# Invited Symposium: The Birds and the Beings

August 27, 2004

*The cuckoo then, on every tree,*
*Mocks married men; for thus sings he,*
*"Cuckoo, cuckoo, cuckoo": Oh word of fear,*
*Unpleasing to a married ear!*

— William Shakespeare's *Spring*

Whether playing with pets or watching nature films, people are often reminded of the social behavior of "human animals." Shakespeare used the likeness between human and bird sexual behavior as a source of humor in the sonnet *Spring* . The song of the cuckoo is "unpleasing to a married ear" because of its likeness to the word "cuckold," a man whose wife is sexually unfaithful. The cuckoo lays its eggs in other birds' nests. Like the cuckoo's victim, the cuckold may end up raising offspring not his own.

Researchers have systematically examined nonhuman sexual behavior as a way to gain insight into human sexuality, but the approach is often scrutinized by those who believe that cultural influences greatly affect evolutionary tendencies. In introducing the symposium "Evolutionary Approaches to Human Sexuality," chair James R. Roney, University of Chicago noted that the four talks would present human data that support the validity of making direct comparisons between nonhuman and human sexual behavior.

Martie G. Haselton, University of California, Los Angeles, and Steve Gangestad, University of New Mexico, presented evidence from nonhuman species of hormonally mediated variation in women's sexual desires and preferences. Females of many bird species get two potential reproductive advantages based upon their choice of mate: paternal care of offspring and "good genes," which yield healthy, attractive offspring. Because these characteristics are often not combined in the same father, "dual mating" is a strategy adopted by some female birds. Through extra-pair mating, the female can get the

“good genes” from a male bird other than her social mate. Could human females also have evolved this strategy?

To test this question, Haselton and Gangestad exploited a particular characteristic of women’s sexuality: the ovulatory cycle. The benefits of extra-pair mating vary across the ovulatory cycle. Females can only reap the benefits of good genes when fertile, but the potential costs of getting caught “cheating” are continuous. Thus, Haselton explained, women should be especially inclined toward “sexy” (i.e., good gene) partners during high fertility periods. Haselton and Gangestad found through a daily diary study of undergraduate women an “ovulatory shift” during fertile periods toward greater extra-pair attraction and flirtation. Primary male partners showed more jealousy when the women were fertile, which Haselton explained as an evolved male counterstrategy. These shifts were most apparent when primary male partners were rated by the women as less sexy. Women with less sexy partners have more to gain by looking outside the pair for good genes, and these partners have more reason to be vigilant. Gangestad reported that women prefer different characteristics in males depending upon whether they view them as potential short term (good gene providing) or long term (investment) partners. During fertile periods, short-term preferences become more prominent. The presentations concluded that female preferences and adaptive mating strategies are sensitive to their fertility status, and that women do not naturally have uniformly monogamous tendencies.

Roney also emphasized commonalities between nonhumans and humans in the regulation of sexuality. In nonhuman vertebrates, female cues have been shown to trigger limbic-hypothalamic activity, resulting in increased testosterone levels and accompanied courtship behavior. Roney found comparable responses in human males who interacted with female confederates in his laboratory. Compared to male participants who interacted with other males, sexually experienced males who interacted with females showed increased testosterone and female-rated “display” behavior across the lab session. Roney proposed expanding the nonhuman model of courtship behavior to include men’s psychological representations of potential mates. He presented evidence suggesting that male students’ mental representations of females’ preferences influence male behavior and attitudes, especially in the presence of females.

David Schmitt, Bradley University , used cross-cultural data to show that despite important influences from personality and culture, evolutionary theories can account for observed trends in human sexuality. Evolutionary theory predicts that specific reproductively advantageous sexual strategies should be apparent in men and women. For example, because their reproductive capacity is limited primarily by number of available female partners, men should pursue a strategy of high quantity to maximize their reproductive success. Data from the International Sexuality Description Project, or ISDP, comprising over 17,000 individuals in 56 nations, supported Schmitt’s prediction. Across world regions in the ISDP sample, men reported desiring a greater variety of partners and reported being quicker to consent to sex with a new partner.

Schmitt pointed out a difficulty with the evolutionary psychology approach: its hypotheses are difficult to disprove. Cross-cultural universals support the argument that sexual strategies are evolved adaptations. However, if a counterexample were found (e.g., a culture in which females prefer more sexual variety than males), this would not rule out the evolutionary explanation, but might only suggest that unusual cultural or environmental circumstances prevented the expression of the naturally selected behavior in that particular culture.

Each of the symposium speakers made the case that as in other species, human sexual behavior strategies evolved through natural selection, based on contingencies in ancestral environments. Despite cultural and environmental pressures, evidence of these strategies emerges in modern men and women.