

## Male, Female: The Evolution of Human Sex Differences

David Geary

A rigorously academic book. Encyclopedic, scrupulously noncontroversial treatment of a sensitive subject

David Geary is a thorough, authoritative expert on the evolution of sex differences throughout the animal kingdom, and especially human beings. His bibliography is huge. I counted well more than a thousand authors, including a Who's Who of the best known science writers of the age. Here are some of the names I have reviewed and respect: Baumeister, Darwin, Dawkins, Diamond, Dunbar, Eibl-Eibesfeldt, Fossey, Giedd, Goodall, Gould, Haidt, Hamilton, Hrdy, Irons, Kanazawa, Leakey, MacDonald, Pinker, Ridley, Robbins, Rubenstein, Scarr, Tiger, Tobias, Tooby, Trivers, Wade and Wilson.

The first part of the book deals with sexual evolution in the animal kingdom, then among primates and among anthropoid apes and humanoids. The second part addresses the evolution of traits that we observe in modern man. The chapter titles are:

Chapter 1: Beginnings

Chapter 2: Natural Selection and the Evolution of Sex

Chapter 3: Sexual Selection

Chapter 4: Sexual Selection and Life History

Chapter 5: Sexual Selection in Primates and During Human Evolution

Chapter 6: Evolution of Fatherhood

Chapter 7: Choosing Mates

Chapter 8: Competing for Mates

Chapter 9: Evolution and Development of the Human Mind

Chapter 10: Sex Differences in Infancy and at Play

Chapter 11: Sex Differences in Social Development

Chapter 12: Sex Differences in Folk Psychology

Chapter 13: Sex Differences in Folk Biology and Folk Physics

Sexual and asexual reproduction are found throughout the plant and animal kingdoms. Asexual reproduction has its advantages, chief among which is that it does not require the organism to find a mate. The major disadvantage of asexual reproduction is that it has no mechanism to support diversity within the gene pool. Most mutations are disadvantageous and need to be eliminated. Conversely, beneficial mutations should be conserved. With asexual reproduction it is an all or nothing proposition. Any mutation gets reproduced with the entirety of the genome. A population lacking genetic diversity is vulnerable to changes in the environment, a phenomenon that happens all the time.

Sexual reproduction is favored by just about every advanced animal species. Most plants as well, although they may have the facility to reproduce by sending out runners (banyan trees) or leaf in branch cuttings (walnuts, navel oranges) also take advantage of sexual reproduction at some point in their cycle.

Mate choice is part and parcel of sexual selection. In a good many species the males battle with one another for access to females. One of the interesting things to come out in this book is the extent to which the supposedly passive females are able to take active control of their reproduction by one means or another. In many bird species the females overtly choose the male with whom they will mate. In other species the females mate with whom they must, but have evolved mechanisms to covertly choose whose sperm will impregnate them.

In most species one sex makes a greater investment in the offspring than the other. It is usually, but not always, the female. Whichever it is, the sex that makes the greatest investment in offspring tends to be the choosiest about selecting a mate.

Mating may be a matter of a moment or a lifetime. Different strategies evolved to support each kind of pairing up. Among monogamous animals, the males typically assist in raising the young. They are typically about the same size as the females. They typically have smaller genitalia and less testosterone, inasmuch as they do not have to fight for sexual access.

Our primate ancestors have generally been polygynous. Dominant males controlled as many females as they could and did their best to control their mating. DNA testing demonstrates that try as they might, orangutans and chimpanzees are not totally successful in keeping their mates from straying. Nonetheless, among primate species the males tend to be significantly larger than the females. Another evolved suite of attributes among species that feature dominant males is that males reach sexual maturity later than females, males are brightly colored, and males' childhood play involves practicing dominance battles with other males.

A point to which Geary often returns is that gorillas are the exception. The male gorilla guards his harem and participates somewhat in taking care of his children. The male to male competition in which he is involved has to do with territory. There is only one silverback at a time in a gorilla family, and he alone has the right to mate with the females. His genitalia are just big enough to do the job; skillful lovemaking is not the key to having baby gorillas.

Human beings differ from other apes in significant ways. There is less sexual dimorphism – men and women are closer to the same size. We are more monogamous. Men participate significantly more in raising children, especially in provisioning the family as the children grow up. Female humans have more freedom to choose their mates than other species of primates, and they tend to choose men who will provide well for their children.

Humans are the only ape species in which male choice is a significant factor. In human societies culture and custom require the male to remain with the female. Men do not want to be saddled with losers. Moreover, since they are often compelled to be monogamous, they want to choose the mate offering the best possible genetic material and the promise of fidelity and attention to the young.

To repeat, Geary made every effort to make this book as balanced and uncontroversial as possible. The research he cites and the conclusions he draws are very careful and mainstream. Anybody seeking useful quotations to employ in the battle of the sexes would do well to look elsewhere. Roy Baumeister, cited by Geary, manages to be more exciting, though remaining scientifically objective, in [\[\[ASIN:B003WT26I0 Is There Anything Good About Men?: How Cultures Flourish by Exploiting Men\]\]](#). Jack Donovan focuses mainly on men, and how we evolved to be who we are, in [\[\[ASIN:B007O0Y1ZE The Way of Men\]\]](#). Lastly, Roger Devlin enthusiastically joins battle with the feminists in [\[\[ASIN:1935965891 Sexual Utopia in Power\]\]](#). There is a book for every appetite. Geary is for the serious academic in search of the considered opinion of the experts and a rich bibliography of same.