

essential for understanding the FPS, because each type implies drastically different cognitive procedures: type (1) accesses a realm of empirical and perceptual evidence that is ontologically closed to type (2) and type (2) accesses a realm which rests on descriptive resources and individual/collective imagination.

Ecological variability and religious beliefs

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Abstract: Religious beliefs, including those about an afterlife and omniscient spiritual beings, vary across cultures. We theorize that such variations may be predictably linked to ecological variations, just as differences in mating strategies covary with resource distribution. Perhaps beliefs in a soul or afterlife are more common when resources are unpredictable, and life is brutal and short.

Religious beliefs, including those about an afterlife and omniscient spiritual beings, vary across cultures (Cohen & Hall, submitted; Cohen et al. 2003). This does not mean they are not adaptations, because human behavior represents a continual and dynamic interplay between flexible evolved mechanisms and variable environmental inputs (Kenrick 2006; Kenrick et al. 2002). Rather, an evolutionary ecological perspective inspires questions about whether variations in religious beliefs and practices are adaptively keyed to variations in human physical and social environments (ranging from food and shelter to social structure: e.g., status hierarchies, access to mates, and geographical distribution of kin relative to self). Cultural norms surrounding sexual liaisons (often centrally incorporated into religious beliefs) provide one illustrative case. Such norms vary widely, with some societies and some religions sanctioning only monogamy, many also accepting polygyny, and a small percentage permitting polyandry. These variations correlate predictably with physical and social ecology. For example, Tibetan families in which one man marries one woman have fewer surviving children than do families in which brothers pool their resources (Crook & Crook 1988). By sharing one wife, brothers can preserve the family estate, which would not even support one family if it were subdivided each generation. Brothers in other species also engage in polyandrous mating when resources are scarce. Regarding polygyny, multiple women are particularly likely to marry one man when several conditions converge: (1) a steep social hierarchy, (2) a generally rich environment so one family can accumulate vast wealth, (3) occasional famines so the poor face occasional danger of starvation (Crook & Crook 1988). Under these circumstances, a woman who joins a large wealthy family reaps benefits, even if she would have to share her husband with other women. This pattern is also found in other species. For example, indigo buntings vary between monogamy and polygyny, but multiple females only pairup with the same male when that male controls a resource-rich territory and his neighbors have poorer territories (Orians 1969).

We wish to apply a similar analytic strategy to variations in belief in souls and the afterlife. Different religions have very different emphases on the importance of belief in an afterlife (emphasized less by Jews, more by Fundamentalist Protestants, for example; Cohen & Hall, submitted). And within a religion, some individuals have much stronger beliefs in an afterlife than others do (Cohen et al. 2005). Furthermore, there are vastly different forms of belief in life after death, including reincarnation, heaven and hell, ghosts, and so forth. Similarly, individuals and cultures vary in views of God as vengeful and punishing (Abramowitz et al. 2002). It is sometimes claimed that the Old Testament God is more vengeful, whereas the New Testament God is more forgiving (but see Cohen et al. 2006).

Certainly, such variations may be due to particular historical factors affecting the development of a particular religion or the learning history of a particular individual. However, taking a cue from Bering, and Atran and Norenzayan (2004) and others, we propose a novel direction for theorizing about belief in life after death. It would be worth investigating whether variations in beliefs in afterlife or observant spirits are linked to recurrent variations in social or physical ecology. Bering has proposed that belief in souls has a moral function, among others. Perhaps beliefs in a soul or afterlife are more common when resources are unpredictable, and life is brutal and short. If most people have predictable and sufficient resources, there may be less need to regulate cooperation. If resources are unpredictable or scarce, however, supernatural agents may be more necessary: As Durant and Durant (1968, p. 51) suggested, “as long as there is poverty there will be gods.”

Similarly, a belief in an omniscient God (who also metes out punishment, both during life and after) might be more common in societies in which people spend more time around non-relatives (who are more likely to punish your transgressions severely, and to cheat on you). If true, one would expect not to find such beliefs as commonly in small groups of closely related hunter-gatherers. In social groups including unrelated individuals, on the other hand, other people can't be watching you all the time to make sure you are not poaching others' mates or stealing their food. But invisible, supernatural agents can (or, at least, you don't know when they are and when they are not). According to this line of reasoning, one might suppose that the variable and harsh desert culture in which the Old Testament is rooted promoted a view of God as harsh and vindictive, whereas the more stable societal structure of the New Testament promoted a view of God as more forgiving. Religions that exist in harsh or unpredictable environments (or religions rooted in such environments) may be more prone to belief in souls, or may view God as more punitive. Religions that exist in stable or resource-rich environment (or religions rooted in such environments) may be less prone to belief in souls, or may view God as more forgiving.

This analysis suggests a need for a functionally based taxonomy of religious beliefs and practices, which can be mapped onto a taxonomy of ecological variations to which human groups need to adjust. An ecological approach suggests that the traditional beliefs of international religions originally emerged in interaction with particular environmental factors. There are likely pressures to maintain the belief systems intact as members migrate to new physical and social environments. Our analysis implies that the group-level beliefs will change (perhaps slowly) to match new habitats, and that individual commitment to particular features of those beliefs will change (perhaps more rapidly) to reflect operation of context-triggered behavioral and cognitive mechanisms. It may be, for example, that even Roman Catholics (who belong to a religion with strongly institutionalized checks on heretical thinking) have very different complexes of supernatural beliefs and imagined offenses depending on whether they are from an Irish fishing village, a Sicilian farming community, or a California suburb.

Production of supernatural beliefs during Cotard's syndrome, a rare psychotic depression

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Abstract: Cotard's syndrome is a psychotic condition that includes delusion of a supernatural nature. Based on insights from recovered