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Sex and the Evolution of Spirituality

This paper will explore how the neurological components of human sexuality may have produced an evolutionary by-product that contributed to the development of the human capability for potent spiritual experiences. Sex and mate bonding is essential in all sexual species for their evolutionary survival, and I suggest that the neural wiring and architecture developed in the human version of this biological adaptation also came to provide the capacity for human experiences of spiritual transcendence, even if not engineered evolutionarily to produce this specific outcome.

This paper develops a model that argues that human experiences of spiritual transcendence, here referring explicitly to the temporary eradication or loss of the sense of the individual self, can at times create strong sensations of unity with nature, the cosmos, higher powers, or God. The capacity for these spiritual experiences of 'selflessness' may have been facilitated by evolutionary developments in human sexuality, including specific biological, psychological, and social adaptations. Uniquely, humans are sexually available on a regular basis unlike other mammalian species, including primates (with a few limited exceptions). Human females appear biologically unique having developed menstrual cycles which differ in important ways from the estrus cycles of other mammalian females, again including primates. With the laying of this biological groundwork, opportunities for spiritual transcendence have been facilitated increasingly as human societies made substantial investments of energy and resources encouraging human religious proclivities, including spiritual connections with nature, the cosmos, and often with perceived higher powers. These activities have led to the development of elaborate religious practices and traditions that may operate as forms of cultural adaptation and enhance human biological fitness.

While research has shown that there are certain neurological and hormonal similarities in human sex and mating, important differences have also been noted between human males and females in terms of their neurological responses to sexual engagement. Recent neurological research shows that differences between males and females in terms of neurological responses to sex may have important implications not only for sexual selection but also for biological adaptability, although research on humans in particular remains limited.

While these issues will be addressed briefly and may suggest the possibility of different male and female orientations towards spiritual transcendence, more focus will be placed on understanding the basic development of a unique human neurological capacity for experiencing intense episodes of spiritual transcendence due to loss of the sense of self, and the historical role of religious traditions in facilitating such occurrences through a variety of ritual means. The common aspects to be explored are the neurological mechanisms involved in producing a human sense of selflessness and the possibility of attendant spiritual transcendence, with the recognition that interpretations of such experiences are myriad. Evidence gleaned from cognitive and social neuroscience, evolutionary psychology, human biology, primatology, and religious studies will be marshaled in order to develop the stated hypothesis to elaborate explanatory possibilities for the development of religion and its variety of expressions.