Book Reviews


Reviewed by Edward M. Miller, Ph.D.1,2

“Men are animals.” That is the message of Mealey’s book. No, this is not a feminist treatise. Instead, her message is men (and women) are evolved animals, ones whose abilities and motivations have been shaped by eons of evolution. These long periods of evolution have shaped them to be different.

Because we are indeed animals, Mealey starts out by discussing reproduction in various animals. In this context, the first question is “Why sex?” Surely an animal that reproduced by budding could outreproduce one that needed a mate. With budding, all of the genes are found in descendants whereas with sexual reproduction only half of them are. The most plausible theory is that only with sexual reproduction can evolution in larger animals out-run the evolution in the parasites that preyed on them. Because the parasites are much smaller, they can run through a vast number of generations during the lifetime of a larger animal.

Having established “why sex,” it is then shown that evolution leads to two types of gametes. Small ones specialize in fertilizing the larger ones. Thus, we have sperm (small gametes) and eggs (large ones). Some specialize in producing one or the other. Those that produce small gametes (sperm) are males, and those that produce large gametes (eggs) are females.

Understanding “Sperm is cheap” (bad grammar is deliberate) results in males following a strategy of producing much sperm and spending their efforts trying to impregnate females. This is especially likely in mammals where large amounts of energy are required during pregnancy and lactation. Because a pregnancy imposes these heavy costs on the female, it is in the female’s genetic interest to be very choosy about which males she allows to impregnate her. The first part of the book, on theory, is followed by chapters on male strategies for getting genes into the next generation, female strategies for getting genes into the next generation, and mating systems.

Having discussed sex differences (including behavioral difference) in animals, the discussion turns to humans and their strategies for perpetuating their genes. An introductory chapter in this section deals with the history of human evolution, the methodological issues, genetic methodology, and race. The very interesting chapter on women’s strategies and tactics covers all sorts of interesting topics related to women. A cliché is that graying men look “distinguished” while graying women just look “old.” Mealey describes how in all cultures attractiveness is closely related to age, with attractiveness maximized at about 23 and declining rapidly after that. She points out how attractiveness correlates closely with fertility and concludes that males have probably evolved to like females that exhibited signs of fertility.

Female waist to hip ratios have been shown to be an important predictor of female attractiveness. Males find a 0.7 ratio most attractive. Again, this seems to be an honest signal of fertility. The book contains numerous boxes that discuss various interesting topics. One shows the silhouettes with different waist to hip ratio used to discover this. Another shows that female thinness is considered attractive only in societies where food is abundant. Contrary to the argument that the desire for thinness is imposed by men, it turns out that men actually prefer heavier women than women do themselves.

Women apparently use other senses to communicate, including odors. The delicate topic of pheromones is brought up, with it being pointed out that the apocrine glands appear designed to produce odors and that the smells produced differ between the sexes.

What are women looking for in mates? On appearance, men with a symmetric, muscular build and a 0.9 waist to hip ratio are most attractive (see, e.g., Dixson, Halliwell, East, Wignarajah, & Anderson, 2003). Several of the features that women find attractive are testosterone related, including height, angular features, a rougher and darker complexion, and a dominant look (rather than passive).

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2Editor’s Note. Dr. Mealey died on November 5, 2002 of colon and liver cancer at the age of 46. At the time of her death, Dr. Mealey was on the Editorial Board of the Archives and was a member of the International Academy of Sex Research. Memorial contributions can be sent to The Linda Mealey Legacy Fund, Department of Psychology, College of St. Benedict, St. Joseph, Minnesota 56374.

Mealey is willing to be nonpolitically correct in her discussion of date rape (p. 228). She notes that many women who have been the victims of what is legally rape do not regard themselves as having been raped, and that many go on to continue to date the perpetrator. Even more surprising is that a higher proportion of the victims of a completed attack than an attempted attack end up continuing to date their attackers. She points out that this is consistent with the “sexy son” model of evolutionary biology. A female who selects mates that will give her sexy sons will leave more descendants. A woman who selects mates who are aggressive enough and strong enough to rape may indeed leave more descendants than one who selects weaker or more passive men. She reports that studies indicate that over 40% of U.S. women admit to having said “no” when they really meant “yes.” A particular subgroup of women (labeled “hyperfeminine” based on their scores on questionnaires) is socially and sexually attracted to “macho and “sexually coercive” men.

The discussion of unfaithfulness in women puts the behavior in biological context, using the biological term of extra-pair copulations (EPCs). Earlier discussions in the nonhuman sections of the book had reported the recent discovery that in many apparently monogamous species (especially birds) appreciable fractions of the offspring are from other than the apparent mate of the female. Because the male with the best genes will have many mating opportunities, females cannot always have such a mate as their partner (i.e., one who provides provisioning as well as genes). The best female strategy then becomes to find a partner that will help in rearing offspring, but then to seek opportunities for copulation with males with better genes. Naturally, males in partnerships have evolved strategies for mate guarding aimed at preventing such EPCs.

It is argued that similar behavior is found in humans. About 50% of married men and 25% of married females admit to copulations with other than their spouse. As she documents in the chapters on nonhuman animals, Mealey also documents EPCs as a strategy of humans. Women appear to be seeking matings with carriers of better genes (although this may not be conscious and birth control eliminates the chance of pregnancy).

Unlike many species, women display no signs of when they are ovulating (which is referred to as concealed ovulation). The theories to explain this include preventing males from knowing when a woman is fertile. This forces them to stay around and provide protection and food at all stages of the woman’s cycle. Another theory is that by confusing paternity, males are less likely to harm or kill the baby.

The book is filled with fascinating facts. One study (p. 243) shows that women (if noncontraceptive using) are least likely to engage in activities that involve a risk of rape during the ovulatory period of their cycle, which is when they are at the greatest risk of pregnancy, and would experience the greatest loss from rape.

Women living together tend to menstruate at the same time. This is believed to be due to pheromones emitted by women. A likely purpose of this is to make it hard for males to monopolize the women, facilitating monogamy. In particular, a man mated to a woman whose cycles are synchronized with other women would be less tempted to leave her at a time when she is nonfertile for another woman who is ovulating.

The increase in chromosomal abnormalities (such as Down’s syndrome) with women’s age is interpreted as a relaxation of the mechanism by which the mother rejects possibly damaged fetuses. The low percentage of fertile-period copulations that result in pregnancies is explained, at least partially, by the woman’s body rejecting any fetus that is not developing perfectly. Theory suggests that near the end of a woman’s reproductive life, when she may not have a chance at another pregnancy, this selection should be relaxed and a higher chance of defects accepted.

A human peculiarity is menopause. Women actually stop childbearing well before death. Women spend a large part of their life in a postfertile stage. Why? Surely women who kept bearing children throughout their life would leave more descendants. One possibility is that women who devoted their efforts to rearing their already born children and their grandchildren benefited their genes more than having another child would have. Such a late-born child might not mature before the mother died (whose death would probably be followed by the child’s death).

Naturally, the female strategies chapter is followed by one on male strategies. An examination of the relative testes size in different primates (along with relative heights and canine sizes) suggests humans evolved with a mating system close to monogamy. Primate males that frequently have to fight other males for mating opportunities are much bigger than females, and have much larger canine teeth. Primates that frequently copulate with a female that has just been impregnated by another male (such as chimpanzees) have large testes. This permits their sperm to swamp the sperm from other males that may be in the female at the same time.

Because mammalian males lose relatively little from copulation (whereas females risk a pregnancy that would impede their chances of having a child by a more suitable male), males are expected to be less choosy then females in selecting sexual partners. For humans, this is true. Male college students were neutral as to their willingness to consider intercourse after knowing someone for only 1 week, whereas the average female response was in the...