (Patton 2000, p. 421, my emphasis). As they fulfill their embodied religious orientation—to sing—they praise God, the saint says, and in doing so they find their own embodied ecstasy. Christianity thus acknowledges a host of ways in which animals, according to the unique physiological and affective configurations of their bodies, transact

with God. They are often the elephants in the room: unspoken and unacknowledged, but looming present in religion.

Islamic Traditions

Richard Foltz surveys a variety of Islamic perspectives on animals in his article “‘This she-camel of God is a sign to you’: Dimensions of animals in Islamic tradition and Muslim culture” (2006). Foltz suggests that although humans, from the Islamic viewpoint, have an undeniable special status in creation as God’s “vice-regents” (*khalifa*) on earth, animals are also decidedly more *similar* to humans in Islamicate conceptions than they are in many other religious traditions (Foltz 2006, pp. 150–151). For instance, the Qur’an states that all animals have souls (*nafs*), and some Muslim scholars have inferred from this that animals will be among the ranks of the resurrected on the Day of Judgment (Foltz 2006, p. 151).

It is on the basis of this affirmation of animal ensoulment that Islam details the particulars of animal religion. First, the Qur’an suggests that all of creation is in a state of “praise” of God—humans and animals alike. This praise need not be in the form of human language, for the Qur’an is explicit, too, that animals have their own languages (Foltz 2006, p. 151). Furthermore, the Qur’an asserts in Surah 6:38 that animals form communities: “There is not an animal in the earth, nor a flying creature on two wings, but they are communities (*umam*, *sg. umma*) like unto you” (Patton 2000, p. 410; Foltz 2006, p. 151). Foltz notes that Ahmad ibn Habit, a Classical Islamic jurist, “even surmised from this verse that since the Qur’an elsewhere states that ‘there never was a community (*umma*) without a warner [i.e., a prophet] having lived among them,’ then perhaps non-human animals also have prophets” (2006, p. 151; cf S 35:24). This, indeed, is why God, in a hadith of Abu Hurayrah, rebukes an earlier prophet for destroying a colony of ants: “Because one ant stung you, you have burned a whole community which glorified me” (cited in Patton 2000, pp. 410f). This is consonant with the affirmation in Surah 16 that animals can receive divine revelation: “And your Lord revealed to the bee, saying: make hives in the mountains, and in the trees, and in [human] habitations” (S 16:68; Foltz 2006, p. 151). The Qur’an implies that animal religiosity is constituted in part by the network of “instincts” that drive animal behavior—by their unique arrays of embodied impulses.

In keeping with this sense of animals as religious, some Islamic traditions also reference animal worship practices. Foltz quotes the Turkish Sufi master Bediuzzaman Said Nursi (1877–1960), who wrote:

Later, I lay down to sleep for the night. I looked; one of the cats had come. It lay against the pillow and put its mouth against my ear, and murmuring: “O Most Compassionate One! O Most Compassionate One!” in the most clear manner, as though refuting in the name of its species the objection and insult which had occurred to me [that the cats were lazy], throwing it in my face. (Foltz: 2006, p. 156)

Other cats, Nursi learns, say the same thing, and also “O Most Merciful!” Various animals were also said to go prostrate in the presence of the prophet (related by Abū Nu’aym and Bayhaqī, cited in Patton 2000, p. 415).

As Patton points out, though, the Qur’an states that animals in their beings each have their own, body-specific modes of worship: “Seest thou not that it is Allah Whose praises all beings in the heavens and on earth do celebrate, and the birds (of the air) with wings outspread? Each one knows its own (mode of) prayer and praise” (S 24:41; Patton 2000, p. 417). As with the worship through *physis* highlighted in the Christian tradition, Islam understands animal bodies as designed to praise God each in their own distinct ways.

Patton's framing of the question of animal religion calls attention to two particular motifs in these traditional accounts of animals expressing religion. The first is the multiplicity of animal religions. Patton describes a lecture she attended by Father Thomas Hopko, a dean of Saint Vladimir's seminary in the 1990s, on "the rabbithood of God," the divinity revealed in each rabbit:

he was directing our attention to the way in which a rabbit reveals something *unique* about who God is, some dimension of His being that is, in a word, rabbit. For no apparent reason other than joy, rabbits leap high into the air, twist their furry bodies, and kick out their feet in abandon. There is an aspect of God's Self that at creation expressed itself as a rabbit, and nothing can better reveal that particular aspect of the divine nature than a real, living rabbit. In some ways, we can compare this to Eastern ideas: the rabbit is more than just a rabbit, but is instead a metaphysical participant on the great playing field of the cosmos. (Patton 2000, p. 427)

For Hopko, God assumes different aspects through *different* animal bodies, all of which are bound together in a religious network oriented towards God. Patton points out that in the thought of the Muslim theologian Ibn 'Arabi, the sacred names of animals indicated by Adam reflect the "multidimensional essence of God" (Patton 2000, p. 433). There is a "*kaleidoscopic individuation*" of living animal beings in creation, each with a sacred name, each reflecting a different facet of God's being. With each individual animal, "something of God's inexhaustible nature is revealed, *something that would not be revealed if that particular creature did not exist*" (Patton 2000, p. 430, emphasis original). And each animal therefore prays to God, worships God, in its own way. "Each prayer is different," she writes, "yet each prayer *matters*" (Patton 2000, p. 418). Animal bodies are heterogeneous, but each refracts the being of God, and participates transactionally in that religious sphere.

The medium of this participation points to a second motif of Patton's work—one that emerges repeatedly in the available traditions on animal religion but only seldom is made explicit: affect. Patton suggests that even though we are cautioned to reject anthropomorphism both from certain scientists (who dispute the attribution of human qualities to animals) and theologians (who dispute the attribution of human qualities to God), there may be a common ground of animal and human being, what she calls our common patterning after God, the *theomorphism* of bodies (2000, p. 428). This principle is in fact entirely theologically consistent with the approaches listed above. Patton calls this "divine ipseity," "God's complete ontological self-sufficiency—His independent non-origination, and the way in which He makes everything and relates to everything in a completely reflexive way" (2000, p. 428). God participates in living beings fundamentally, and living beings are all created to praise and give glory to God.

This prevalent praising, Patton writes, is a "kind of self-referential hymnody" (2000, p. 429). Animals experience this drive as "a responsive *urgency*," "a chronic and abiding *impulse*" (Patton: 2000, pp. 413, 417, my emphasis), an *embodied instinct to praise*. The medium of this impulse, the circulation between God and animal body, is *affect*, represented in everything from the "joy" that God takes in playing with Leviathan to the embodied resonance we feel with the outstretched wings of birds in "prayer and praise": between animals and God there is an "interlocking metaphysics and [a] mutual joy: that of the great animal and that of the Creator" (Patton 2000, p. 433). Synthesizing the world's religious traditions, Patton concludes that animal religion is best understood not as belief, but as an experience, an emotion, an embodied process. For Patton, this affective, pre-cognitive encounter with God is also available

to human animals—as in her analysis of Jane Goodall's personal mystical encounter in Gombe (2000, p. 426; cf. Goodall and Berman 1999, pp. 71–73).

Patton's work draws out a particular thematics of all of these texts on animals as religious beings: there is a sense that animal bodies can encounter religion—and that this encounter is, indeed, theologically necessary in light of the doctrine of creation. More importantly, this encounter is very rarely doctrinal or conceptual. It is not framed in terms of animals “believing” in God. Rather, we see *affective* modes of religious being: animals are *praising* God, *feeling* God—each animal body uniquely attuned to God's presence, and each in its own way.

Patton closes her discussion of animal religiosity with a reflection on animal cognition and animal “free will,” asking whether or not animal religious responses are “instinctive” or “free,” and exploring the implications of this question for their religious being. Rather than pursuing these questions, I would suggest that the conversation about animal religion must be carried forward in the direction of a more attentive study of the *affective* configuration of animal bodies, further drawing out this latent theme in Patton's work. At the same time, animal religion must attend to animal difference by focusing on the biological heterogeneity of animal bodies. Animal religion, as this survey of religious texts shows, emerges in the tension between the common orientation of bodies towards affect *and* their physiological singularities.¹¹

Ethological Impressions of Animal Religion

These traditional religious perspectives on animal religion have a contemporary echo in the field of cognitive ethology. Ethology, the study of animals in their natural habitats, emerges in reaction to the early-20th-century behaviorist orthodoxy that suggested that animals could best be understood through laboratory research, and that animal minds are best conceived as opaque stimulus-response clusters. As Donald Griffin argued, laboratory studies can only offer experimental data on the level of generalizability of studies of humans living in prison camps—hence the imperative articulated by early ethologists such as Jakob von Uexküll, Niko Tinbergen, Heini Hediger, and Konrad Lorenz to study animals in the wild (Griffin 1984, p. vi). Ethologists reiterate Darwin's affirmation of the continuity between human and animal bodies in anticipating complex behaviors on the part of animals (von Uexküll 1957; Griffin 2006; Bekoff 2007).¹² Cognitive ethologists, writes Marc Bekoff, “hope to trace mental continuity among different species; they want to discover how and why intellectual skills and emotions evolve; and they want to unlock the worlds of the animals themselves” (2007, p. 30). Cognitive ethology thus enhances the classical ethological paradigm with a renewed attention to animal mentation, drawing on other disciplines such as psychology and cognitive science. Bekoff describes cognitive ethology as a strategy for “minding animals”: both presupposing that they have complex minds, experiences, motivations, and behaviors, and taking those complex worlds into account (2006, p. 462).

This complexity of animal worlds includes not just pure cognition, as the term “cognitive ethology” might suggest, but also, as Bekoff insists, a rich repertoire of embodied affects. In *The Emotional Lives of Animals* (2007), Bekoff writes that it is simply “bad biology” to reject the possibility of animal emotions¹³ (p. xviii). As far back as Darwin, evolutionists have affirmed that animal bodies and human bodies draw on related (not to say identical) emotional palettes. Bekoff has his own pieces of evidence to support the existence of animal affect, such as the efficacy of psychotropic drugs across animal species (2007, p. 10), but his most strident defense is the empirical fact that we see animals behaving in ways that are best explained by attributing emotions to them:

When animals express their feelings they pour out like water from a spout. Animals' emotions are raw, unfiltered, and uncontrolled. Their joy is the purest and most contagious of joys and their grief the deepest and most devastating. Their passions bring us to our knees in delight and sorrow. If animals didn't show their feelings, it's unlikely that people would bond with them. (2007, p. 19)

Cognitive ethology thus concerns itself not just with a pure "cognitive" dimension of animal bodies—although establishing the constantly overlooked and underestimated cognitive abilities of animals is a crucial corrective to the binary of reasoning humans and unreasoning animals.¹⁴ It also expressly considers the richness and variety of animal affects.

Although cognitive ethology thematizes the continuity of animal and human bodies, it, too, offers resources for theorizing animal difference. Griffin suggests that consciousness may be best understood not as a singular phenomenon grafted isomorphically into each animal body, but rather as a heterogeneous "umbrella concept" manifesting in different ways throughout the zoosphere (2006, p. 488). This feature of ethological theory goes back fully a century to von Uexküll, the progenitor of the ethological movement, for whom animals find themselves in particular *Umwelten*, "worlds." Each *Umwelt* is constituted by an array of salient sense-perception data available to the organism—such as the tick's famous "three beacons" of warmth, butyric acid, and large, mammalian bodies. Von Uexküll's *Umwelt* theory starts with the principle that "all animals, from the simplest to the most complex, are fitted into unique worlds with equal completeness" (1957, p. 11). Through a particular bodily configuration, each animal takes on a different worldly orientation.

The upshot of this is that cognitive ethology takes the experience of the animal in its *world* as central. Bekoff suggests that each animal has its own distinct set of experiences and priorities, related by a "branching bush" to other species. In looking at a dog, for instance, our terms of analysis must become "dogocentric." We must recognize that dog-joy is different from chimpanzee-joy (2006, p. 462). This extends not only to affects, but to intelligence itself: "Dogs are dog-smart," Bekoff writes, "and monkeys monkey-smart. Each does what is required to survive in its world" (2003, p. 91). All of this work is in anticipation of what Bekoff hopes will be a major "paradigm shift" in the comparative study of animal worlds—from the quantitative to the qualitative:

Rather than presuming that fish feel less than mice and that mice feel less than chimpanzees, or that rats aren't as emotional as dogs or wolves, or in general that animals feel less (and know less and suffer less) than humans, let's assume that numerous animals *do* experience rich emotions and *do* suffer all sorts of pain, perhaps even to a greater degree than humans. (2007, p. 22)

The imperatives for the study of animal religion posed by cognitive ethology thus parallel those found in our survey of world religions: an emphasis on embodied difference and on affect.

It is when we move from the theoretical background of cognitive ethology to its empirical contents, however, that we get our first crucial glimpses of animal bodies *exhibiting* religious behavior. Cross-species examples of religious behaviors are available on a number of topics. For instance, an expanding enterprise within cognitive ethology catalogs cross-species responses to death. Bekoff has a small library of examples in this column. He describes watching magpies respond to the death of one of their fellows, first by pecking at the body, then laying blades of grass beside it (Bekoff 2007, p. 1). Gorillas hold "wakes" for their companions, a practice so well established that zoos have formalized the process, inviting human

onlookers to attend; elephants stage funeral gatherings and express special interest in the bones of deceased relatives; llamas grieve through stillness (Bekoff 2007, pp. 65–69).

But Bekoff is most detailed in his accounts of grieving processes among canids. He recounts watching a fox burying another fox near his Colorado home: “She’d kick dirt, stop, look at the carcass, and intentionally kick again” (2007, p. 64). The process continues unevenly, only eventually resulting in the body completely buried—suggesting a more complicated affective exchange between living and dead bodies than would be permitted by labeling this an exercise of pure “instinct.” Wolves have been observed performing the same rite (Bekoff 2003, p. 17). Dogs are well known for becoming despondent, sometimes starving themselves to death, after the loss of their companions (Bekoff 2007, p. 66). Wolves respond similarly to losses within their pack, particularly their mates: they refuse to breed, travel long distances through new territory in solitude (Bekoff 2007, p. 62), and alter their howling routines¹⁵ (Bekoff 2007, p. 68).

What these reports of animal reactions to death reveal is a complex array of behaviors and responses that do not necessarily appear in popular understandings of animals, as when Richard Dawkins suggests, in his bestselling *Unweaving the Rainbow* (1998), that animals “are there to survive and reproduce” (p. 211). In fact, for Bekoff, “[m]uch happens in the complex lives of animals that we can’t see” (2007, p. 64): animal bodies are multidimensional, and their reactions to the world and to other bodies take complex forms. Where these reactions include a response to death, these forms can seem to overlap with recognizably religious human forms.

A second emerging approach to animal religion within cognitive ethology has been the focus on species clusters, such as the order Primates, which includes humans, apes, great apes, monkeys, and prosimians. As early as George B. Schaller’s *The Year of the Gorilla* (1964), the pioneering field biologist described evidence of monkeys (and wolves) climbing glaciers, where there was no food and no other material resources to be found. “Perhaps man,” Schaller suggested, “is not the only animal that climbs a mountain merely because it is there” (1964, p. 32). These early reports were contemporary with Jane Goodall’s published accounts of chimpanzee tool use, communication, and complex social structure, laying the groundwork for a more complex engagement with the question of primate religion.

In an interview with Goodall in 2001 (published in 2006), Paul Waldau and Kimberley Patton asked the famous primatologist to further comment on her description, in *Reason for Hope* (1999), of a “dance” the chimpanzees of Gombe perform at the base of a giant waterfall. Goodall described the dance as follows:

In the Kakombe Valley is a magnificent waterfall. There is a great roar as the water cascades down through the soft green air from the stream bed some eighty feet above. Over countless aeons the water has worn a perpendicular groove in the sheer rock. Ferns move ceaselessly in the wind created by the falling water, and vines hang down on either side. For me, it is a magical place, and a spiritual one. And sometimes, as they approach, the chimpanzees display in slow, rhythmic motion along the river bed. They pick up and throw great rocks and branches. They leap to seize the hanging vines, and swing out over the stream in the spray-drenched wind until it seems the slender stems must snap or be torn from their lofty moorings. For ten minutes or more they may perform this magnificent “dance.” Why? Is it not possible that the chimpanzees are responding to some feeling like awe? A feeling generated by the mystery of water; water that seems alive, always rushing past yet never going, always the same yet ever different. (Goodall and Berman 1999, p. 189)

They perform a similar dance during heavy rains—even though chimpanzees dislike being wet (Goodall 2006, p. 654). The intensity of the rain dance, Goodall says, increases with the strength of precipitation (1990, p. 9). The same dance has been reported during thunderstorms and heavy wind (Bekoff 2007, p. 62).

A related account, by Jill Pruetz and Thomas LaDuke, expands this repertoire further, describing a *fire* dance performed by savanna chimpanzees in Senegal. Most animals, Pruetz and LaDuke point out, flee fire: experiments show, for instance, that West African reed frogs will even flee the *sound* of a fire being played back to them (Pruetz and LaDuke 2010, p. 647). But humans have an evolutionary basis for their own fire management techniques in their ability to modulate their response to fire. Pruetz and LaDuke cite their own field observations in Senegal to demonstrate that chimpanzees have the same cognitive ability. Rather than fleeing fire, they leisurely move away from the blaze site in intervals, stopping to feed along the way (Pruetz and LaDuke 2010, p. 647).¹⁶

More significantly for our purposes, chimpanzees also seem to express fascination with the fire. Pruetz reported a completely new vocalization among the chimpanzees in response to wildfire¹⁷ (2010, p. 647). The chimpanzees climbed trees to watch fire, occasionally moving closer to the fire to inspect it in proximity. Most startling of all was Pruetz's note of a dominant male in the group "exhibiting a slow and exaggerated display 'toward' the fire"¹⁸ (2010, p. 648). Pruetz and LaDuke compare this "display" to Goodall's recorded "rain dance" (2010, p. 648). In their discussion, Pruetz and LaDuke point out that the chimpanzees must have been capable of cognizing the speed and direction of the potentially fast-moving wildfires: their response reflects an ability to "conceptualize" the fire's movement and react accordingly (2010, p. 649). It also seems to have elicited no distinct fear indicators among the chimps (Pruetz and LaDuke 2010, p. 648).

All of these behaviors demonstrate "the cognitive ability to adjust to a potentially harmful agent" (Pruetz and LaDuke 2010, p. 648), an adaptive set of cognitive mechanisms that enable a particular embodied relationship with fire. But I would go further than Pruetz and LaDuke and suggest that the fascination response of the chimpanzees—as well as the display response, echoing the rain dance—put the chimpanzee reaction to the fire not only in the register of conceptualization, but of *affective* resonance. Fire, like the crashing water and wind, seems to evoke a complex of feeling-motivated behaviors.

Another example of animal religion from primate ethology is described by Barbara Smuts, a strange encounter she calls the "baboon sangha":

The Gombe baboons were travelling to their sleeping trees late in the day, moving slowly down a stream with many small, still pools, a route they often traversed. Without any signal perceptible to me, each baboon sat at the edge of a pool on one of the many smooth rocks that lined the edges of the stream. They sat alone or in small clusters, completely quiet, gazing at the water. Even the perpetually noisy juveniles fell into silent contemplation. I joined them. Half an hour later, again with no perceptible signal, they resumed their journey in what felt like an almost sacramental procession. (Smuts 2001, pp. 300f)

Smuts goes on to say that she has witnessed this ritual twice only, and has never heard it mentioned by any other primatologist.

Smuts does not explicitly label this act "religious," but her use of a religious term¹⁹ to describe it unobtrusively colors her explication of its meaning. Smuts identifies it as an example of a

“presence” that emerges *between bodies*, even across species²⁰ (2001, p. 307). “I do not care what we call this presence,” she writes. “What matters is recognizing its importance and honouring it in ourselves and in others, including nonhuman animals” (2001, p. 308). For Smuts, various species of animal have this ability to find profound, meaningful channels of affective resonance in the space *between* their bodies. Her choice of the term “*sangha*” suggests her willingness to enfold this embodied ritual into an account of baboon religion.

In her interview with Waldau and Patton, Goodall suggests that the most cogent explanation for the dances is that they reflect the outward expression of a singularly religious *affect*: awe. Based on her decades of field observations, Goodall asserts that these actions seem “over and above just play; over and above mere curiosity” (2006, p. 653). The chimpanzees, in her view, are participating in the same affectively driven ritual actions that led pre-linguistic humans to develop *codified* religion.

Patton’s response to Goodall in the interview offers what I think is the best capsule account of religious experiences observed by ethologists among animals. Sociobiologists, reducing human ritual to animalistic behavior, have it backwards: in fact, Patton says in the interview, “ritual action is a natural response to living in a world of mystery and beauty and divinity,” and this capacity for a body-driven ritual response is shared by both animals and humans (Goodall 2006, p. 654). The ethological perspective on animal religion attunes us to the questions of embodied affect and the heterogeneity of bodies that must guide future inquiries into the nature of animal religion. Animal religion, cognitive ethology suggests, is a product of bodies constructed inside particular evolutionary-historical lineages— affective, pre-linguistic bodies.

Conclusion

In Georges Bataille’s Theory of Religion (1972/1992), the animal is depicted as the religious being par excellence, uniquely connected to the sense of the sacred. For Bataille, the primary distinction between human and animal hinges on the question of consciousness: humans have it, animals do not. “Consciousness,” in Bataille’s framework, reflects the ability to conceptualize the world in terms of objects. The inability of animals to divide the world up into objects gives their mode of being a particular “intimacy” with the world, and it is this hyper-intimacy that Bataille will identify as religious. The lack of objectifying consciousness opens up the animal to a particular mode of being. The animal, every animal, Bataille famously writes, “*is in the world like water in water*” (1992, p. 19).

For Bataille, the sacred force of the world manifests as a form of fluid immanence with the world; it is the “prodigious effervescence of life that, for the sake of duration, the order of things holds in check” (Bataille 1992, p. 52). Animals experience this holy fire that liquidates objects, liquidates boundaries between subject and object, unceasingly. Human consciousness of objects is only an obstacle to this fundamentally religious way of being: “Divine life is immediate, whereas knowledge is an operation that requires suspension and waiting” (Bataille 1992, p. 98). The animal is not just capable of religion, it *is* religion, a hyper-affective immersion in a world brilliant with religious meaning.

At the same time, in an important corrective to Bataille’s refocusing on the relationships between animality and affect, Jacques Derrida calls us to recollect the radical *multiplicity* of animal bodies: “Beyond the edge of the *so-called* human,” he writes, “beyond it but by no means on a single opposing side, rather than ‘The Animal’ or ‘Animal Life’ there is already a heterogeneous multiplicity of the living” (2008, p. 31). For Derrida, the philosophical question of “the animal” is already mangled by its syntax. There is no “the animal,” only a heterogeneous

multiplicity of animals; and there is no “the body,” only a vast zoo of material *bodies*. A reorientation to animal religion calls us to look not only at the limits of language, belief, and text in circumscribing the totality of religious experience, but to the irreducible plurality of religions, the heterogeneous multiplicity of religious bodies.

Animal religion should thus prompt new lines of theoretical reflection within the study of religion. It connects to the roster of questions that have come to be associated with what Manuel Vásquez, in *More than Belief: Towards a Materialist Theory of Religion* (2011) has called the “materialist shift” in religious studies (pp. 3f). For Vásquez, this means understanding religion in non-dualist but also non-reductive terms. Religion is not to be analyzed according to the terms of a transcendent force (ontological dualism), but nor is it to be analyzed strictly according to a two-dimensional network of symbols, texts, and beliefs. “We must recognize,” Vásquez writes, “that, although our experience of the world is mediated through our discursive and nondiscursive practices, we cannot reduce to human texts the materiality of our bodies and the world in which and through which we live” (2011, pp. 321f). For Vásquez, the third dimension of religious studies must be bodily practices, the pre-cognitive registers of bodies determined by an inextricable combination of “natural” and “cultural” forces (2011, pp. 6f).

However, as Vásquez himself states in his conclusion, there is more work to be done in asserting the methodological parameters of material religion. A look at animal religion shows that Vásquez’s own project stops short of an even more crucial element of religion: embodied affect.²¹ The religion of animals need not be only practices visible to the anthropological (or ethological) eye. An account of animal religion must be inaugurated by diagramming the possibility of invisible systems of bodily affect animating the distinct geographies of animal experience. These geographies emerge directly out of the vast variety of animal bodies and can take observable forms in practices, such as burying of the dead or waterfall dances, or non-observable forms—embedded in the subtle dynamic between bodies and worlds. The chimps at the base of the waterfall, the fox burying her mate, the snow monkey in the hot spring: what do they feel? How do their distinctive bodies make possible different configurations of affective engagements? And how do these affective ingredients feed into broader arrangements that come to look, for all the world, like what we would call in humans “religion”? Animal religion, then, supplies us with what must become the maxim of material religion: Religion affects animal bodies no less than human bodies, and animal religion affects humans no less than the bodies of animals.

Acknowledgements

My thanks to the two anonymous reviewers from *Anthrozoös*, who helped me substantially improve the methodological framing of this paper. My thanks also to the members of the H-Animal listserv, who contributed a number of valuable citations that went into the research of this paper. Special thanks go to David Aftandilian and Susan McHugh.

Notes

1. A useful compendium of images from *Baraka* is available at the “Spirit of Baraka” blog: www.spiritofbaraka.com/baraka/.
2. See Smith, J. Z. “Religion, religions, religious” in *Relating Religion* (2004). Cf. Aravamudan, S. *Guru English: South Asian Religion in a Cosmopolitan Language*. (2005). Cf. also Vásquez, M. *More than Belief: Toward a Materialist Theory of Religion* (2011), discussed further below, and Derrida, J. “Faith and knowledge: The two sources of ‘religion’ at the limits of reason alone” (2002).

3. See, for instance, Andrew Linzey's *Animal Theology* (1995), Stephen Webb's *Good Eating* (2001), Paul Waldau's *The Specter of Speciesism* (2001), Celia Deane-Drummond and David Clough's edited volume *Creaturely Theology* (2010), and Anthony J. Nocella and Lisa Kemmerer's edited volume *Call to Compassion* (2011).
4. Found, for instance, in the essays in Part I of David Aftandilian's *What are the Animals to Us?* (2007).
5. That said, the examination of animal religion cannot fail to have ethical implications, opening a field within which to comprehend the rich internal worlds of animal bodies. This fills out the question posed by Gross, following Mary Midgley's 1984 book of the same title, of "why animals matter."
6. "Hinduism" as a heading is analogous to "Abrahamic" in its scope and complexity as a category. It is best understood as a broad and complex family of traditions, rather than a single "faith." Buddhism is a near relative of this family, hence its concurrent discussion here. See the essays in J.E. Llewellyn's edited volume *Defining Hinduism: A Reader* (2006) for further discussion of the complexity of this term.
7. Interestingly, this hierarchy of animal bodies also corresponds to a hierarchy of human bodies in the writings of, for instance, the classical sage Sankara, with high-caste Brahmins and cows at the top, elephants in the middle, and dogs and low-cast "dog-eaters" (*svapaka*) at the bottom. The unique feature of this cosmology is that some animals are closer to divinity than some humans, but all are participating in the same karmic multicycle (Nelson 2006, p. 180).
8. An inquisitor, Étienne de Bourbon, destroyed the dog's shrine and disinterred his relics in the 13th century (Hobgood-Oster 2007, p. 196).
9. Forthcoming in Blake Leyerle and Robin Darling Young, eds. *Ascetic Culture: Essays in Honor of Philip Rousseau*. University of Notre Dame Press.
10. I will revert to a less rigorous rendering of the Greek diacritics than used by Miller, in part to emphasize the correspondence between the transliteration "*physis*" and English body-words like "physique," "physiology," and "physical."
11. This approach also prevents an importance point of divergence—but not contradiction—from another reflection on animal religion, Stewart Guthrie's cognitive approach in "Animal animism: Evolutionary roots of religious cognition" (2002). Guthrie's analysis suggests that the same adaptively evolved cognitive mechanisms that generate religion as a byproduct in humans—the tendency to anthropomorphize inanimate objects, for instance—also exist among other animals, especially primates, and that therefore we should be looking for religion there, as well. Defining the plane of divergence between the highly insightful cognitive approach to animal religion put forward by Guthrie and the affective approach that I argue is suggested by the resources brought together here is beyond the scope of this paper, but I would suggest, in keeping with my concluding remarks on Vásquez, that the idea of animal religion makes more urgent than ever the need to conceptualize religion beyond the bounds of belief.
12. The reaction to the discovery of complex animal worlds through fieldwork studies is particularly well revealed in Jane Goodall's reflections on the reception of her work in the 1960s. In these reactions, I would contend, a particular privileging of the objectivity, neutrality, and rigidity of a positivist conception of "science" intersected with *both* a set of gender expectations that deflected the possibility of women participating meaningfully in science *and* a particular theory of a masculinized, singularly human rationality. She writes, for instance, of the "violent scientific and theological uproar" against the "challenge to human uniqueness" posed by her discovery of not only tool use, but tool construction by chimpanzees in Gombe within three months of her arrival there (Goodall and Berman 1999, p. 67).
13. Bekoff and many other scholars who work on embodied affect propose various dichotomies between emotion and feeling (subtly or significantly different for each author) (Bekoff 2007, p. 6). I will not deploy this dichotomy here or anywhere else in this dissertation; "feeling," "affect," and "emotion" are here interchangeable.
14. Indeed, Bekoff's overstatement here could be seen as retrogressively reaffirming the binary positioning of animals as unreasoning "brutes," and should be taken with some caution. Cognitive ethology is helpful in pointing to the importance of affect and cognition for animal bodies and animal religion, but cannot actually detangle affect from cognition.
15. Rather than howling as a group, they sing individually, and with a "mournful" tone.
16. My thanks to David Aftandilian for calling my attention to this research.
17. This vocalization, they note, "had never been recorded [i.e., logged by the observers] in over 2300 contact hours by J[ill] P[ruetz] with the Fongoli chimpanzees" (Pruetz and LaDuke 2010, p. 647).
18. Similar behavior is mentioned later in the article, exhibited by a captive male chimpanzee towards a campfire. (Pruetz and LaDuke 2010, p. 648)

19. The *sangha* is the Buddhist monastic community.
20. Smuts is developing an account of a similar sense of intimate “presence” she feels between her and her dog, Safi (2005, p. 307).
21. This affective approach to religion is represented from a variety of perspectives, including anthropology (Csordas 1997), textual studies (Kripal 1998; Corrigan 2001; Fuller 2007), feminism (Hollywood 2002), neuroscience (Damasio 2003), philosophy (LaMothe 2004, 2006), and cognitive science (Bulkeley 2004).

References

- Aftandilian, D. ed. 2007. *What are the Animals To Us?: Approaches from Science, Religion, and Folklore, Literature, and Art*. Chattanooga, TN: University of Tennessee Press.
- Aftandilian, D. 2011. Toward a Native American theology of animals: Creek and Cherokee perspectives. *Crosscurrents* 61(2): 191–207.
- Aravamudan, S. 2005. *Guru English: South Asian Religion in a Cosmopolitan Language*. Princeton, NJ: Princeton University Press.
- Bataille, G. 1992. *Theory of Religion*. New York: Zone Books.
- Bekoff, M. 2003. *Minding Animals: Awareness, Emotions, and Heart*. New York: Oxford University Press.
- Bekoff, M. 2006. Wild justice, social cognition, fairness, and morality: A deep appreciation for the subjective lives of animals. In *A Communion of Subjects*, 461–480, ed. P. Waldau and K. Patton. New York: Columbia University Press.
- Bekoff, M. 2007. *The Emotional Lives of Animals: A Leading Scientist Explores Animal Joy, Sorrow, and Empathy—and Why They Matter*. Novato, CA: New World Library.
- Bulkeley, K. 2004. *The Wondering Brain: Thinking about Religion with and Beyond Cognitive Neuroscience*. New York: Routledge.
- Corrigan, J. 2001. *Business of the Heart: Religion and Emotion in the Nineteenth Century*. Berkeley, CA: University of California Press.
- Csordas, T. 1997. *The Sacred Self: A Cultural Phenomenology of Charismatic Healing*. Berkeley, CA: University of California Press.
- Damasio, A. 2003. *Looking for Spinoza: Joy, Sorrow, and the Feeling Brain*. New York: Mariner Books.
- Dawkins, R. 1998. *Unweaving the Rainbow: Science, Delusion and the Appetite for Wonder*. Boston: Houghton Mifflin Co.
- Deane-Drummond, C. and Clough, D. eds. 2009. *Creaturely Theology: God, Humans, and Other Animals*. Norwich, UK: SCM Press.
- Derrida, J. 2002. Faith and knowledge: The two sources of “religion” at the limits of reason alone. In *Acts of Religion*, 40–101, ed. G. Anidjar. London and New York: Routledge.
- Derrida, J. 2008. *The Animal That Therefore I Am*. New York: Fordham University Press.
- de Waal, F. 1997. *Good Natured: The Origins of Right and Wrong in Humans and Other Animals*. Cambridge, MA: Harvard University Press.
- Edwards, D. 2009. The redemption of animals in an incarnational theology. In *Creaturely Theology: On God, Humans and Other Animals*, 81–99, ed. C. Deane-Drummond and D. Clough. London: SCM Press.
- Foltz, R. 2006. “This she-camel of God is a sign to you”: Dimensions of animals in Islamic tradition and Muslim culture. In *A Communion of Subjects*, 146–159, ed. P. Waldau and K. Patton. New York: Columbia University Press.
- Fricke, R. 1993. *Baraka*. USA: Magidson Films.
- Fuller, R. C. 2007. Spirituality in the flesh: The role of discrete emotions in religious life. *Journal of the American Academy of Religion* 75 (1): 25–51.
- Goodall, J. 1990. *Through a Window: My Thirty Years with the Chimpanzees of Gombe*. Boston: Houghton Mifflin.
- Goodall, J. 2006. The dance of awe. In *A Communion of Subjects*, 651–656, ed. P. Waldau and K. Patton. New York: Columbia University Press.
- Goodall, J. and Berman, P. 1999. *Reason for Hope: A Spiritual Journey*. New York: Grand Central Publishing.
- Griffin, D. 1984. *Animal Thinking*. Cambridge, MA: Harvard University Press.
- Griffin, D. 2006. From cognition to consciousness. In *A Communion of Subjects*, 481–504, ed. P. Waldau and K. Patton. New York: Columbia University Press.

- Gross, A. S. 2009. The question of the creature: Animals, theology and Levinas' dog. In *Creaturely Theology: On God, Humans and Other Animals*, 121–137, ed. C. Deane-Drummond and D. Clough. London: SCM Press.
- Guthrie, S. 2002. Animal animism: Evolutionary roots of religious cognition. In *Current Approaches in the Cognitive Science of Religion*, 28–67, ed. I. Pyysiäinen and A. Veikko. London and New York: Continuum.
- Harris, I. 2006. "A vast unsupervised recycling plant": Animals and the Buddhist Cosmos. In *A Communion of Subjects*, 207–217, ed. P. Waldau and K. Patton. New York: Columbia University Press.
- Hobgood-Oster, L. 2007. Holy dogs and asses: Stories told through animal saints. In *What are the Animals to Us?: Approaches from Science, Religion, and Folklore, Literature, and Art*, 189–203, ed. D. Aftandilian. Chattanooga, TN: University of Tennessee Press.
- Hollywood, A. 2002. *Sensible Ecstasy: Mysticism, Sexual Difference, and the Demands of History*. Chicago: University of Chicago Press.
- Jenkins, W. J. 2008. *Ecologies of Grace: Environmental Ethics and Christian Theology*. Oxford: Oxford University Press.
- Kemmerer, L. 2012. *Animals and World Religions*. Oxford: Oxford University Press.
- Kripal, J. J. 1998. *Kali's Child: The Mystical and the Erotic in the Life and Teachings of Ramakrishna*. Chicago: University Of Chicago Press.
- LaMothe, K. L. 2004. *Between Dancing and Writing: The Practice of Religious Studies*. New York: Fordham University Press.
- LaMothe, K. L. 2006. *Nietzsche's Dancers: Isadora Duncan, Martha Graham, and the Revaluation of Christian Values*. New York: Palgrave Macmillan.
- Linzey, A. 1995. *Animal Theology*. Champaign, IL: University of Illinois Press.
- Llewellyn, J. E. ed. 2006. *Defining Hinduism: A Reader*. New York: Routledge.
- McVay, S. 1993. Prelude: A Siamese connexion with a plurality of other mortals. In *The Biophilia Hypothesis*, 3–19, ed. S. Kellert and E. O. Wilson. Washington, DC: Island Press.
- Midgley, M. 1984. *Animals and Why They Matter*. Athens, GA: University of Georgia Press.
- Miller, P. C. in press. Adam, Eve, and the elephants: Asceticism and animality in late ancient christianity. In *Ascetic Culture: Essays in Honor of Phillip Rousseau*, ed. B. Leyerle and R. D. Young. Notre Dame, IN: University of Notre Dame Press.
- Nelson, L. 2006. Cows, elephants, dogs, and other lesser embodiments of Atman: Reflections on Hindu attitudes toward nonhuman animals. In *A Communion of Subjects*, 179–193, ed. P. Waldau and K. Patton. New York: Columbia University Press.
- Nocella, A. J. and Kemmerer, L. eds. 2011. *Call to Compassion: Religious Perspectives on Animal Advocacy*. New York: Lantern Books.
- Patton, K. C. 2000. 'He who sits in the heavens laughs': Recovering animal theology in the Abrahamic traditions. *Harvard Theological Review* 93(4): 401–434.
- Pruetz, J. D. and LaDuke, T. C. 2010. Brief communication: Reaction to fire by savanna chimpanzees (*Pan troglodytes verus*) at Fongoli, Senegal: Conceptualization of "fire behavior" and the case for a chimpanzee model. *American Journal of Physical Anthropology*. 141: 646–650.
- Schaller, G. B. 1964. *The Year of the Gorilla*. Chicago: University of Chicago Press.
- Smith, J. Z. 2004. *Relating Religion: Essays in the Study of Religion*. Chicago: University of Chicago Press.
- Smuts, B. 2001. Encounters with animal minds. *Journal of Consciousness Studies* 8 (5–7): 293–309.
- Vásquez, M. A. 2011. *More than Belief: A Materialist Theory of Religion*. Oxford and New York: Oxford University Press.
- von Uexküll, J. 1957. A stroll through the worlds of animals and men: A picture book of invisible worlds. In *Instinctive Behavior: The Development of a Modern Concept*, 5–8, ed. C. H. Schiller. New York: International Universities Press.
- Waldau, P. 2001. *The Specter of Speciesism: Buddhist and Christian Views of Animals*. Atlanta, GA: American Academy of Religion.
- Waldau, P. and Patton, K. eds. 2006. *A Communion of Subjects: Animals in Religion, Science, and Ethics*. New York: Columbia University Press.
- Webb, S. 2001. *Good Eating*. Grand Rapids, MI: Brazos Press.