

Adolescent Religious Rites of Passage: An Anthropological Perspective

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Throughout the world and across widely diverse cultures, adolescence is considered the appropriate life stage for learning sacred rituals and beliefs, and religious rites of passage are the preferred means of their transmission. Christian confirmation classes, the bar and bat mitzvahs of Judaism, the traditional Sun Dance rites of Native American Plains cultures, and the initiation rites of the Ilahita Arapesh and Baktaman of New Guinea attest to the ubiquity and great diversity of these rites.

The explicit function of adolescent rites of passage is to transform children into socially responsible adults through the transmission of sacred knowledge. Numerous anthropologists have noted the transformative psychological effects of adolescent rites of passage on initiates (Glucklich, 2001; Turner, 1967; Whiting, Kluckhohn, & Anthony, 1958). Others have examined their important social and political consequences (Paige & Paige, 1981). It is noteworthy, however, that not all societies conduct adolescent rites of passage, and, of those that do, there is wide variation in the composition, duration, and intensity of these rites.

Adolescent rites of passage are costly. They entail time, energy, and resources, and may even result in the disability or death of initiates. The absence of these rites in some traditional and many contemporary societies suggests that adolescents can successfully transition to adulthood without participating in religious rites of passage. This raises a number of important questions: Why do these rites occur? Why do they exhibit such wide variation across cultures? Why are they *religious* rites? Why is adolescence the preferred developmental period for conducting such rites? These questions have received considerable attention from both psychologists and anthropologists over the past several decades, and emerging research in adolescent brain development has provided fresh insights. Concomitantly, the application of costly signaling theory to religion in general, and adolescent rites of passage in particular, by evolutionary anthropologists has offered new perspectives on adolescent rites of passage and provided novel approaches for cross-cultural research.

1 Rites of Passage: Structure and Function

Rites of passage are ceremonies that mark transition points in an individual's social identity as they move through the life cycle. Marriage, birthdays, graduation, and

even membership in new social groups all entail changes in social roles and identities. Rites of passage create new social identities for initiates and announce these changed identities to the larger social group. Participation in these rites prepares individuals for their new roles and statuses by inculcating new behavioral norms and expectations. Rites of passage publicly signal these changes to the larger social group and clarify new behavioral expectations of other group members vis-à-vis initiates. These rites also establish new social, political, and legal relationships. Ndembu males who have successfully completed the Mukanda ceremony are no longer boys to be treated as children; they are men with full adult authority and responsibilities and must be treated as such. Likewise, the American bride and groom who take their wedding vows are no longer independent social and legal entities but are, instead, a couple with a shared social identity and new legal obligations.

Rites of passage may be as brief and simple as a Las Vegas wedding or as lengthy and complex as the months-long Mukanda ceremony. Whether simple or complex, rites of passage universally share two important characteristics: (1) all entail ritual and (2) all exhibit a three-part structure involving separation, liminality, and reintegration.

The Role of Ritual in Rites of Passage

Rites of passage incorporate ritual, although such ritual may be either secular or religious. Anthropologist S. J. Tambiah (1979) has defined ritual as “a culturally constructed system of symbolic communication ... constituted of patterned and ordered sequences of words and acts ... whose content and arrangement are characterized in varying degree by formality (conventionality), stereotypy (rigidity), condensation (fusion), and redundancy (repetition)” (p. 119). The ritualized displays of numerous nonhuman species also incorporate formality, stereotypy, condensation, and redundancy. Laboratory experiments show that these elements neurophysiologically alert and focus attention, enhance memory, and promote associational learning, thereby improving communication (Rowe, 1999). For both humans and nonhuman species, ritual constitutes the costliest end of a continuum of signals and behaviors that have evolved to communicate important social and biological information. The mating dance of peacocks, the stotting displays of Thompson’s gazelles, and human wedding ceremonies all entail considerable time, energy, and somatic resources. Evolutionary biologists Amotz and Avishag Zahavi (1997) have argued that such costly ritualized displays have evolved to provide honest, reliable information for receiver assessment, since only those fit enough can bear the costs of such displays.

Human ritual also serves to communicate important biological and social information by alerting and focusing attention, enhancing memory, and promoting associational learning. In contrast to nonhuman ritual, however, the incorporation of symbols in human ritual provides an additional mechanism for extending such communication across both time and space, thereby creating the basis for cultural and group transmission of information.

Ritual symbols may be secular and mundane, such as the pledges of fraternities and sororities or the tattoos of urban gangs. The vast majority of traditional rites of passage, however, are sacred rites and incorporate sacred symbols. Sacred symbols are mysterious and metaphorical, triggering myriad neural associations, both conscious and subconscious (Alcorta & Sosis, 2005). These attributes of sacred symbols make

them personally salient and motivationally powerful for adherents while simultaneously rendering them culturally pliable. Religious rituals imbue sacred symbols with shared experiential meaning and deep emotional force. In contrast to secular ritual, the experiential and emotionally evocative elements of religious ritual serve to create, re-create, and sanctify sacred symbols fundamental to the social order. Adolescent rites of passage not only inculcate these symbols but also render them personally salient and motivationally meaningful for initiates. Traditional societies conduct adolescent rites of passage for the explicit purpose of transmitting sacred knowledge to initiates within a “forest of symbols” (Turner, 1967).

The Three-Phase Structure of Rites of Passage

The second universal characteristic of rites of passage is a three-phase structure involving separation, liminality, and reintegration (Van Gennep, 1909/1960). Adolescent rites of passage remove the initiate from the familiarity and security of his or her childhood social group in order to begin the process of stripping away old identities and creating new ones. Separation may be as mundane as a trip to the local synagogue or church, or it may entail the forceful kidnapping and sequestering of the initiate in a secret location, as among the Ndembu. In all cases, however, separation involves removal of the initiate from the security of a “known” physical, social, and psychological space and transference to a novel, mysterious, and disorienting one.

Once separated, the initiate enters the second (liminal) phase, in which the initiate’s previous self-identity is broken down and new beliefs, norms, and values are inculcated. During this phase the psychological transformation of the initiate occurs. In some societies this stage entails little more than the oral transmission of knowledge. In others, however, the liminal stage lasts weeks or months and subjects the initiate to terrifying physical and psychological ordeals, including food and water deprivation as well as bodily mutilation. Such ordeals typify rites of passage across numerous cultures, including the Aranda of Australia, the Baktaman of New Guinea, the Crow of North America, and the Maasai of Africa. When initiates pass through a rite of passage together, differences between initiates are minimized, and a strong sense of *communitas* or bonding is created between them.

In the third and final stage, the transformation of the initiate from child to adult is socially and communally acknowledged. The initiate is “reborn” and reintegrated into the larger social group with a new social persona: a socially obligated adult.

Many adolescent rites of passage are relatively simple, consisting of little more than the oral transmission of knowledge from elder to initiate. Such simple rites typify the majority of individual female rites of passage and are recorded for many hunter-gatherer band societies, such as the Yámana and Halakwulup of Tierra del Fuego. Religious rites of passage in most contemporary developed nations are also relatively brief and incur relatively low costs in terms of time, energy, resources, and initiate experiences.

In other cultures, however, adolescent rites of passage traditionally involve intense and violent psychological and physical ordeals. For example, Luiseño initiates were required to lie motionless while being bitten by angry hordes of ants. Tukuna girls had their hair plucked out. Nuer boys were scarified, and the Iatmul novice was incised with a small bamboo blade on his back. The traditional Sun Dance rites of many

Native American Plains cultures required initiates to fast, dehydrate, and dance to exhaustion. As the community watched, adolescent males were required to break free of leather thongs attached to a communal pole by tearing their own flesh (Glucklich, 2001). Baktaman initiation rituals were even more brutal and terrifying, with initiates being beaten and tortured (Barth, 1975), while the Ndembu concluded their lengthy Mukanda initiation rites with the circumcision of initiates by knife-wielding, red-stained elders—the “killers” of the boys—as participants watched (Turner, 1967). Such intense and violent rites of passage impose significant psychological and physical costs on initiates, sometimes resulting in physical mutilation or impairment, and even death.

2 Functions of Adolescent Rites of Passage

The explicit purpose of adolescent rites of passage is to transform children into socially responsible adults through the transmission of sacred and socially valued knowledge. Importantly, rites of passage transform ambiguous biological processes—at what point during puberty does a boy/girl become a man/woman?—into unambiguous digital information. Before the rite of passage, initiates are boys and girls; they emerge from the rite as socially recognized men and women respectively. These rites “help to establish a sense of social–emotional anchorage for the growing individual ... on the social map” (Cohen, 1964, p. 5). Rites of passage accomplish this by transmitting sociocultural knowledge to the initiate regarding adult roles and responsibilities, and by clearly communicating the transitioning of social statuses and identities within the social group. In addition to the psychological transformation of initiates, rites of passage regenerate and transform social groups as well. Rites of passage provide a stabilizing mechanism for the smooth transfer of statuses within a given social structure, but they additionally afford an institutionalized mechanism for brokering power relations and creating social change within a society. Initiation rites change the status of individuals and may simultaneously alter the status of social groups within the larger collectivity. For societies organized along principles of descent, rites of passage have important political as well as economic and reproductive consequences (Paige & Paige, 1981).

The pivotal role of rites of passage in relation to the formation and cohesion of social groups has increasingly been recognized by evolutionary anthropologists. These researchers view religion in general, and adolescent rites of passage in particular, as *costly signals* that function to create and inculcate group identity and to increase in-group cohesion and cooperation (Alcorta & Sosis, 2005). The costly signaling model of religion posits a continuum in the costliness of adolescent rites of passage that reflects escalating benefits to be derived from increased in-group solidarity. This model predicts that adolescent rites of passage will be low cost or absent in societies for which the benefits of in-group cohesion are minimal. This is true of both small-band fission–fusion societies and modern nation-states in which educational, economic, and defense functions have been secularized and subsumed by the state. Conversely, the costliest rites should be found in nonstate societies for which the benefits to be derived from in-group cohesion and cooperation are great, as in the case of territorial defense, alloparental care, or collective resource acquisition.

3 Cross-Cultural Research

Cross-cultural research conducted to date supports this model. Nearly 70% of traditional societies studied by anthropologists conduct adolescent religious rites of passage (Lutkehaus & Roscoe, 1995). Most entail relatively simple rituals involving single adolescent females at first menarche. Such female rites are recorded for 50–60% of traditional societies. Individual male rites of passage are found in only 30–40% of traditional cultures. In contrast, rites of passage involving groups of age-graded cohorts more frequently involve males. Approximately 30% of societies throughout the world conduct male group initiation rites, as compared to only 10% that conduct group rites for females (Lutkehaus & Roscoe, 1995).

The presence or absence of adolescent rites of passage in a society, as well as the particular forms these rites take, significantly correlate with social complexity in a U-shaped pattern. Research by Schlegel and colleagues found that “initiation ceremonies follow an evolutionary track. Ceremonies for girls are predominant in simple societies; ceremonies for boys become equally frequent at the middle range; in complex societies, these ceremonies tend to be absent” (Schlegel & Barry, 1980, p. 710).

In nomadic hunter-gatherer and small horticultural societies, adolescent rites of passage, when present at all, usually consist of female initiation rites occurring at first menarche. These typically involve a single initiate, are relatively low cost, and serve primarily to signal reproductive maturity. For the Navajo of the American Southwest the 4-day, 4-night *Kinaaldá* ceremony celebrated a girl’s attainment of puberty and her transition to womanhood. The *Elima* ceremony of the African Pygmies entailed a girl’s seclusion in the *Elima* hut followed by instruction and celebration. Among the Cree of North America, girls entering puberty were taught by female elders for 2 years, secluded in a cleansing lodge, and reintegrated into the group as women. At first menstruation !Kung San girls were “bedecked with ornaments, rubbed with oil, and brought into a hut” (Shostak, 1981, p. 134) where they remained secluded for 3 to 4 days, talking and eating little, as elder females danced and sang outside the hut.

Many hunter-gatherer and small horticultural groups exhibit a fission–fusion social organization, with fluid group size and membership. In these groups there is constant coalescence and dispersal of both individuals and social groups as social and ecological circumstances change. In such groups, male initiation rites, when present at all, may occur as single initiate vision quests, as in many Southwest Native American cultures, or may involve age-graded cohorts during times of band fusion, as typified by the *Choma* ceremony of the !Kung San of Africa. The *Choma* lasted only a few weeks, during which time male initiates were isolated from the women of the band and subjected to “hunger, cold, thirst and extreme fatigue that comes from continuous dancing” (Shostak, 1981, p. 213).

In larger, more sedentary midlevel societies, adolescent initiation rites occur most frequently and are more costly in terms of time, resources, and painful initiation practices. In these societies, descent groups constitute an organizing principle of marriage, inheritance, residence, and governance, with unilineal descent systems predominating. It is in these midlevel unilineal descent societies that elaborate adolescent religious rites are most frequently found. Female initiation rites are most frequently associated with matrilineal societies “in which women make a notable contribution to subsistence activities” (Brown, 1963, p. 851), as in the *Chisungu* rites of the Bemba of Africa. Female

initiation rites are less common in patrilineal societies but are more likely to involve painful genital operations and/or scarification when they occur in patrilineal societies that also conduct painful male initiation rites, as among the Aranda, Gusii, and Tsonga (Brown, 1963). Male rites of initiation occur in both matrilineal and patrilineal societies and are more frequent in midlevel pre-state societies (Schlegel & Barry, 1980). Among the Nuer of eastern Africa, initiation traditionally occurred every 4 years and involved “age sets” of pubertal boys. These boys collectively underwent the operation of “gar,” in which “the brows of initiates are cut to the bone with a small knife, in six long cuts from ear to ear” (Evans-Pritchard, 1969, p. 249). Following the operation the boys lived together in partial seclusion, observing various taboos before being reintegrated into the group as men. According to anthropologists William Divale and Marvin Harris (1976, p. 521), “three quarters of 1,179 societies classified by Murdock (1967) are either patrilineal or virilineal while only one tenth are matrilineal or uxorilineal.” These anthropologists maintain that patrilineality, patrilineality, and the male supremacist complex associated with them constitute an adaptation for warfare (Divale & Harris, 1976).

Of all cooperative group endeavors, warfare requires the highest levels of individual self-sacrifice on behalf of the group. It also demands the greatest trust and cohesion of individual participants. Costly male group rites of passage that promote in-group cooperation and cohesion may comprise an important element in the warfare complex. Cross-cultural research has found that the costliest rites of passage, as defined by the severity of ordeals inflicted on initiates, are positively and significantly associated with the frequency of warfare in pre-state societies (Sosis, Kress, & Boster, 2007). These rites, such as those observed by the Ilahita Arapesh and Baktaman of New Guinea and the Ndembu of Africa, most often involve age-graded male groups and subject initiates to intense, terrifying, and painful psychological and physical ordeals, including scarification, bodily mutilation, and circumcision. The psychogenic impacts of these rites are significant (Glucklich, 2001; Turner, 1967; Whiting et al., 1958). They create new social and personal identities for initiates and forge a cohesive “band of brothers” as an effective warrior class within the society.

In modern state-level societies, religious rites of passage are often significantly attenuated or absent. In these societies, the legal, judicial, and defense functions performed by descent groups and warrior classes in midlevel pre-state societies are assumed by the state. Attenuation of religious ritual is frequently accompanied by increases in secular ritual, as the socialization and educational functions of traditional rites of passage are largely shifted to institutions of the state. Even in these circumstances, however, sacralization of secular ritual frequently occurs, as illustrated by the swearing of sacred oaths of office and the ubiquity of military chaplains.

4 Adolescent Rites of Passage and Experiential Learning

The impacts of adolescent rites of passage on initiates can be profound. Even relatively benign rites of passage, such as those conducted in Christian and Buddhist training programs, have short- and long-term effects on autonomic, psychological, and behavioral measures (Alcorta, 2016). In the United States, teen religious participation is positively associated with a broad array of prosocial behaviors, and significantly and negatively associated with cigarette smoking, alcohol and substance abuse, risky sexual behaviors,

juvenile delinquency, and a host of psychological and physical disorders, including anxiety, depression, and suicidal behaviors. Even comparatively mild exposure of adolescents to religious training can significantly impact their beliefs, behaviors, and biological indices (Alcorta, 2016). Advances in our understanding of both religion and the developing adolescent brain provide insights into the processes involved.

Adolescence is marked by extensive social, psychological, and physical change. The most obvious change that occurs during adolescence is the onset of puberty and the initiation of a cascade of hormones that accelerate growth, induce development of secondary sexual characteristics, and begin reproductive maturation. Yet, puberty itself is triggered by neuroendocrine signals in the developing adolescent brain. These signals are but one of myriad neurophysiological changes that differentially impact the neural circuitry that makes up our “social” and “moral” brains. During early to midadolescence, limbic structures that play pivotal roles in emotion and memory attain peak volumes. As a result of these neurophysiological changes, young adolescents are more “prone to erratic ... and emotionally influenced behavior” (Dahl, 2004, p. 3) and react with greater emotional intensity than either children or adults.

Among these structures the hippocampus is central to the formation and consolidation of our explicit, or conscious, memories, while the amygdala encodes and consolidates our implicit, emotional memories. The amygdala evaluates and processes both positive and negative emotions and assigns emotional valuations to the stimuli encountered in our daily lives. The amygdala is particularly important in the appraisal of negative emotions and is central to fear conditioning, a powerful learning process that underlies our evolved negativity bias. The amygdala also functions in the conscious and unconscious processing of facial signals and judgments of trustworthiness, a function particularly pronounced in adolescents, who exhibit “greater brain activity in the amygdala than in the frontal lobe when engaged in a task requiring the subjects to identify emotional state from facial expressions.” This contrasts with adults, who exhibit “greater activation in [the] frontal lobe than [the] amygdala when engaged in the same task” (Spear, 2000, p. 440).

The amygdala has direct interconnections with numerous brain structures, including both the prefrontal cortex and the brain’s pleasure and reward center. During adolescence the reward-processing region of the brain also undergoes maturation. Release of the neurotransmitter dopamine in the reward center makes us feel good and motivates us to continue to engage in the behaviors that initiated its release. Some things, such as food, sex, music, and drugs of abuse, are intrinsically rewarding and automatically elicit dopamine release. Other stimuli that do not have inherent incentive value can acquire it through association with stimuli that do through a process of reinforcement learning. Reinforcement learning is largely a subconscious process, yet, like fear conditioning, it plays a critical role in weighting our judgments and choices, and influencing our behavior (Coricelli, Dolan, & Sirigu, 2007).

During mid- to late adolescence, the temporal and prefrontal cortices of the brain mature. The primary function of the temporal cortex is the processing of social stimuli, including facial and gestural recognition, mental-state attribution, and music and language processing. The increased importance of social and musical stimuli during adolescence reflects the ongoing maturation of this region. The prefrontal cortex, the brain’s “executive center,” is critical for impulse inhibition, self-regulation, social judgment, personal decision making, and our sense of self. It is also the preeminent

association area of the brain and the locus of human abstract and symbolic thought. During midadolescence, the prefrontal and temporal cortices peak in volume. These changes are accompanied by a shift in the brain's dopaminergic system as neural pathways linking executive and social functions of the brain with reward and emotional processing structures are shaped and strengthened. Underutilized neural connections are "pruned" away and the associational pathways that remain are streamlined through the process of myelination (Paus, 2005).

The brain changes that occur during adolescence render this developmental stage a particularly sensitive period for the shaping of a sense of self. It is during this period that our "social" and "moral" brains mature, as well. Heightened activity in the emotion and reward-processing regions of the adolescent brain concomitant with the dopaminergic "shift" in functional connectivity that occurs between the prefrontal cortex, amygdala, and ventral striatum optimize conditions for conditional and reinforcement learning. Simultaneously, the maturing temporal and prefrontal cortices provide the neural plasticity necessary for creating and strengthening new associational networks linking social, executive, and symbolic functions. Neuroscientist William Greenough (1986) has coined the term *experience expectant* to describe developmental periods during which the experiences of the individual have particularly significant impacts on the developing brain. Adolescence appears to be such an experience expectant period for the shaping of our "social" and "moral" brains. The maturation of temporal and prefrontal cortices during adolescence provides a plastic substrate for creating social and symbolic schema. At the same time, changes occurring in emotional and reward-processing regions of the adolescent brain create opportunities to invest sociosymbolic schema with emotional meaning and motivational salience through processes of both fear conditioning and reinforcement learning.

5 Emotions, Motivation, and the Sacred

Religious rites of passage are optimally adapted for such learning (Alcorta & Sosis, 2005). These rites derive their power to inculcate sociocultural values and influence individual behaviors from the strong emotions they evoke and the embodied experiences they create. Even relatively low-cost rites, such as participation in music-based communal rituals, serve to elicit feelings of joy and transcendence. Music, an intrinsically enjoyable experience found in nearly all religions, engages the brain's reward system and stimulates the production of "feel-good" neurochemicals such as dopamine, serotonin, oxytocin, and endorphins. While dopamine production underlies reinforcement learning, oxytocin enhances social memory and increases in-group bonding. Participation in religious ritual, like participation in music-based secular ritual, elicits all these neurophysiological responses. In contrast to secular ritual, however, religious ritual further associates these embodied experiences and evoked emotions with highly memorable counterintuitive beliefs and supernatural agents at a time in development when such agents and beliefs are most compelling and socially relevant. More intense and costly rites of passage that couple emotionally rewarding experiences with fear-evoking pain and terror create even more powerfully compelling embodied experiences and implicit and explicit memories. Adolescents who endure these rites bear both a visible sign of

group membership and an indelibly etched network of powerful subconscious neural associations that impact subsequent beliefs, choices, and behaviors.

The ability of ritual to evoke both positive and negative affect is, of course, not specific to religion. Secular dances, concerts, and “raves” also induce feelings of happiness and joy, and military boot camps can certainly elicit pain, shock, and awe. Such secular experiences can have strong emotional impacts on participants. What is different about religion, however, is the association of these evoked emotions with omniscient supernatural beings that prescribe and proscribe social behaviors. The counterintuitive beliefs of religious systems are highly memorable and activate cognitive schema on a conscious level. The metaphorical nature of these beliefs also activates myriad unconscious social and emotional associations. The minimally counterintuitive beliefs of religious systems are easily remembered, difficult to forget, and almost impossible to “fake” by the uninitiated. These attributes render them powerful markers of group identity, and their mystery imbues them with personal significance and motivational force. Since they are also unfalsifiable, they cannot be disproven, and so they endure (Rappaport, 1999). Moreover, the shared beliefs and values created through religious rites forge communities of trust, faith, and cooperation. Research indicates that religious attendance, rather than religious belief, is most consistently and positively correlated with both prosocial and prohealth behaviors.

6 Conclusion

Nearly three fourths of all human societies conduct adolescent rites of passage. The explicit purpose of these rites is to transform children into adults through the transmission of sacred knowledge. Anthropologists have long noted the transformative effects of religious initiation on adolescents, and empirical evidence of a significant positive association between adolescent religious participation and myriad prosocial behaviors has been demonstrated for modern industrial cultures as well.

The neurophysiological changes that occur during adolescence render this a particularly sensitive period for both fear conditioning and reinforcement learning. The maturation of brain regions involved in social, symbolic, and executive functions and a shift in the dopaminergic system of the adolescent brain provide a unique window of opportunity for inculcating sociocultural beliefs and imbuing them with motivational significance during this developmental period.

Evolutionary anthropologists often view adolescent rites of passage in particular, and religion in general, as costly signals that promote in-group cohesion and cooperation. In pre-state societies, such rites created adaptive warrior classes that served to capture and defend valued territories, resources, and mates. Modern nation-states have co-opted many of the functions of adolescent rites of passage. While this secularization of the socialization process promotes greater social fluidity, there is some evidence that it may also contribute to increased adolescent psychological and social dysfunction. In his review of social and economic indicators of nations around the globe, sociologist Phil Zuckerman (2005) notes that suicide rates are “the one indicator of societal health in which religious nations fare much better than secular nations” (p. 59). Adolescents are disproportionately represented in these statistics.

Examining the relationship between religious rites of passage and the developing adolescent brain can shed much light on contemporary adolescent lives. Ongoing research in both adolescent brain development and evolutionary studies of religion holds great promise for better understanding both the proximate and ultimate functions of adolescent rites of passage and religion.

SEE ALSO: Adolescence in Intercultural Context; Culture and Adolescent Development; Ethnographic Research in Adolescent Development; Religious Development in Adolescence; Religious Identity; Rites of Passage

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