CHAPTER 2. Section 4.

THE BATTLE OF THE SEXES.

In humans, as in all other mammalian and bird species except brush turkeys, an egg that has just been fertilized is incapable of independent survival. In fact, the length of time until the offspring can forage and care for itself is at least as long for humans as for any other animal species,and far longer than for the vast majority of animal species. Hence parental care is indispensable. The only question is, which parent will provide that care or will both parents provide it?

For animals, we saw that the answer to that question depends on the relative size of the mother's and father's obligate investment in the embryo, their other opportunities foreclosed by their choice to provide parental care, and their confidence in their paternity or maternity. Looking at the first of those factors, the human mother has a greater obligate investment than the human father. Already at the time of fertilization a human egg is much larger than a human sperm, though that discrepancy disappears or is reversed if the egg is compared to an entire ejaculate of sperm. After fertilization the human mother is committed to up to nine months of time and energy expenditure, followed by a period of lactation that lasted about four years under the conditions of the hunter-gatherer lifestyle that characterized all human societies until the rise of agriculture about ten thousand years ago. As I recall well myself from watching how fast the food disappeared from our refrigerator when my wife was nursing our sons, human lactation is energetically very expensive. The daily energy budget of a nursing mother exceeds that of most men with even a moderately active lifestyle and is topped among women only by marathon runners in training. Hence there is no way that a just-fertilized woman can rise from the conjugal bed, look her spouse or lover in the eye, and tell him, "You'll have to take care of this embryo if you want it to survive, because I won't!" Her consort would recognize this for an empty bluff.

The second factor affecting the relative interest of men and women in child care is their difference in other opportunities thereby foreclosed. Because of the woman's time commitment to pregnancy and (under hunter-gatherer conditions) lactation, there is nothing she can do during that time that would permit her to produce another offspring. The traditional nursing pattern was to nurse many times each hour, and the resulting release of hormones tended to cause lactational amenorrhea (cessation of menstrual cycles) for up to several years. Hence hunter-gatherer mothers had children at intervals of several years. In modern society a woman can conceive again within a few months of delivery, either by forgoing breast-feeding in favor of bottle-feeding or by nursing the infant only every few hours (as modern women tend to do for convenience). Under those conditions the woman soon resumes menstrual cycles. Nevertheless, even modern women who eschew breast-feeding and contraception rarely give birth at intervals of less than a year, and few women give birth to more than a dozen children over the course of their lives. The record lifetime number of offspring for a woman is a mere sixty-nine (a nineteenth-century Moscow woman who specialized in triplets), which sounds stupendous until compared with the numbers achieved by some men to be mentioned below.

Hence multiple husbands do not help a woman to produce more babies, and very few human societies regularly practice polyandry. In the only such society that has received much study, the Treba of Tibet, women with two husbands have on the average no more children than women with one husband. The reasons for Treba polyandry are instead related to the Treba system of land tenure: Treba brothers often marry the same woman in order to avoid subdividing a small landholding.

Thus, a woman who "chooses" to care for her offspring is not thereby foreclosing other spectacular reproductive opportunities. In contrast, a polyandrous female phalarope produces on the average only 1.3 fledged chicks with one mate, but 2.2 chicks if she can corner two mates, and 3.7 chicks if she can corner three. A woman also differs in that respect from a man, whose theoretical ability to impregnate all the women of the world we have already discussed. Unlike the genetic unprofitability of polyandry for Treba women, polygamy paid off well for nineteenth-century Mormon men, whose average lifetime output of children increased from a mere seven children for Mormon men with one wife to sixteen or twenty children for men with two or three wives, respectively, and to twenty-five children for Mormon church leaders, who averaged five wives.

Even these benefits of polygamy are modest compared to the hundreds of children sired by modern princes able to commandeer the resources of a centralized society for rearing their offspring without directly providing child care themselves. A nineteenth-century visitor to the court of the Nizam of Hyderabad, an Indian prince with an especially large harem, happened to be present during an eight-day period when four of the Nizam's wives gave birth, with nine more births anticipated for the following week. The record for lifetime number of offspring sired is credited to Morocco's Emperor Ismail the Bloodthirsty, father of seven hundred sons and an uncounted but presumably comparable number of daughters. These numbers make it clear that a man who fertilizes one woman and then devotes himself to child care may by that choice foreclose enormous alternative opportunities.

The remaining factor tending to make child care genetically less rewarding for men than for women is the justified paranoia about paternity that men share with the males of all other internally fertilized species. A man who opts for child care runs the risk that, unbeknownst to him, his efforts are transmitting the genes of a rival. This biological fact is the underlying cause for a host of repulsive practices by which men of various societies have sought to increase their confidence in paternity by restricting their wife's opportunity for sex with other men. Among such practices are high bride prices only for brides delivered as proven virgin goods; traditional adultery laws that define adultery by the marital status only of the participating woman (that of the participating man being irrelevant); chaperoning or virtual imprisonment of women; female "circumcision" (clitoridectomy) to reduce a woman's interest in initiating sex, whether marital or extramarital; and infibulation (suturing a woman's labia majora nearly shut so as to make intercourse impossible while the husband is away).

All three factors—sex differences in obligate parental investment, alternative opportunities foreclosed by child care, and confidence in parenthood—contribute to making men much more prone than women to desert a spouse and child. However, a man is not like a male hummingbird, male tiger, or the male of many other animal species, who can safely fly or walk away immediately after copulation, secure in the knowledge that his deserted female sex partner will be able to handle all the ensuing work of promoting the survival of his genes. Human infants virtually need biparental care, especially in traditional societies. While we shall see in chapter 5 that activities represented as male parental care may actually have more complex functions than meet the eye, many or most men in traditional societies do undoubtedly provide services to their children and spouse. Those services include: acquiring and delivering food; offering protection, not only against predators but also against other men who are sexually interested in a mother and regard her offspring (their potential stepchildren) as a competing genetic nuisance; owning land and making its produce available; building a house, clearing a garden, and performing other useful labor; and educating children, especially sons, so as to increase the children's chances of survival.

Sex differences in the genetic value of parental care to the parent provide a biological basis for the all-too-familiar differing attitudes of men and women toward extramarital sex. Because a human child virtually required paternal care in traditional human societies, extramarital sex is most profitable for a man if it is with a married woman whose husband will unknowingly rear the resulting child. Casual sex between a man and a married woman tends to increase the man's output of children, but not the woman's. That decisive difference is reflected in men's and women's differing motivations. Attitude surveys in a wide variety of human societies around the world have shown that men tend to be more interested than women in sexual variety, including casual sex and brief relationships. That attitude is readily understandable because it tends to maximize transmission of the genes of a man but not of a woman. In contrast, the motivation of a woman participating in extramarital sex is more often self-reported as marital dissatisfaction. Such a woman tends to be searching for a new lasting relationship: either a new marriage or a lengthy extramarital relationship with a man better able than her husband to provide resources or good genes.