

ed to behave in ways that maximized their individual reproductive success and this tendency often led to intrasexual competition or intersexual exploitation. She hypothesizes that a monkey's reproductive history, current reproductive status, and breeding potential are important variables influencing behavioral decisions and that cost-benefit decisions made during phylogeny have shaped the monkeys' behavioral tendencies so that they generally act to maximize their overall reproductive success.

Blaffer Hrdy's analysis is well done and her arguments are carefully reasoned and thought-provoking. An example is her interpretation of the female dominance system. She reports that within langur troops at Abu adult females were organized into linear dominance hierarchies with aggressive, competitive, "prime" females (4 to 10 years old) at the top, and old, noncompetitive females in the lower ranks. Differences in females' aggressiveness and rank were not correlated with strength or fighting prowess, however, and old females often took an active role in troop defense. Blaffer Hrdy explains these features of female dominance in terms of differing reproductive potentials and each female's tendency to behave so as to maximize her inclusive fitness. A female's aggressive competition for status and access to resources during the height of her breeding career, hypothesizes Blaffer Hrdy, is a selfish strategy that should contribute to reproductive success. Old females, near the end of their breeding careers and low in reproductive value, are hypothesized to contribute to the success of their offspring and other relatives by withdrawing from competition for rank and resources, while still defending the troop against dangers such as invading males.

During the course of her study at Mount Abu, Blaffer Hrdy documented eight instances of troop take-overs by invading males, and in seven of these cases immature monkeys (usually infants) were killed or were found to be missing from the troop shortly after the take-over. She argues convincingly that infanticide by new alpha males is an ancient colobine reproductive strategy whereby the male increases his reproductive success at the expense of the former alpha male, the mother, and her infant. According to this hypothesis, in order to maximize his reproductive success during his short tenure with the troop (male take-overs occurred once every 27.6 months in Mount Abu troops), a new male kills unweaned infants in order to hasten the mothers' re-

turn to estrus and the conception of his own offspring.

*The Langurs of Abu* is a readable, well-illustrated account of langur social behavior and reproduction that is filled with interesting data and hypotheses. Even those who dislike the sociobiological approach will find it a valuable addition to the primate literature.

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