Sexual selection

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Evolution is driven not just by the survival of the fittest (natural selection), but by the reproduction of the sexiest (sexual selection). If an animal finds food and avoids predators, but can't find a mate, the animal is an evolutionary dead-end. Its genes will die out when it dies. This is why sexual selection is so important: it is the evolutionary gateway to genetic immortality. Every one of your ancestors managed not just to survive to adulthood, but also to attract a willing sexual partner. Every one of your 30,000 genes has passed through thousands of generations of successful courtship, mating, and parenting.

'Sexual selection' is another term for reproductive competition – competition to attract more high-quality mates than one's sexual rivals, to have more high-quality offspring. Charles Darwin discovered sexual selection, and published a massive book about it in 1871, but sexual selection was usually ignored in biology until the 1970s, and in psychology until the 1990s. Since then, biologists have realized that many traits in animals have been shaped by sexual selection, either as sexual ornaments to attract mates (e.g. the peacock's tail, the nightingale's song, the female baboon's bright red bottom) or as weapons for sexual competition against rivals (e.g. deer antlers, gorilla muscles, big male baboon teeth). Since about 1990, evolutionary psychologists have also realized that many human traits have been shaped by sexual selection. These sexually-selected traits include: (1) socially salient physical traits such as female breasts and buttocks, and male beards, upper-body muscles, and penises, (2) personperception abilities to judge the attractiveness of potential mates, including their beauty, kindness, intelligence, and status, (3) self-presentation abilities (ways of showing off in courtship) such as language, art, music, and humor, and (4) social emotions such as lust, love, jealousy, anger, and ambition.

Sex differences in bodies and brains are usually the result of sexual selection. Male mammals can produce offspring just by having sex for a few minutes if they find a willing female, whereas female mammals can only produce offspring if they get pregnant for a long time and produce milk for their offspring. Thus, males can potentially have a lot more offspring than females can. This makes fertile females a much more precious, limited resource than fertile males are. For these reasons, male mammals typically compete much more intensely to attract mates than females do, and females are typically much more choosy about their mates than males are. This leads to many human sex differences that appear across all known cultures, including stronger male motivations to seek status, kill rivals, seduce multiple partners, and take conspicuously heroic risks for the public good.

Yet sexual selection is not restricted to explaining sex differences. Sexual selection can also explain mating-related traits that are shared by both sexes, including many uniquely human physical traits (e.g. long head hair, everted lips, smooth hairless skin) and mental

traits (e.g. creativity, language, social intelligence, moral virtues). Humans can feel lust for other people's bodies, but we typically fall in love with people for their impressive minds, great personalities, and social virtues. Or, we fall out of love with them because we realize they are stupid, boring, selfish, or violent. Thus, human mate choice (choice of sexual partners) depends a lot on the social psychology shared by both sexes – the way we perceive what others are thinking and feeling.

Sexual selection can also explain sexual maturation – the changes from puberty through adolescence and young adulthood, as male and female bodies and brains get ready to enter the mating market. Sexual selection may also be important in explaining individual differences in personality (such as the 'Big Five' traits: openness to experience, conscientiousness, extroversion, agreeableness, and neuroticism), which can be understood as different mating strategies that have different strengths and weaknesses. Finally, sexual selection is important in understanding many social psychology topics related to sexual competition, such aggression, status, self-presentation, prejudice, and prosocial behavior.

Sexual selection is especially good at explaining weird social behavior. If someone is doing something that seems irrational, foolish, bizarre, or risky, it's probably because they're producing some sort of courtship display to attract a mate, by trying to attain higher sexual status in some sub-culture that you don't understand. Just as different animal species have very different sexual ornaments, different human cultures develop different ways to compete for sexual status, to attract mates, and to derogate rivals. But underneath this cultural variability, a few key traits are always displayed and considered attractive: physical health and fertility, mental health, intelligence, kindness, charisma, social popularity, and social status.

Further reading

Buss, D. M. (2003). *The evolution of desire: Strategies of human mating* (2nd Ed.). New York: Basic Books.

Cronin, H. (1993). The ant and the peacock: Altruism and sexual selection from Darwin to today. New York: Cambridge U. Press.

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