ALTRUISTIC CELIBACY, KIN-CUE MANIPULATION, AND THE DEVELOPMENT OF RELIGIOUS INSTITUTIONS

by Hector Qirko

Abstract. Building on a model first proposed by Gary Johnson, it is hypothesized that religious institutions demanding celibacy and other forms of altruism from members take advantage of human predispositions to favor genetic relatives in order to maintain and reinforce these desired behaviors in non-kin settings. This is accomplished through the institutionalization of practices to manipulate cues through which such relatives are regularly identified. These cues are association, phenotypic similarity, and the use of kin terms. In addition, the age of recruits and their contact with actual kin are factors that relate to kinship recognition and that are similarly manipulated by institutions in order to reinforce altruistic behavior directed toward non-kin. Support for this set of predictions is presented from historical and ethnographic sources on monastic life in Buddhism, Christianity, and Hinduism, as well as Islamic dervish groups, the Essenes, Shakers, and others. Potential implications of the model for understanding the development of religious institutions are preliminarily explored by reviewing Joachim Wach's model of religious developmental stages as well as some of the literature on the relationship between individualism and communalism in incipient religious organizations, in light of the kin-cue manipulation model.

Keywords: altruism; celibacy; Darwinian evolutionary theory; kinship recognition cues; manipulated psychology; religious institutions.

THE KIN-CUE MANIPULATION MODEL

Gary Johnson has suggested in a series of papers (1986; 1989; Johnson, Ratwick, and Sawyer 1987) that human altruism for the benefit of non-kin, particularly in the contexts of military volunteerism, combat, and suicide, might be reinforced by the manipulation of the means through which

Hector Qirko is Assistant Professor of Anthropology, University of Tennessee, 250 South Stadium Hall, Knoxville, TN 37996-0720; e-mail hqirko@utk.edu.

individuals identify kin. His argument is both powerful and simple: research on inclusive fitness strongly suggests, both theoretically (Dawkins 1979; Hamilton 1963; 1964; Hughes 1988) and empirically (for some reviews, see Alcock 1998, 561–99; Bourke 2001; Emlen 1995; 1997; Jennions and Macdonald 1994; Komdeur and Hatchwell 1999), that individuals of many species will sacrifice fitness for others if the coefficient of relatedness among them is sufficiently high. However, kinship can be ascertained only indirectly, by means of cues, and cues necessarily permit the possibility of error and manipulation. In human beings, the cues most likely to apply are association (where familiar individuals, especially during development, are kin)[1]; phenotypic matching (where a physical or behavioral "template" is innate or learned and those who match it are kin)[2]; and, of course, kin terms[3] (for more on altruism and kin recognition see Alexander 1990; Fletcher and Michener 1987; Hamilton 1964; Hepper 1991a, b; Sherman and Holmes 1985). Thus, military institutions might reinforce altruistic behavior by training recruits in extremely close and intense proximity; causing them to resemble each other as much as possible by means of uniforms, identical haircuts, and so on; and using identifying and rhetorical language characterized by such kin terms as "mother country" and "brothers-in-arms." Johnson and others (e.g., Badcock 1987; Balch 1985; Coser 1974; Crippen and Machalek 1989; van den Berghe 1981) have suggested that religious, political, and other organizations make use of similar means to reinforce desired altruistic behavior among members.

In my research (Qirko 2001; 2002), I have built upon this work by developing a model involving the three cues discussed by Johnson and two associated factors. These factors are the age of recruits (essentially, the younger the better, based on the likelihood that learning in many domains involves development-related sensitive periods; e.g., Belsky, Steinberg, and Draper 1991; Draper and Harpending 1988; Hurford 1991) and attachment theory (the likelihood that separation from kin will facilitate kin-cue manipulation; this based on research suggesting that severed attachments can be relatively easily replaced; e.g., Ainsworth 1977; Dontas et al. 1985; Sagi et al. 1985). In order to test predictions derived from this model I have focused on celibacy, or lifelong sexual abstinence, primarily because in Darwinian terms it belongs to a class of altruistic behaviors that may be called *terminal*. That is, if one foregoes reproduction for a lifetime, no benefit can be personally incurred that will outweigh the resulting loss of fitness, and no reciprocal benefits can be obtained at a later date. These facts limit the number and power of alternative Darwinian and other theoretical positions (such as cost/benefit assessments and risk strategies) that potentially apply to celibate behavior. In addition, celibacy in institutionalized settings is clearly altruistic, because organizations enjoy its benefits in at least two ways. First, the time and energy that would be devoted to

reproduction, parental care, and care for relatives are sacrificed, not for offspring and other close kin, but for others in the organization, including leaders as well as abstract and supernatural entities. Second, the practice helps ensure the organizational control of wealth and other resources, because celibate members are likely to have fewer conflicts of interest with respect to acquiring, preserving, and distributing resources (Balch 1985).

Thus it can be hypothesized that non-kin institutions demanding celibacy of their members will utilize kin-cue manipulative practices. Specifically, these institutions should:

- encourage close association that replicates natural kin contexts (particularly parent-child and sibling relationships).
- encourage the use of false phenotypic matches (uniforms, emblems, hair styles, speech patterns, mannerisms, and so on).
- encourage the use of linguistic and other symbolic kin referents.
- attempt to obtain young, impressionable recruits.
- discourage association with actual kin.

This predicted pattern has been tested using George Murdock and Douglas White's sample of 186 societies (1969), in which cross-cultural descriptions of celibacy were sought and compared. Cases of institutionalized celibacy (institutions as defined in DeLamater 1987, accompanied by socially defined, consistent statuses and roles) were found in 41 different contexts in 32 sample societies. Of these, 26 contexts were non-kin (that is, celibacy was not practiced in individual or in family settings). These non-kin contexts included the major religions as represented in several societies, as well as the Vestal Virgins of Rome, "Amazons" of Dahomey, Aztec priestly class, Inca "Virgins of the Sun," and others. While data are often sketchy, the predicted pattern of institutional practices associated with kin-cue manipulation was found in the majority of cases (see Qirko 2001, 2002).

A complementary means through which to assess the value of the model, and the focus of this essay, is a historical analysis of religious institutions in which celibacy is present. Below are summaries of the typical institutional practices pertaining to celibacy found in Buddhist, Christian, and Hindu monastic settings, Protestant celibate groups, the Essenes, and Islamic dervish groups. While some of this material may be familiar, the context of kin-cue manipulation theory in which it is presented reveals a potentially important pattern. All of these institutions, irrespective of ideological, historical, and geographic settings, similarly exhibit non-kin membership, connections between celibacy, altruism, and important institutional objectives, and the predicted specific institutional practices related to the manipulation of kin-recognition cues.

Celibacy and Kin-cue Manipulation in Religious Institutions

Buddhism.   The *Pratimoksa*, the written code of behavior for Buddhist monks and nuns, is fundamental to both Indian Buddhism and the forms subsequently exported elsewhere (Yamagiwa and Silk 1994). One of its most important provisions is a prohibition against sex (Horner 1982a). While Buddhist branches began adding and supplanting *Pratimoksa* precepts as early as the fourth century (Tsomo 1994), voluntary celibacy has remained an important component of monastic behavioral codes throughout the Buddhist world.

Typically, lay societies receive spiritual guidance from monks and in turn provide, through patronage, land grants, and other gifts, the resources for building and maintaining monasteries. The monks' daily subsistence requirements are similarly underwritten. Wealthy patrons provide for the more ambitious and at times opulent monasteries that have characterized Indian Buddhism in later centuries. "The contributions [by laity] are so numerous, so frequent, and so varied in size and content (cash, food, clothing, utensils, or labor) that it is very difficult to determine how much of its income a family may contribute in a year" (Ingersoll 1966, 66; see also Nash 1963).

Melford Spiro (1970) describes two categories of property in Buddhist monasticism. The first is corporate, wherein all belongs to the order. The second is personal, made up of gifts given to individual monks. These gifts, ranging from the small and commonplace to land, money, and sometimes even monasteries themselves, revert to the order upon the death or departure of the individual and cannot be transferred to kin or laity (see also Bunnag 1973, 103; Ingersoll 1966). Thus institutions can become wealthy, while the opportunities for individual members to keep or pass on portions of that wealth are limited. In addition, a monk's relatives typically benefit very little, in material terms, from his entering a Buddhist institution. When a young boy is dedicated to the church, his family often earns religious merit, but not resources. Giving up a child does "reduce the number of mouths to feed in the family" (Yalman 1962, 326) but this benefit is often outweighed by associated expenses for the initiate's clothing, ordination, and ritual meals.

Traditionally, "going forth," or becoming a novice, occurs at roughly age fifteen, although ordination, or final admission, is prohibited before the age of twenty. Initiates renounce ties to kin, take new, shared names, and perform work in service of higher-ranking monks and the community. Whether in monasteries, begging, or on pilgrimages, they associate only with fellow recruits or monks. Visits to family members, often in villages far from monasteries, are controlled, discouraged, and occasionally proscribed.

Spiro's description of Buddhist monastic life in Burma in the 1960s (1970; see also Pfanner 1966) shows that the general pattern described in the Pratimoksa continues to apply. Celibacy is reportedly rigidly adhered to. While ordination occurs only after age twenty, novices can be as young as eight, and some "small novices" can enter the institution even earlier. Ordination involves vows of poverty, chastity, and homelessness, and the candidate attests to being free, solvent, and of sound mind and body. He brings to ordination his begging bowl and uniformly yellow robes. With the consent of his family, he "dies a civil death" and divests himself of all possessions and rights to inheritable resources (Spiro 1970, 291).

Separation from kin and lay society is accomplished not only by residence in a monastery but "by diacritical features of dress and personal appearance" (Bunnag 1973, 34). Clothing is so uniform that "disfigurement" of robes by means of a small dark dot is necessary to make them individually identifiable (Horner 1982b, 407). Similar regulations apply to begging bowls (Horner 1982b, 113–15, 119). In addition, Buddhist monks traditionally shave their heads on the eve of each holy day, or roughly four times a month (Horner 1983, 27, 239, 261).

Monks are known as "Sons of the Buddha." In the many cases where kin cannot afford ordination and subsequent costs and a sponsor is obtained, the monk calls the sponsor "my father" or "my mother." According to Spiro, "it is no accident . . . that the parental image is explicitly and especially evoked" (1970, 343).

The pattern with respect to female celibates is somewhat different. Nuns are generally subject to harsher discipline (Auboyer 1965) and are not equivalent in status to male ascetics, falling somewhere between laity and monks (Horner 1982a; Spiro 1970). However, they typically conform to the general model of practices and behavior outlined above.

Hinduism.   Three of the four stages of the ideal life in Hinduism are characterized by celibacy (Goergen 1974). In the first, the young student (eight to twelve years old) moves in with his teacher, or *guru*, for at least twelve years of discipline and celibacy. The name of this stage, *bramacarya*, is Sanskrit for celibacy. The second stage is characterized by an active social life, including marriage and family, where sexual activity and the pursuit of descendants is required (Elder 1990). While most remain "householders" for life, a few move on to the third stage and live as hermits, removed from social life. Spouses may enter this stage together, but they are to live as celibates. The fourth stage involves complete isolation and meditation.

Some Hindus, however, skip the householder stage and become monks or nuns, maintaining the celibacy of their early years. An important condition underlying this choice is that "aspirants should take to it before they have tasted sex in ordinary course and settled down as married men and

women" (Ghurye 1964, 21). Such an alternative is mentioned in sacred texts as early as 900 B.C.E. However, the first clear evidence of sectarian, settled ascetics appeared around 400–500 C.E., and by the seventh century distinguishable branches with distinctive clothing and practices were described by foreign visitors. The first Hindu monasteries, which arose around 788–820 C.E., are traced to the influence of the ascetic Sankaracarya (Ghurye 1964).

Sankaracarya, following the model of Buddhist and Jain monasteries, established membership rules, initiation vows and rituals, and administrative structures still in use today (Ghurye 1964; Elder 1990). His goal was to provide "freedom from the bother of wandering" (Ghurye 1964, 85), and orders were to rely upon lay communities' contributions for survival. He organized ascetics into ten orders, each marked by a suffix added to all members' names. Soon a class of younger attendants was formed to help provide for elder ascetics and to physically provide for the monasteries. Each center was assigned a territory from which to draw resources and recruits. Not surprisingly, competition among centers soon followed, with concomitant attention to in-group identification through clothing, language (e.g., greeting formulas), initiation rituals, and other practices. This emphasis on markers denoting membership continues today. For example, novices among the *Samnyasis* (Siva followers) are told to let themselves be "taught," not by the particular doctrines or even by their masters, but by their distinctive membership badges: their yellow robes, the removal of their top-lock, and so on (Ghurye 1964, 93).

The various ascetic branches appear to conform to the kinship manipulation model in other respects as well. Members are initiated, typically while quite young. (In the words of one informant, "one is never too young to enter upon a good path" [Oman 1973, 264].) After receiving their distinctive clothing and insignias, the initiates become either permanent residents of a monastery or wandering mendicants. Even the wanderers gather during the rainy season and associate only with their own. Members of orders generally "must disclaim kinship ties with [forefathers] as well as with the living" (Bhattacharyya 1953). In many groups, members receive new, identical surnames (Oman 1973). Other kin symbolism abounds; for example, hailing the Lord as "father and mother" is common (Narayanan 1990, 168).

Religious property is often considerable and is corporately held. Local laity contribute cash, buildings, lands, labor, and food (Oman 1973, 250). Religious trusts are passed on within the groups and "neither [property] nor its management is divisible among members of the family" of the contributor (Oman 1973, 253). As in Buddhism, merit is accrued proportionate to the efforts and resources contributed. This is often discussed in sacred texts, and merit promises salvation not only for individual contributors but also for their ancestors and descendants (Oman 1973).

The general pattern is illustrated by the *Dasanami* order, which is more than one thousand years old and one of the most respected and influential orders in India and elsewhere (Dazey 1990). Family, clan, and lineage structure are the central organizing principles of the group. Divided into the ten ascetic lineages that trace their ancestry to Sankaracarya, all members of each lineage share the same name. A larger subdivision, a *gotra*, which includes several lineages, also has distinctive, shared names for its members based on its founding sage. These names are used for "mutual recognition" and are "especially useful when on pilgrimage to distant and unfamiliar areas" (Dazey 1990, 290). Disciples of the same teacher are called *guru-bhai* (guru brothers), and a senior monk taught by the same teacher of one's guru is *caca-guru* (uncle guru). The *Dasanami* organization thus "parallels that of a biological lineage or 'family tree'" (Dazey 1990, 292).

Lynn Teskey Denton (1991) worked with female ascetics in the city of Varansi. Roughly two-thirds are "celibate students" who extend the first, or student, stage of life into a lifelong status. The pattern is consistent with that of males with respect to the kin-cue model. All permanent students live organized and controlled lives in "convent-like establishments," overseen by "Mother-Teachers," where they worship and perform service. They tend to be young (average age, 23), wear distinctive haircuts and styles of dress, and go out only in chaperoned groups.

Christianity. Since its early history, the Christian Church has been characterized by one form or another of voluntary vows of sexual abstinence. The first written law on abstinence for priests was issued by the Council of Elvira in 305 C.E. (Cholij 1989; de Valk 1990). Roman Catholic priests today are required to observe a "total and irrevocable" commitment to sexual abstinence (Napier 1989). In the Eastern Church, individuals can be married before ordination as priests but must swear abstinence as a prerequisite to clerical duty. Bishops and those who take monastic vows must be chaste.

The New Testament gives as instructions for an ascetic life: ". . . hating one's father and mother, forsaking one's family, becoming a eunuch for the kingdom of God and renouncing all possessions . . ." (in Linge 1990, 44). Wandering charismatics who followed these instructions spread the gospel and organized householder Christianity. By the early second century, this wandering proselytism was viewed with suspicion by many settled Christians and was replaced with churches and clergy.

The Christian Church increased enormously in size between the third and fifth centuries (becoming the official religion of Roman society in the fourth century), concomitant with the call by an ecclesiastical elite for celibacy (Osiek and Balch 1997, 155). In addition, the ease in travel provided by Roman order facilitated an increased pool of potential recruits.

Thus "the virtually simultaneous appearance of Christian empire and ceno-bitic monasticism is . . . no accident" (Linge 1990, 46; see also Coser 1974, 150; Frazee 1998, 11).

Throughout the centuries, the rules of Christian monastic life—as developed and refined by Pachomius (Rousseau 1985), Saint Benedict of Nursia (McCann 1963), Lanfranc (Knowles 1951), and others (e.g., Mason 1998; Symons 1953)—consistently stressed obedience and selfless service to the institution, its leaders, and God. They also stressed each of the predicted institutional practices associated with kinship manipulation. Pachomius's words are instructive: "He who makes progress in the *Koinonia* [community] with purity, obedience, humiliation, and submissiveness, and puts no stumbling-block or scandal before anyone by his words or by his acts, that one will grow rich forever in imperishable and enduring riches" (in Rousseau 1985, 90).

While the monks were kept poor, the monasteries of Pachomius accrued so much wealth that it even troubled Theodore, his eventual successor (Rousseau 1985, 158).

The typical institutional pattern in the Christian Church is of immature recruits, averaging age fourteen to fifteen (though many are younger), who are separated from relatives to live in near or total isolation with other recruits and members. Orders are characterized by uniform clothing, hairstyles, and accouterments even where there is no contact with outsiders and social identification is not an issue. Behavior is similarly homogeneous, including, for example, vows of silence or constant prayer in both individual and group settings (Timko 1990). The use of kin terms and other symbols of kinship to refer to members and authority figures permeates all aspects of daily life (Wynne 1988).

As early as Pachomius (fourth century), all elements of this pattern were in place. Contact between members of monastic "houses" within a community was forbidden without permission, as was contact between monasteries. "Brothers" who had to travel could not do so alone, nor could they speak of what they had seen upon their return. Visits with family members were strictly controlled. Members, many of whom entered as young boys, wore uniforms with belted tunics, goatskins, and hoods marked with monastery and house insignias (Rousseau 1985, 82).

In the sixth century, Saint Benedict warned that "monks should not have even their bodies and wills at their disposal" (McCann 1963, 85). Parents dedicating young children to monastic service had to agree to withhold resources from their children as well as to forfeit any gifts from them. Letters from parents were read first by abbots (McCann 1963). And Benedict's prologue to his rules amply illustrates the use of kin terms: "Hearken, my son, to the precepts of the master and incline the ear of thy heart; freely accept and faithfully fulfill the instructions of a loving father" (McCann 1963, 7).

Priests were trained under similar circumstances (for example, with respect to kinship symbols, they were typically given new biblical names, and bishops were called husbands of the church [Coser 1974, 157]). Militarized monastic orders created to fight in the Crusades, such as the Hospitallers, Templars, and Teutonic Knights, also conformed to the patterns described above (Barber 1994; Seward 1972). While nunneries were less common historically and their practices are less well documented, the general pattern of kin-cue manipulation applies to female recruits as well (Burton 1994, chap. 5).

George Hillery Jr. (1992), in his description of Trappist-Cistercian abbeys and monasteries in the 1970s and 1980s, shows that the historical association between altruism and institutional kin-cue manipulation remains today. Members take five vows: of poverty (owning nothing), chastity (total sexual abstinence), obedience, stability (not leaving the monastery unless directed to do so by the abbot), and conversion of manners, with a commitment to prayer and the spiritual life (Dudley and Hillery 1979). Candidates are usually very young men who remain novices for two to five years. Members have only limited contact with their families and wear distinctive uniforms within and outside the monastery walls. Kinship roles, with associated terms, are an integral part of the social structure. As noted by Samuel Rubenson (1995, 49), "it is obvious that the monastic theology and the sets of rules shaped before the [C.E.] 380s have remained the foundation of monasticism until today."

Protestant Sects.   Protestant reforms, beginning with Martin Luther in the early sixteenth century, were primarily spurred by opposition to celibate and monastic aspects of the Catholic Church (Ozment 1972). However, celibacy was (and is) still occasionally practiced in Protestant communal organizations, and manipulation of kinship recognition cues appears to have accompanied it.

The Shakers are perhaps the best known example of a Protestant celibate sect. Founding their first settlement in Albany, New York, in the mid-1770s, the sect by 1826 had established nineteen communities and additional branches in the United States. Women typically outnumbered men, and equality of the sexes was always an important component of Shaker ideology. Commitment to celibacy appears to have been extremely consistent, with few known infractions (Kitch 1989; Muncy 1973). Members were required to give all their property to the organization (Kitch 1989, 88). Clothing was identical within orders and genders (Andrews 1963).

Shakers advocated "nonsexual, affectionate, sibling love" as the purest love on earth. Members referred to themselves as "brothers," "sisters," and "siblings in Christ" and lived in communal houses as "families" (Kitch 1989, 87). Children who entered the sect with their parents lived apart

from them and were cared for by non-kin. Leadership was explicitly modeled after parental roles: "Supervisors in the Shaker family system treated their workers as loved children of God" (Kitch 1989, 88). The founder of the Shakers, "Mother" Ann Lee, wrote: "I am married to the Lord Jesus Christ. He is my head and my husband, and I have no other" (Muncy 1973, 19). The degree to which separation from kin was attempted is illustrated in a typical song:

> Of all the relations that ever I see
> My old fleshly kindred are furthest from me
> So bad and so ugly, so hateful they feel
> To see them and hate them increases my zeal
> O how ugly they look!
> How ugly they look!
> How nasty they feel! (Edward D. Andrews, in Kanter 1972, 83)

Other celibate Protestant sects, such as the Zoarites, Harmonists, and Sanctificationists, exhibited the predicted pattern of kinship manipulation (Kitch 1989; Muncy 1973). All demanded close association among members and carefully regulated social contacts with nonmembers. They insisted on uniform dress, utilized kin terms and symbolism, and showed a willingness to accept, if not an outright preference for, young recruits. Celibacy in these institutions was explicitly implemented to curb individual and familial self-interest and to promote altruistic behavior toward the community and its leaders (e.g., Kanter 1972; Muncy 1973; 1988; van den Berghe and Peter 1988).

Judaism–Essenes.   As described by the best available early sources, Philo Judaeus, Flavius Josephus, and Pliny the Elder, the Essenes were a Jewish religious order that existed roughly between the second centuries B.C.E. and C.E. in present-day Syria and Palestine. It had, at its peak, approximately 4,000 members. Marriage was apparently forbidden and celibacy the norm for many (Baumgarten 1996; 1998; Vermes and Goodman 1989). New members handed over all property to supervisors. They worked in various occupations "with zeal, like athletes" (Philo Judaeus, in Vermes and Goodman 1989, 27) and shared earnings communally.

The Qumran community, known only through Dead Sea Scrolls, is likely to have been Essene (Zias 2000). The "standard" hypothesis is that Essenes lived near Qumran ca. 200 B.C.E.–68 C.E., after which Romans destroyed their community, and that it is their manuscripts that constitute the Dead Sea Scrolls (Stegemann 1992; but see Baumgarten 1996). The Scrolls' descriptions of Qumran closely parallel Essene life (Stegemann 1992), and, although there is no explicit mention of celibacy, researchers think it likely that here, too, at least some (e.g., Qimron 1992) and perhaps all (e.g., Zias 2000) members were abstinent.

Although not confined to monasteries, Essenes lived in commonly oc-
cupied and supervised houses. Philo Judaeus states that "no house belongs
to any one man; indeed, there is no house which does not belong to them
all, for as well as living in communities, their homes are open to members
of the sect arriving from elsewhere" (in Vermes and Goodman 1989, 23).
They shared communal meals twice a day (Baumgarten 1997; Stegemann
1992) and are likely to have lived and traveled only in close association
with each other.

Albert Baumgarten (1997, 55; also Vermes and Goodman 1989) re-
ports that each Essene carried "distinctive marks of membership," includ-
ing a loincloth, a white garment for meals, and a small shovel for use after
defecating in remote places. "Easy and certain recognition" was one con-
sequence of their wearing "special uniforms" (Baumgarten 1998). Jose-
phus noted that all Essenes, even leaders, dressed identically (Baumgarten
1997). Further, Josephus, Philo, and others referred specifically to "the
analogy of kinship/brotherhood" regarding Essenes (Baumgarten 1998, n.
1). Members could help support the needy but not their own relatives
without special permission (Vermes and Goodman 1989). A Qumran
scroll fragment suggests that supervisors (or "Overseers") considered "lov-
ing one's relatives" an offense (Eshel 1994).

Josephus wrote that Essenes "disdain marriage for themselves, but adopt
the children of others at a tender age in order to instruct them; they regard
them as belonging to them by kinship, and condition them to conform to
their own customs" (Vermes and Goodman 1989, 39; see also Beall 1988).

Dervish Sects.   While Islam, like Judaism, is far more "pro-natalist"
than Christianity (Reynolds 1986), asceticism, including celibacy, has al-
ways been a strong, if secondary, movement in this religion (Bellamy 1979).
The dervish groups of the Middle Ages (thirteenth–sixteenth centuries),
particularly in non-Arab Islamic areas, practiced total renunciation of so-
cietal norms (including kinship) coupled with "deliberate and blatant so-
cial deviance" (Karamustafa 1994, 3). They appear to have had a symbiotic
relationship with the institutionalized Sufism that arose at roughly the same
time but did not demand renunciation in general or celibacy in particular
(e.g., Lewis 1969, 140–54). Rejection of marriage, reproduction, and, in
most cases, sexual activity was a prerequisite for following the (exclusively
male) dervish paths (Karamustafa 1994, 16). While some individuals of-
ten joined for temporary periods, many remained dervishes for life.

The various dervish groups were characterized by seasonal wandering
and begging coupled with community life in *tekkes,* or religious hospices.
Highly organized begging and patronage led to many hospices being "veri-
table institutions dependent upon carefully managed economic surpluses
and subject to political control" (Karamustafa 1994, 15). One Abdal *tekke*
was "mosque, hostel, hospice, refectory, and center of pilgrimage in one."
It housed more than two hundred members and servants and "apparently

never ceased to receive financial support from the central government" (1994, 77).

All groups were characterized by distinctive, uniform styles of appearance. The Haydaris, for example, wore long beards and long hair, dressed in sacks and sheepskins, and wore iron rings on their ears, necks, wrists, and genitals. The Abdals went naked except for a felt or iron covering over their genitals. They had shaved heads and beards, and their bodies were decorated with burn spots and drawings of snakes. They carried hatchets, leather pouches, anklebones, begging bowls, and large yellow spoons. Abdals also carried musical instruments, which they played while screaming (Karamustafa 1994, 68, 71).

Membership was heavily youth-oriented, and founders were often young elites who continued to received parental support as dervishes. Dervishes "took a special interest in adolescents and young men," who appear to have been "exceptionally responsive" to their calling (Karamustafa 1994, 94). Founders and current masters were referred to as "fathers," and groups referred to themselves as "families."

Summary.   The preceding brief review of the major religions and their offshoots lends support to the prediction that voluntary vows of life-long celibacy occurring in non-kin contexts will be accompanied by the institutionalized manipulation of kinship recognition cues. There are three components to this support. First, the specific organizations described are primarily associations of unrelated members and recruits. Only the Shakers and other small Protestant sects appear to have actively recruited related initiates, and it is significant that in these cases every attempt was made to minimize the potentially disruptive impact of kin-based relationships. While in many organizations individuals, especially higher ranking ones, sometimes utilize the resources and status they derive from celibacy and organizational membership to provide benefits to their kin (e.g., Betzig 1995), clearly benefits are primarily and usually channeled to other, unrelated members or to the organization itself.

Second, celibacy in these organizations is clearly altruistic. In all cases, membership requires the voluntary surrendering of personal and family resources. Attempts to gain additional personal resources are foreclosed. Further, the sacrifice of time and labor by initiates is directed to the organization as a whole, specific group leaders, and supernaturals. Celibacy is explicitly discussed in religious doctrine, in statements by leaders and members, and in direct observation by researchers as being an important, if not essential, component of individual sacrifice. All of the major institutions discussed here, even the most ascetic, are highly organized and successful at acquiring resources from recruits and nonmembers. Most important, these institutions accumulate and preserve these resources, at least in part, by demanding and reinforcing vows of celibacy.

Third, the predicted institutionalized practices associated with kin-cue manipulation are generally present. All of the organizations reviewed rely on close association of members and institutional replication of family roles (even where wandering or missionary work is important); the severing or restricting of ties with nonmembers, particularly biological relatives; and the use of kin referents. A willingness, if not preference, for young recruits is present as well. Finally, all groups demand uniformity in dress and other accouterments and behaviors. Notwithstanding a great deal of variety in doctrine and structure of different orders, branches, and sects, these five predicted practices generally remain constant.[4]

IMPLICATIONS FOR THE DEVELOPMENT OF RELIGIOUS INSTITUTIONS

These findings spur preliminary thinking about the relationship of kin-cue manipulation and practices to the development of religious institutions. An argument can be made that an important step in the development and success of any religious or other institution that demands sacrifice from unrelated members is the adoption of such practices to maintain and reinforce desired behaviors. Another brief look at many of the same institutions already reviewed, this time from a more explicitly developmental perspective, is useful to support this contention.

J. Patrick Olivelle suggests that the "anti-culture" of ascetic renunciation began in northeast India around the sixth century B.C.E. in the company of demographic changes driven by a shift to intensive agriculture:

. . . early village-based tribal organization gave way to relatively large kingdoms under the absolute authority of monarchs. Centralized political authorities made travel relatively safe and easy, facilitating commerce and creating a rich and powerful merchant class. The economy became more complex and integrated, and there was greater contact and communication across a relatively large area of North India. Urban centers grew especially around the capitals of kingdoms. (Olivelle 1990, 129)

Two traditions arose within early Hinduism. One was the path of the sedentary hermit, soon obsolete but idealized. The other was that of the itinerant mendicant, which survived and became increasingly organized. Renouncers abandoned their families and places in a strict caste system and began to associate in non-kin groups. Vows of celibacy and poverty became central organizing principles. Dress was not uniform at first but simply symbolic of renunciation (by not being white, the normal societal color).

It is clear that these mendicant groups became viable only after the demographic changes outlined earlier took place. Only with a large pool of potential recruits, increased travel and communication, and a mainstream society capable of providing resources to renunciants could these groups

survive (Olivelle 1990, 142–44). Once these conditions were met, charismatic leaders could attract groups of recruits whose loyalty they could require and maintain through effective organizational practices (Elder 1990, 30). Typically, after the charismatic figure was gone, a group would fade away, but some persisted. Because of the great variety in rules, patterns, and traditions, "A fascinating study could be done of those factors that contribute to the survival and growth of an *asrama* following the death of its founder" (Elder 1990, 31). Because of the likelihood that a pool large enough to provide recruits would consist of unrelated members, the effective reinforcement of desired behavior through kin-cue manipulation is possibly one such factor.

Similarly, organized monasticism developed in Christianity when it became the official religion of Roman society and when the ease in travel provided by Roman order yielded an increased pool of potential recruits. Philip Timko (1990) describes three patterns in early Christian asceticism: anchorites, who lived alone; semi-anchorites, who, although also living alone, formed a close and constant association around a "spiritual father," usually in a church; and cenobites, usually near towns and cities, who owned property, worked farms or herds, and provided religious services to the neighboring communities. Strict discipline and communal organization characterized the latter two groups.

Buddhism arose through the influence of an individual charismatic who organized his religious movement as the ever-increasing number of disciples demanded it. The first section of the *Mahavagga* begins with the night of the Buddha's enlightenment and discusses various issues pertaining to the "development and stabilisation of the Order as a uniform institution" (Horner 1983, xiii). The Buddha becomes aware that the practice of monks' bringing recruits to him for personal ordination has become unwieldy, and he permits monks to ordain others themselves "in any quarter, in any district" (Horner 1983, 30).

And thus, monks [says the Buddha] should one let go forth, should one ordain: First, having made him have his hair and beard cut off, having made him put on yellow robes, having made him arrange an upper robe over one shoulder, having made him honour the monks' feet, having made him sit down on his haunches, having made him salute with joined palms, he should be told: Speak thus: "I go to the awakened one for refuge, I go to the *dhamma* for refuge, I go to the Order for refuge." This formula was repeated two more times. (Horner 1983, 30)

Eventually this too became logistically demanding. Candidates began to be presented by a preceptor to the Order as a whole for ordination. Thus Buddhism, developing in populous northeast India ca. 530 B.C.E., also depended for its success on regulating the behavior of its increasing number of recruits.

Even among the smaller-scale Islamic dervish groups, an original pattern of individualistic mendicancy was often supplanted by community

life. Individual renunciants, typically in urban settings, succeeded in attracting followers, and random begging was replaced, in some cases partially and others almost completely, by highly organized group collection of resources and gifts from patrons (Karamustafa 1994). This was accompanied by aspects of kinship manipulation discussed earlier.

It seems evident that the pattern of kinship manipulation found within these religious institutions correlates with the size and lack of relatedness of the pool of potential recruits. In Christianity and Hinduism, where no single charismatic leader initially fueled the development of organized, cenobitic life, this pattern developed only after population sizes and geographic mobility significantly increased. In the case of Buddhism (and Jainism; see Dundas 1992), the presence of a large and ever-growing number of (unrelated) followers aligned with a specific leader created the need for effective internal organization. Thus, the institutional practices pertaining to kin-cue manipulation exhibited by these religious institutions may be related less to particular ideological or cultural contexts than to problems associated with institutional cohesion, and their occurrence in so many contexts a result less of diffusion than of the shared psychological dispositions of members and recruits.

Joachim Wach (1962), in a cross-cultural analysis of the relationship between religion and society, describes a number of conditions necessary for the development of "specifically religious" groups. First, there must be population increases in the relevant "sociological unit—family, clan, or tribe" (p. 109). There must additionally be social stratification with respect to the ownership of property, occupations, and ranks. Finally, leaders, responding to momentous events like wars or plagues, must break from the traditional conservatism of their groups. A new group can then appear, "characterized by the concept of relationship as spiritual fatherhood and spiritual brotherhood" (p. 110). The nature of the new, usually magical or religious, experience sets members apart from the rest of society, although "motives such as lust for power and desire for health, wealth, or protection do characterize the more degenerate forms of secret societies" (p. 116). Membership in these organizations is not automatic; tests of some sort must be passed. Admission is typically symbolized by "'death' and 'rebirth,' rejuvenation, perhaps the choice of a new name, and knowledge of the secret language" (p. 117).

Wach's description of the three stages in development of American Indian religious groups illustrates this developmental process (as does research on the development of Western cults; e.g., Hood et al. 1996, 315–19). First, outstanding, charismatic individuals gather followers; next, progressively more complex organizational structures emerge; and finally, stratification within the organizations occurs. Wach sees a similar process in the development of major religions. Individual personalities obtained disciples

who were willing to sacrifice for them ("permanent helpers," as Max Weber characterized them [1964, 60]). "Ties of family and kinship and loyalties of various kinds [were] at least temporarily relaxed or severed" (Wach 1962, 135), and life in the groups was integrated by means of rites and religious practices such as prayer and meditation. Upon the death of the founder, the "circle" of helpers became a brotherhood, after which, with increasing membership, previously simple rules and rites were extended. Discipline became more important, which eventually led to the formation of an ecclesiastical body and the distinguishing of clergy. "Here and here alone," concludes Wach, "the term 'institution,' often loosely used, can rightfully be applied" (1962, 144).

While manipulation, psychological or otherwise, is not addressed by Wach, his perspective, as well as the history of specific institutional developments as summarized earlier, suggest a model related to altruism and the manipulation of kinship recognition cues. Individuals in any society may choose celibacy and other forms of renunciation for idiosyncratic or culture-specific reasons. If these individuals and/or their embraced religious ideologies possess qualities that are attractive to others, and if a sufficient number of unrelated followers are gained, methods to organize and provide for the growing membership become necessary. It is at this point, when individual renunciation becomes a communal, altruistic act, that the pattern of kinship manipulation should appear. Celibacy, while by no means universal, is a common part of ideology and practice in these contexts, because control of sexuality is an important means through which institutions direct energy, time, wealth, and other resources from individuals and their kin to the organization and its non-kin members and leaders.

Altruistic sacrifice such as celibacy may in fact be required by developing organizations as a key to their survival. Here, too, reinforcement of individual sacrifice would be maintained through kin-cue manipulation. Research into sect development provides additional clues concerning the historical formation of institutions that demand celibacy and other forms of altruistic behavior in non-kin contexts. Pierre van den Berghe and Karl Peter (1988) find that communal groups typically succeed or fail based on their ability to control individual self-interest and self- and kin-based relationships. Through celibacy, many groups attempt to minimize the effects of "the two most powerful and ubiquitous bases of special relationships: kinship and sex" (1988, 523). Noncelibate groups such as the Hutterites and Kibbutzim typically succeed only when they modify central aspects of their communalist ideology to accommodate individualism and familism.

The tension between individualism and communalism in developing organizations is repeatedly observed. For example, the Amana Society (or Community of True Inspiration), which moved to the United States from Germany in 1843, attempted to deemphasize the family by valuing (although not requiring) celibacy. Kin bonds and individualism nevertheless

reasserted themselves after 1900. By 1932, when members voted to change from a socialistic community to a joint-stock corporation, "families in the new Amana immediately took on characteristics of families outside Amana" with respect to economic consumption (Andelson 1983, 61). The Children of God, founded in California by "Papa" Berg, were originally strongly, and efficiently, communal. However, Rex Davis and James Richardson (1992) describe the problems in the group that resulted from its initially young recruits marrying and having children. Individuals spent more time and energy in familial concerns and less in meeting organizational goals.

In some cases, organizations combat individualism and familism through the control, rather than the prohibition, of sexual expression. In the Oneida Community, a group founded in New York State in 1848, founder John Humphrey Noyes oversaw a system of "complex marriage," wherein all members considered themselves wed to each other and regularly exchanged sexual partners (Foster 1995). Oneida members lived, worked, and raised their children communally, and all property was held in common. Noyes's strategy was explicitly implemented to curb "special love," or romantic attachments, that could threaten this communal organization. By 1879, the system of complex marriage was abolished due to both internal and external pressures. Only two years later, "the group also officially gave up its communistic system of economic organization, reorganized as a joint-stock corporation, and went on to become one of the most successful small businesses in the United States" (Foster 1995, 54). Another example is the Unification Church, where founder Reverend Moon, known as the "True Spiritual Father," attempted to promote and maintain selfless commitment to the organization by requiring his approval for all marriages, and, in many cases, personally matching marriageable pairs. Over time, commitment lagged, and an organizational strategy suffered as a result of "the endemic tension of individual and collective needs in communal groups" (Bromley et al. 1982, 128).

Overviews of Protestant and other sects such as those described above (e.g., Galanter 1993; Muncy 1973) suggest the widespread use of kin-cue manipulation. Communal living is characteristic, and members often refer to each other by means of kin terms (Galanter 1993, 124). Constraints are often established over all facets of communication, and charismatic groups also establish their "distinctive character" through dress, custom, and ideology. Members when recruited are usually young. It is no coincidence that deprogramming—the techniques utilized to remove and resocialize group members—is ideally accomplished with the strong involvement of kin. Galanter proposes a "biologically grounded inclination among individuals to coalesce into such groups, particularly when ties to other sources of affiliation are weakened" (1993, 122). It seems likely that the interest individuals have in maintaining ties with non-kin in these contexts is facilitated by the manipulation of kinship-recognition mechanisms

and that the successful implementation of institutional practices that reinforce those ties has a great deal to do with organizational survival and development.

DISCUSSION

There are several alternative possible explanations for the apparent correlation between institutions demanding celibacy of their members and the predicted pattern of kin-cue manipulation. One is simply the diffusion of institutional practices in religious settings. There is no doubt that the major religions have influenced each other throughout their development and that their practices are often transferred to new and different contexts. However, cultural traits associated with religious institutions do not tend to diffuse en masse but more often according to their locally perceived utility and congruence with existing cultural patterns, as established theoretically (Barnett 1953; Rogers and Shoemaker 1971) and borne out by a large number of syncretic and other religious movements throughout the world (e.g., brands of Catholicism in Latin America; see Gossen 1997). Even granting the likelihood of trait diffusion, the question of why the particular traits associated with kin-cue manipulation continue to be maintained in so many settings remains. This is particularly true given that the traits in question are an interrelated set derived from an independently developed model.

Another possibility is that factors other than the reinforcement of celibate behavior account for these institutional practices. For example, Rosabeth Kanter (1972) has argued that sacrificial behavior in religious organizations, rather than requiring reinforcement, itself reinforces commitment. A more recent evolutionary variant of this argument emphasizes the cost of many institutional practices as a signal of commitment to intra-group cooperation (Cronk 1994; Sosis 2000). As Richard Sosis has put it, "celibacy is one of the costliest signals imaginable!" (2000, 7). However, that very point may most directly illustrate a potential problem with the costly signal theory. Celibacy, given its terminal nature in terms of individual fitness, is too costly to have evolved, in either cultural or biological terms, to serve as a signal in this manner. "Handicap" signals arise because they promote individual fitness relative to survival and reproduction (Grafen 1990; Zahavi and Zahavi 1997); thus they cannot be so expensive as to preclude the goals they have been selected to achieve. It is more plausible that celibacy is one of a number of altruistic practices that, because of both the sacrifice they entail for the individual and the benefits they provide the organization, are typically institutionally reinforced. Alan Grafen's discussion of the difference between signal (where both signaler and recipient benefit) and manipulation (where only one party benefits) is potentially instructive in this context (1990, 535).

Several other evolutionary models related to altruism in general might apply to celibacy in particular. One is reciprocity, either direct (Trivers 1971; 1985) or indirect (Alexander 1987). However, as in the case of costly signaling, the currency of celibacy is too expensive, at least in evolutionary terms: there seem to be no benefits that could be returned to a celibate individual involved in a reciprocal relationship. Inclusive fitness is often highly relevant, and several researchers have shown how celibacy can be a familial strategy to minimize parental investment in offspring when cultural circumstances such as inheritance laws (Betzig 1995; Boone 1986) or resource stress (Low 2000) render it practical. However, even when indirect benefits accrue to a family by a celibate's removal from its material and reproductive concerns (Hager 1992) or by means of the celibate's increased status as a member of a celibate institution (Alexander 1979, 80), the daily maintenance by individuals of vows in non-kin settings still requires explanation. Trait-group selection (e.g., Sober and Wilson 1998a), to the extent that its effects might differ from those of kin selection, could be relevant as well; at present, while often assumed in the context of human behavior, it remains controversial (Sober and Wilson 1998b; Trivers 1998). Other relevant, evolutionary-minded models include mate competition (Dickemann 1997) and population-wide reproductive strategies (Reynolds 1986). All of these, and others, are likely to play some role in the development of institutional practices in religious contexts, as of course are more typically discussed historical, political, and economic factors. It seems clear, however, that the role of kin-cue manipulation as a basis of religious institutional practices to reinforce altruistic behaviors is a complementary one that warrants additional research. (For one approach focusing on the relationship of kin recognition to the evolution of religion, see Crippen and Machalek 1989).

CONCLUSION

I have explored the potential role of non-kin altruism in the behavior of members of religious institutions, the organizational practices that appear to reinforce that behavior, and the implications of both with respect to the development of religious institutions in general. I have not discussed religious institutions on the basis of specific ideology, ritual, or myriad other possible criteria (e.g., Verkamp 1995). Obviously, there are many powerful individual and cultural rationales for religious belief and practice and many potential factors involved in religious affiliation or conversion (Snow and Machalek 1984). And, of course, this research does not contradict the possibility that human beings act in ways that benefit others for altruistic reasons without coercion or deceit.

However, it does suggest that there may be aspects of human psychology that are similarly identified and manipulated in a variety of organizational settings in order to reinforce sacrificial acts such as celibacy. Additional

steps are clearly necessary to further test this possibility. These include reviewing materials on additional cases of institutionalized celibacy; exploring ways in which stratification, gender, and other variables impact celibacy and its reinforcement in institutional contexts; conducting ethnographic analyses to learn more about the impact of kin-cue manipulation on the daily life of celibates; and more rigorously comparing the developmental history of institutions where celibacy does and does not occur.

It is important to remember, however, that the predicted pattern of kin-cue manipulation is likely to apply not only to religious organizations with celibate members but also to religious, military, political, social, and other organizations demanding many different classes of altruistic behavior from recruits. Celibacy is only one example, however powerful, of the many demands that religious and other organizations might make, and attempt to institutionally reinforce, on recruits and members.

In fact, vows of celibacy need not be of primary importance to institutions manipulating kin recognition among members. For example, while a dramatic example of altruism in military contexts is altruistic suicide in battle, it is unlikely to be of primary concern to military organizations. Obedience, group cohesion under stress, and willingness to risk lives while engaging the enemy are much more important objectives (Henderson 1985). Yet some of the processes through which these behaviors are reinforced may also encourage acts of terminal altruism.

Similarly, it is likely that the avoidance of marriage, and therefore heirs, as well as the harnessing of individual resources and labor, are prime institutional objectives in institutions demanding celibacy of their members. Yet the means through which these behaviors are maintained can reinforce as well the reproductive sacrifice inherent in sexual abstinence. Any type of sacrifice for unrelated others in institutional settings should be expected to be facilitated by reinforcement, in that competing individual and familial interests can jeopardize the meeting of institutional goals. Thus, however difficult this may be to operationalize, the best future tests of kin-cue manipulation theory will likely require analyses of various classes of altruistic behaviors as well as comparisons of institutional practices in more generally altruistic versus non-altruistic contexts.

NOTES

1.   Although indirect, perhaps the best support for the importance of association as a human kin cue is found in studies of Israeli *kibbutzim*, where children reared together tend to avoid each other sexually (Shepher 1971; Talmon 1964), and in Taiwanese arranged marriages, where the practice of rearing children together and forcing them to marry often results in sexual dissatisfaction (Wolf 1995; see also Brown 1991, 118–29; van den Berghe 1983).

2.   Two promising lines of support in this area are the increasingly large literature on human face–recognition modules (e.g., Gauthier and Logothetis 2000; Kanwisher 2000; Wilson 1987) and research on paternity confidence and infant appearance (e.g., Christenfeld and Hill 1995; McLain et al. 2000).

3.   Obviously, kin terms do not necessarily correlate with actual genetic relationships. However, individuals appear to be generally aware of the genetic relationships that underlie kin nomenclature (Alexander 1979; Chagnon 1979; 1988; van den Berghe 1981). As summarized in Daly, Salmon, and Wilson 1997, all societies exhibit ego-centered kinship terminology based on parent-offspring relationships and distinguish between genders, generations, and degree of relatedness. These universal linguistic categories pertaining to kinship, potentially an aspect of the innate structure of language (Pinker and Bloom 1992), perhaps signal the existence of a kinship recognition cognitive module, and reinforce the likelihood of kin terminology and related symbolism as powerful indicators of relatedness. In addition, shared names, suggesting kinship relations, appear to positively influence helping behaviors (e.g., Johnson, McAndrew, and Harris 1991; Oates and Wilson 2002).

4.   There are, of course, exceptions. Geoffrey Moorhouse (1969, 65–68) describes the celibate Little Brothers and Sisters of Jesus, who live in groups of usually no more than five, take jobs in the workplace, and wear ordinary clothes. The Community of the Glorious Ascension, an Anglican men's celibate order, while typical of the predicted pattern in most respects, permits novices access to, and disposition of, their money and property (pp. 102–3). Some variability will apply to all of the major religions and their offshoots, particularly given the controversy historically accompanying celibacy in Christianity and Buddhism.

REFERENCES

Ainsworth, Mary D. S. 1977.   "Attachment Theory and its Utility in Cross-Cultural Research." In *Culture and Infancy*, ed. P. H. Leiderman, S. R. Tulkin, and A. Rosenfeld, 49–68. New York: Academic Press.

Alcock, John. 1998.   *Animal Behavior: An Evolutionary Approach.* 6th ed. Sunderland, Mass.: Sinauer.

Alexander, Richard D. 1979.   *Darwinism and Human Affairs.* Seattle: Univ. of Washington Press.

———. 1987.   *Biology of Moral Systems.* Hawthorne, N.Y.: Aldine.

———. 1990.   "Epigenetic Rules and Darwinian Algorithms." *Ethology and Sociobiology* 11:241–303.

Andelson, Jonathan G. 1983.   "Communitarianism, Familism, and Individualism among the Inspirationists at Amana." *International Journal of Sociology of the Family* 13:45–62.

Andrews, Edward D. 1963.   *The People Called Shakers.* New York: Dover.

Auboyer, Jeannine. 1965.   *Daily Life in Ancient India.* New York: Macmillan.

Badcock, Christopher R. 1987.   *The Problem of Altruism: Freudian-Darwinian Solutions.* London: Basil Blackwell.

Balch, Stephen H. 1985.   "The Neutered Civil Servant: Eunuchs, Celibates, Abductees and the Maintenance of Organizational Loyalty." *Journal of Social and Biological Structures* 8:313–28.

Barber, Malcolm. 1994.   *The New Knighthood: A History of the Order of the Temple.* Cambridge: Cambridge Univ. Press.

Barnett, H. G. 1953.   *Innovation: The Basis of Cultural Change.* New York: McGraw-Hill.

Baumgarten, Albert I. 1996.   "The Temple Scroll. Toilet Practices, and the Essenes." *Journal of Jewish Studies* 10(1):9–20.

———. 1997.   "He Knew That He Knew That He Knew That He Was an Essene." *Journal of Jewish Studies* 48(1):53–61.

———. 1998.   "Ancient Jewish Sectarianism." *Judaism* 47(4):387–403.

Beall, Todd S. 1988.   *Josephus' Description of the Essenes Illustrated by the Dead Sea Scrolls.* Cambridge: Cambridge Univ. Press.

Bellamy, James A. 1979.   "Sex and Society in Islamic Popular Literature." In *Society and the Sexes in Medieval Islam*, ed. A. Lufti al-Sayyid-Marsot, 23–42. Malibu: Undena.

Belsky, Jay, Laurence Steinberg, and Patricia Draper. 1991.   "Childhood Experience, Interpersonal Development, and Reproductive Strategy: An Evolutionary Theory of Socialization." *Child Development* 62:647–70.

Betzig, Laura. 1995.   "Medieval Monogamy." *Journal of Family History* 20 (2):181–216.

Bhattacharyya, Sivaprasad. 1953.   "Religious Practices of the Hindus." In *Religion of the Hindus*, ed. K. W. Morgan, 154–205. New York: Ronald Press.

Boone, James L. 1986. "Parental Investment and Elite Family Structure in Preindustrial States: A Case Study of Medieval–Early Modern Portuguese Genealogies." *American Anthropologist* 88:859–78.

Bourke, Andrew F. G. 2001. "Social Insects and Selfish Genes." *Biologist* 48:205–8.

Bromley, David G., Anson D. Shupe Jr., and Donna L. Oliver. 1982. "Perfect Families: Visions of the Future in a New Religious Movement." *Marriage and Family Review* 4(3/4): 119–29.

Brown, Donald. 1991. *Human Universals.* Philadelphia: Temple Univ. Press.

Bunnag, Jane. 1973. *Buddhist Monk, Buddhist Layman: A Study of Urban Monastic Organization in Central Thailand.* Cambridge: Cambridge Univ. Press.

Burton, Janet. 1994. *Monastic and Religious Orders in Britain 1000-1300.* Cambridge: Cambridge Univ. Press.

Chagnon, Napoleon A. 1979. "Mate Competition, Favoring Close Kin, and Village Fissioning among Yanomamo Indians." In *Evolutionary Biology and Human Social Behavior*, ed. N. A. Chagnon and W. Irons, 86–131. North Scituate, Mass.: Duxbury.

———. 1988. "Male Yanomamo Manipulations of Kinship Classifications of Female Kin for Reproductive Advantage." In *Human Reproductive Behavior: A Darwinian Perspective*, ed. L. Betzig, M. Borgerhoff Mulder, and P. Turke, 23–48. Cambridge: Cambridge Univ. Press.

Cholij, Roman. 1989. *Clerical Celibacy in East and West.* Hereford, England: Fowler Wright.

Christenfeld, N. J. S., and E. A. Hill. 1995. "Whose Baby Are You?" *Nature* (London) 378: 669.

Coser, Lewis A. 1974. *Greedy Institutions: Patterns of Undivided Commitment.* New York: Free Press.

Crippen, Timothy, and Richard Machalek. 1989. "The Evolutionary Foundations of the Religious Life." *Revue Internationale de Sociologie* 3:61–84.

Cronk, Lee. 1994. "Evolutionary Theories of Morality and the Manipulative Use of Signals." *Zygon: Journal of Religion and Science* 29 (March): 81–101.

Daly, Martin, Catherine Salmon, and Margo Wilson. 1997. "Kinship: The Conceptual Hole in Psychological Studies of Social Cognition and Close Relationships." In *Evolutionary Social Psychology,* ed. J. A. Simpson and D. T. Kenrick, 265–96. Mahwah, N.J.: Erlbaum.

Davis, Rex, and James T. Richardson. 1992. "The Organization and Functioning of the Children of God." In *New and Intense Movements*, ed. M. E. Marty, 322–40. Modern American Protestantism and Its World, No. 11. Munich: K. G. Saur.

Dawkins, Richard. 1979. "Twelve Misunderstandings of Kin Selection." *Zeitschrift fur Tierpsychologie* 51:184–200.

Dazey, Wade H. 1990. "Tradition and Modernization in the Organization of the Dasanami Samyasins." In *Monastic Life in the Christian and Hindu Traditions,* ed. A. B. Creel and V. Narayanan, 281–321. Lewiston, N.Y.: Edwin Mellen.

De Valk, Alphonse. 1990. *Priestly Celibacy in History.* Toronto: Life Ethics Centre, Pamphlet #27.

DeLamater, John. 1987. "A Sociological Approach." In *Theories of Human Sexuality,* ed. J. H. Greer and W. T. O'Donohue, 237–56. New York: Plenum.

Denton, Lynn Teskey. 1991. "Varieties of Female Hindu Asceticism." In *Roles and Rituals for Hindu Women,* ed. J. Leslie, 211–31. London: Pinter.

Dickemann, Mildred. 1997. "Paternal Confidence and Dowry Competition: A Biocultural Analysis of Purdah." In *Human Nature: A Critical Reader*, ed. L. Betzig, 311–28. New York: Oxford Univ. Press.

Dontas, Cleo, Olga Maratos, Maria Fafoutis, and Antigone Karangelis. 1985. "Early Social Development in Institutionally Reared Greek Infants: Attachment and Peer Interaction." *Monographs of the Society for Research in Child Development* 50 (1–2):136–46.

Draper, Patricia, and Henry Harpending. 1988. "A Sociobiological Perspective on the Development of Human Reproductive Strategies." In *Sociobiological Perspectives on Human Development*, ed. K. B. MacDonald, 340–72. New York: Springer-Verlag.

Dudley, Charles J., and George A. Hillery Jr. 1979. "Freedom and Monastery Life." *Journal for the Scientific Study of Religion* 18 (1):18–28.

Dundas, Paul. 1992. *The Jains.* London: Routledge.

Elder, Joseph W. 1990. "Some Roots and Branches of Hindu Monasticism." In *Monastic Life in the Christian and Hindu Traditions*, ed. A. B. Creel and V. Narayanan, 1–36. Studies in Comparative Religion, Vol. 3. Lewiston, N.Y.: Edwin Mellen.

Emlen, Stephen T. 1995. "An Evolutionary Theory of the Family." *Proceedings of the National Academy of Sciences* 92 (18):8092–99.

———. 1997. "Predicting Family Dynamics in Social Vertebrates." In *Behavioural Ecology: An Evolutionary Approach*, 4th ed., ed. J. R. Krebs and N. B. Davies, 228–53. Oxford: Blackwell Science.

Eshel, Esther. 1994. "4Q477: The Rebukes by the Overseer." *Journal of Jewish Studies* 45(1): 111–18.

Fletcher, David J. C., and Charles D. Michener, eds. 1987. *Kin Recognition in Animals*. New York: John Wiley.

Foster, Lawrence. 1995. "Sexuality and Relationships in the Shaker, Oneida, and Mormon Communities." *Communities* 87:52–56.

Frazee, Charles A. 1998. "The Origins of Clerical Celibacy in the Western Church." *Church History* 57 (suppl.): 108–26.

Galanter, Marc. 1993. "Charismatic Religious Sects and Psychiatry: An Overview." In *New and Intense Movements*, ed. M. E. Marty, 117–40. Modern American Protestantism and its World, No. 11. Munich: K. G. Saur.

Gauthier, Isabel, and Nikos K. Logothetis. 2000. "Is Face Recognition Not So Unique After All?" *Cognitive Neuropsychology* 17 (1/2/3): 125–42.

Ghurye, Golind S. 1964. *Indian Sadhus*. 2d ed. Bombay: Popular Prakashan.

Goergen, Donald. 1974. *The Sexual Celibate*. New York: Seabury.

Gossen, Gary H. 1997. *South and Meso-American Native Spirituality: From the Cult of the Feathered Serpent to the Theology of Liberation*. New York: Crossroad Herder.

Grafen, Alan. 1990. "Biological Signals as Handicaps." *Journal of Theoretical Biology* 144:517–46.

Hager, Barbara J. 1992. "Get Thee to a Nunnery: Female Religious Claustration in Medieval Europe." *Ethology and Sociobiology* 13:385–407.

Hamilton, W. D. 1963. "The Evolution of Altruistic Behavior." *The American Naturalist* 97: 354–56.

———. 1964. "The Genetical Evolution of Social Behavior, I,II." *Journal of Theoretical Biology* 7 (1): 1–16, 17–52.

Henderson, William D. 1985. *Cohesion: The Human Element in Combat.* Washington, D.C.: National Defense University Press.

Hepper, Peter G. 1991a. *Kin Recognition*. Cambridge: Cambridge Univ. Press.

———. 1991b. "Recognizing Kin: Ontogeny and Classification." In *Kin Recognition*, 259–88. Cambridge: Cambridge Univ. Press.

Hillery, George A. Jr. 1992. *The Monastery: A Study in Freedom, Love, and Community*. Westport, Conn.: Praeger.

Hood, Ralph W. Jr., Bernard Spilka, Bruce Hunsberger, and Richard Gorsuch. 1996. *The Psychology of Religion: An Empirical Approach*. New York: Guilford.

Horner, I. B. 1982a. *The Book of the Discipline (Vinaya-Pitaka),* Volume I. Sacred Books of the Buddhists, Vol. X. London: Pali Text Society.

———. 1982b. *The Book of the Discipline (Vinaya-Pitaka),* Volume II. Sacred Books of the Buddhists, Vol. XI. London: Pali Text Society.

———. 1983. *The Book of the Discipline (Vinaya-Pitaka),* Volume IV. Sacred Books of the Buddhists, Vol. XIII. London: Pali Text Society.

Hughes, Austin L. 1988. *Evolution and Human Kinship*. New York: Oxford Univ. Press.

Hurford, James R. 1991. "The Evolution of the Critical Period for Language Acquisition." *Cognition* 40:159–201.

Ingersoll, Jasper. 1966. "The Priest Role in Central Village Thailand." In *Anthropological Studies in Theravada Buddhism*, ed. A. Suddard, 51–76. Cultural Report Series No. 13, Southeast Asia Studies, Yale University.

Jennions, Michael D., and David W. Macdonald. 1994. "Cooperative Breeding in Mammals." *Trends in Ecology and Evolution* 9:89–93.

Johnson, Gary R. 1986. "Kin Selection, Socialization, and Patriotism: An Integrating Theory." *Politics and the Life Sciences* 4(2):127–54.

———. 1989.   "The Role of Kin Recognition Mechanisms in Patriotic Socialization: Further Reflections."   *Politics and the Life Sciences* 8:62–69.

Johnson, Gary R., Susan H. Ratwick, and Timothy J. Sawyer. 1987.   "The Evocative Significance of Kin Terms in Patriotic Speech."   In *The Sociobiology of Ethnocentrism*, ed. V. Reynolds, V. Falger, and I. Vine, 157–74.   London: Croom Helm.

Johnson, Jill L., Francis T. McAndrew, and Paul B. Harris. 1991.   "Sociobiology and the Naming of Adopted and Natural Children."   *Ethology and Sociobiology* 12:365–75.

Kanter, Rosabeth Moss. 1972.   *Commitment and Community: Communes and Utopias in Sociological Perspective*.   Cambridge: Harvard Univ. Press.

Kanwisher, Nancy. 2000.   "Domain Specificity in Face Perception."   *Nature Neuroscience* 3(8): 759–63.

Karamustafa, Ahmet T. 1994.   *God's Unruly Friends: Dervish Groups in the Islamic Later Middle Period, 1200–1550*.   Salt Lake City: Univ. of Utah Press.

Kitch, Sally L. 1989.   *Chaste Liberation: Celibacy and Female Cultural Status*.   Urbana, Ill.: Univ. of Illinois Press.

Knowles, David. 1951.   *The Monastic Constitutions of Lanfranc*.   New York: Oxford Univ. Press.

Komdeur, J., and B. J. Hatchwell. 1999.   "Kin Recognition: Function and Mechanism in Avian Societies."   *Trends in Ecology and Evolution* 14:237–41.

Lewis, I. M. 1969.   *People of the Horn of Africa: Somali, Afar and Saho*.   London: International African Institute.

Linge, David E. 1990.   "Asceticism and 'Singleness of Mind' in the Desert Fathers."   In *Monastic Life in the Christian and Hindu Traditions*, ed. A. B. Creel and V. Narayanan, 37–70.   Studies in Comparative Religion, Vol. 3.   Lewiston, N.Y.: Edwin Mellen.

Low, Bobbi S. 2000.   "Sex, Wealth and Fertility: Old Rules, New Environments."   In *Adaptation and Human Behavior*, ed. L. Cronk, N. Chagnon, and W. Irons, 323–44.   New York: Aldine de Gruyter.

Mason, Emma. 1998.   "Monastic Habits in Medieval Worcester."   *History Today* 48(5):37–43.

McCann, Abbot Justin. 1963.   *The Rule of Saint Benedict*.   3d ed.   Westminster: Newman.

McLain, D. Kelly, Diana Setters, Michael P. Moulton, and Anna E. Pratt. 2000.   "Ascription of Resemblance of Newborns by Parents and Nonrelatives."   *Evolution & Human Behavior* 21:11–23.

Moorhouse, Geoffrey. 1969.   *Against All Reason*.   New York: Stein and Day.

Muncy, Raymond L. 1973.   *Sex and Marriage in Utopian Communities: 19th-Century America*.   Bloomington Ind.: Indiana Univ. Press.

———. 1988.   "Sex and Marriage in Utopia.   *Society* (Jan/Feb): 46–48.

Murdock, George P., and Douglas R. White. 1969.   "Standard Cross-Cultural Sample."   *Ethnology* 8 (4): 329–69.

Napier, Michael. 1989.   "Preface."   In *Clerical Celibacy in East and West*, by Roman Cholij.   Hereford, England: Fowler Wright.

Narayanan, Vasudha. 1990.   "'Renunciation in Saffron and White Robes."   In *Monastic Life in the Christian and Hindu Traditions*, ed. A. B. Creel and V. Narayanan, 161–90.   Lewiston, N.Y.: Edwin Mellen.

Nash, Manning. 1963.   "Burmese Buddhism in Everyday Life."   *American Anthropologist* 65: 285–95.

Oates, Kerris, and Margo Wilson. 2002.   "Nominal Kinship Cues Facilitate Altruism."   *Proceedings: Biological Sciences* 269 (1487): 105–9.

Olivelle, J. Patrick. 1990.   "Village vs. Wilderness: Ascetic Ideals and the Hindu World."   In *Monastic Life in the Christian and Hindu Traditions*, ed. A. B. Creel and V. Narayanan, 126–60.   Studies in Comparative Religion, Vol. 3.   Lewiston, N.Y.: Edwin Mellen.

Oman, John Campbell. 1973.   *The Mystics, Ascetics, and Saints of India*.   Delhi: Oriental Publishers.

Osiek, Carolyn, and David L. Balch. 1997.   *Families in the New Testament World*.   Louisville, Ky.: Westminster John Knox.

Ozment, Steven. 1972.   "Marriage and the Ministry in the Protestant Churches."   In *Celibacy in the Church*, ed. W. Bassett and P. Huizing, 39–56.   New York: Herder and Herder.

Pfanner, David E. 1966.   "The Buddhist Monk in Rural Burmese Society."   In *Anthropological Studies in Theravada Buddhism*, ed. A. Suddard, 77–96.   Cultural Report Series No. 13, Southeast Asia Studies, Yale University.

Pinker, Steven, and Paul Bloom. 1992. "Natural Language and Natural Selection." In *The Adapted Mind*, ed. J. H. Barkow, L. Cosmides, and J. Tooby, 451–93. New York: Oxford Univ. Press.

Qimron, Elisha. 1992. "Celibacy in the Dead Sea Scrolls and the Two Kinds of Sectarians." In *The Madrid Qumran Congress*, Vol. 1, ed. J. T. Barrera and L. V. Montaner, 287–94. Leiden: E. J. Brill.

Qirko, Hector. 2001. "The Maintenance and Reinforcement of Celibacy in Institutionalized Settings." In *Anthropological Approaches to Sexual Celibacy*, ed. E. J. Sobo and S. Bell. Madison: Univ. of Wisconsin Press.

———. 2002. "The Institutional Maintenance of Celibacy." *Current Anthropology* 43 (2): 321–28.

Reynolds, Vernon. 1986. "Religious Rules and Reproductive Strategies." In *Essays in Human Sociobiology*, vol. II, ed. J. Wind and V. Reynolds, 105–17. Brussels: V. U. B. Study Series 26.

Rogers, Everett M., and Floyd F. Shoemaker. 1971. *Communication of Innovations: A Cross-Cultural Approach*. New York: Free Press.

Rousseau, Philip. 1985. *Pachomius: The Making of a Community in Fourth-Century Egypt*. Berkeley: Univ. of California Press.

Rubenson, Samuel. 1995. "Christian Asceticism and the Emergence of the Monastic Tradition." In *Asceticism*, ed. V. L. Wimbush and R. Valantasis, 49–57. New York: Oxford Univ. Press.

Sagi, Abraham, M. E. Lamb, K. S. Lewkowicz, R. Shoham, R. Dvir, and D. Estes. 1985. "Security of Infant-Mother, -Father, and -Metaplet Attachments among Kibbutz-Reared Israeli Children." *Monographs of the Society for Research in Child Development* 50 (1–2): 257–75.

Seward, Desmond. 1972. *The Monks of War: The Military Religious Orders*. Hamden, Conn.: Archon.

Shepher, Joseph. 1971. "Mate Selection among Second Generation Kibbutz Adolescents and Adults: Incest Avoidance and Negative Imprinting." *Archives of Sexual Behavior* 1(4): 293–307).

Sherman, Paul W., and Warren G. Holmes. 1985. "Kin Recognition: Issues and Evidence." In *Experimental Behavioral Ecology and Sociobiology*, ed. B. Holldobler and M. Lindauer, 437–60. New York: Gustav Fischer Verlag.

Snow, David A., and Richard Machalek. 1984. "The Sociology of Conversion." *Annual Review of Sociology* 10:167–90.

Sober, Elliott, and David Sloan Wilson. 1998a. *Unto Others: The Evolution and Psychology of Unselfish Behavior*. Cambridge: Harvard Univ. Press.

———. 1998b. "The Golden Rule of Group Selection." *Skeptic* 6 (4):83–86.

Sosis, Richard. 2000. "Religion and Intra-Group Cooperation: Preliminary Results of a Comparative Analysis of Utopian Communities." *Cross-Cultural Research* 34 (1): 70–87.

Spiro, Melford E. 1970. *Buddhism and Society*. New York: Harper and Row.

Stegemann, Harmut. 1992. "The Qumran Essenes—Local Members of the Main Jewish Union in the Late Second Temple Times." In *The Madrid Qumran Congress*, Vol. 1, ed. J. T. Barrera and L. V. Montaner, 83–166. Leiden: E. J. Brill.

Symons, Dom Thomas. 1953. *The Monastic Agreement of the Monks and Nuns of the English Nation*. London: Thomas Nelson.

Talmon, Yohina. 1964. "Mate Selection in Collective Settlements." *American Sociological Review* 29:491–508.

Thompson, Nicholas S. 2000. "Shifting the Natural Selection Metaphor to the Group Level." *Behavior and Philosophy* 28:83–101.

Timko, Philip. 1990. "Pray at Fixed Times, Pray Always: Patterns of Monastic Prayer." In *Monastic Life in the Christian and Hindu Traditions*, ed. A. B. Creel and V. Narayanan, 97–124. Lewiston, N.Y.: Edwin Mellen.

Trivers, Robert L. 1971. "The Evolution of Reciprocal Altruism." *Quarterly Review of Biology* 46:35–57.

———. 1985. *Social Evolution*. Menlo Park, Calif.: Benjamin/Cummins.

———. 1998. "As They Would Do to You: A Review of *Unto Others: The Evolution and Psychology of Unselfish Behavior*, by Elliott Sober and David Sloan Wilson." *Skeptic* 6 (4):81–83.

Tsomo, Karma Lekshe. 1994. "Buddhist Ethics in Japan and Tibet: A Comparative Study of the Adoption of Bodhisattva and Pratimoksa Precepts." In *Buddhist Behavioral Codes and the Modern World*, ed. C. Wei-Hsun Fu and S. A. Wawrytko, 123–38. Westport, Conn.: Greenwood.

van den Berghe, Pierre L. 1981. *The Ethnic Phenomenon.* New York: Elsevier.

———. 1983. "Human Inbreeding Avoidance: Culture in Nature." *Behavioral and Brain Sciences* 6:91–123.

van den Berghe, Pierre L., and Karl Peter. 1988. "Hutterites and Kibbutzniks: A Tale of Nepotistic Communism." *Man* 23:522–39.

Verkamp, Bernard J. 1995. *The Evolution of Religion.* Scranton, Pa.: Univ. of Scranton Press.

Vermes, Geza, and Martin D. Goodman. 1989. *The Essenes according to the Classical Sources.* Oxford Centre for Postgraduate Hebrew Studies. Sheffield: JSOT Press.

Wach, Joachim. 1962. *Sociology of Religion.* Chicago: Univ. of Chicago Press.

Weber, Max. 1964. *The Sociology of Religion.* Boston: Beacon.

Wilson, Edward O. 1987. "Kin Recognition: An Introductory Synopsis." In *Kin Recognition in Animals*, ed. D. J. C. Fletcher and C. D. Michener, 7–18. New York: John Wiley.

Wolf, Arthur. 1995. *Sexual Attraction and Childhood Association.* Stanford: Stanford Univ. Press.

Wynne, Edward A. 1988. *Traditional Catholic Religious Orders: Living in Community.* New Brunswick: Transaction Books.

Yalman, Nur. 1962. "The Ascetic Buddhist Monks of Ceylon." *Ethnology* 1 (3): 315–28.

Yamagiwa, Nobuyuki, and Jonathan A. Silk. 1994. "The Importance of Vinaya in the Study of Indian Buddhism, with Special Reference to Chinese Sources." In *Buddhist Behavioral Codes and the Modern World*, ed. C. Wei-Hsun Fu and S. A. Wawrytko, 101–9. Westport, Conn.: Greenwood.

Zahavi, Amotz, and Avishag Zahavi. 1997. *The Handicap Principle.* Oxford Univ. Press.

Zias, Joseph E. 2000. "The Cemeteries of Qumran and Celibacy: Confusion Laid to Rest?" *Dead Sea Discoveries* 7 (2): 220–53.