

# Book Reviews

## Sex in the Social Order

**The Inevitability of Patriarchy.** STEVEN GOLDBERG. MORROW, New York, 1973. 256 pp. \$6.95.

In this book a sociologist attempts to make the case that the social subordination of women is an inevitable outcome of biological differences between the sexes. The book has two major themes. The first has to do with male dominance based on male aggression, the second with male genius and logical ability and their presumed basis in male hormones. The first argument is more interesting than the second, the latter being based upon some errors of fact that invalidate several of its premises. I will discuss the second argument briefly, and then turn to the first, which I believe deserves more serious discussion.

Goldberg asserts that men perform better than women, on the average, at higher-level mathematics and are better chess players. These assertions are true. He interprets this superiority to mean that men are better at logic, theorizing, and abstraction, which is not true. There are tests for logical reasoning and abstract thinking, and the sexes do not differ on them. Adult men and women do differ on what may be called visual-spatial ability. There is some evidence that a sex-linked genetic factor is involved in this difference. It is not known whether, or to what extent, visual-spatial processes are involved in high-level mathematics or chess playing. Some individuals do appear to use spatial imagery to solve mathematical problems. But that exceptionally high visual-spatial ability is not necessary for a wide range of high-level thought processes is indicated in two ways: spatial ability is only weakly correlated with measures of general intelligence—much less correlated than are other specific abilities with IQ; and the sexes do not differ on a variety of high-level intellectual skills, although they do differ in spatial ability. For example, women are excellent at computer programming, a skill that calls for logical ability but not necessarily for spatial ability. The riddle of sex differences in intellect is not

completely solved, but it is not convincing to base a case for male superiority in logical reasoning on male skill at chess.

Even though there is a good deal of overlap in the distribution of the two sexes on the scale of reasoning ability, says Goldberg, almost all men will be more logical than their wives, just as almost all men will be taller than their wives. “Likes” attract each other. The brightest men tend to marry the brightest women, the dumbest marry the dumbest. Hence if the male distribution of logical ability is simply like that of females but displaced upward several points, the result must be as Goldberg describes it. The first problem with this analysis is, as noted above, that the average scores of the two sexes on logical thinking have not been shown to differ, so the male distribution is not displaced upward. Let us shift the analysis to mathematical ability, which is a better candidate for Goldberg’s argument because men do obtain better average mathematical scores than women from adolescence onward. What Goldberg fails to note is that males are overrepresented at the *lower*, as well as the higher, end of the mathematical distribution. Hence while Goldberg may be right that at the higher levels of ability most men will be better mathematicians than their wives, at the lower end the reverse will be true. A better example of the effect Goldberg describes might be found in verbal ability. Here women do better than men and the distribution is simply displaced upward, with women being overrepresented among high scorers and underrepresented among low scorers. On the principle that similar people marry, most wives would have better verbal ability than their husbands. It might be well to emphasize that “verbal ability” here does not imply mere talkativeness. It implies complex verbal thought, including for example skill at solving abstract analogies.

Goldberg believes that there is a hormonal basis for male superiority in logical thinking and abstract thought. He cites the work of Erhardt and Money showing that girls who were ex-

posed in utero to unusually high levels of androgens later developed higher IQ’s than the population average. Goldberg points out that it is puzzling that male hormones should raise total IQ scores (which have not been shown to differ by sex) rather than simply improve those abilities in which males tend to be superior. He need not have been concerned about this, however, because more recent work has shown that prenatal androgens do *not* raise girls’ IQ. Erhardt has compared a group of fetally androgenized girls with their own normal sisters. The virilized girls did have higher-than-average IQ’s (just as in the original Erhardt and Money work), but so did their unvirilized sisters. The girls who had been subject to excess androgens prenatally were no brighter than their sisters who had been free of these complications. Thus androgenized girls appear to come from a population of families who normally produce children of higher-than-average IQ, and prenatal androgens do not appear to affect later intellectual abilities.

Boys and girls are very similar in their pattern of intellectual abilities until puberty, at which point males progress more rapidly in spatial and mathematical thinking and females in verbal thinking. Goldberg suggests it may be the upsurge of sex hormones at puberty that produces the intellectual differentiation. Actually, the differentiation probably occurs despite the increase of sex hormones, not because of them. It is puzzling but true that among boys and men the individuals who have the highest scores on the special “male” abilities (visual-spatial ability, mathematical ability) are not especially “masculine” in other respects. They tend to be somewhat less aggressive than the average male, and there is some evidence that their bodies are somewhat less androgenized. It might be worth noting here that work by Katherina Dalton indicates an association between the administration of certain *female* hormones prenatally and better intellectual performance in children of both sexes, by comparison with an untreated control group.

The evidence available to date, then, suggests that sex hormones may be implicated in intellectual development, but that their effects may be different during the prenatal period from those they have at puberty, and furthermore that there is no reason to believe male hormones are more associated with high levels of intellectual abilities than fe-

male hormones are—indeed, the reverse may be the case.

Let us turn now to the aggression and dominance issues which are the more central themes of Goldberg's book. His thesis is, briefly:

1) Males are more aggressive than females. The difference is not a product of socialization but is due to inborn hormonal influences.

2) Males are, and have been, dominant in every known human society.

3) The two facts are causally linked. It is because of the male's greater aggressiveness that he dominates the female in day-to-day encounters such as those that occur within the family, and it is because the male is dominant in dyadic encounters that he achieves positions of leadership and power in political life, work settings, and all other group activities except those having to do specifically with childbearing.

4) Social institutions adapt themselves to the realities of biological sex differences. Although many societies extend male dominance beyond what is biologically necessary, there is a minimum point below which a society cannot go in the direction of social equality without endangering its own survival. Goldberg says: "We could lower the degree to which male aggression is present in American society to the minimal level possible in an industrial society, . . . if we were willing to give up science, bureaucratic organization, industrialization, and democracy."

5) There are two kinds of societies in which male dominance can be minimized: (i) any primitive society in which men and women must play similar economic roles, and (ii) societies in which a significant number of roles having status or power are inherited, rather than achieved through competition. Thus it is in the complex and "open" (democratic) societies that patriarchy is most inevitable.

6) The socialization of children does not cause sex differences in dominance; it does, however, help to fit the individual for the role he or she will inevitably have to play. It is wise to socialize girls so that they will not attempt to compete with males; otherwise they would be doomed to frustration and failure when they reached the age when they must inevitably lose in such competition.

Goldberg does not insist that the male's aggressiveness is the only biological attribute that makes his dominance (and hence patriarchy) inevitable. He only says it is sufficient, and chooses to

base his argument on it, while noting that the female's childbearing, and the male's assertedly superior reasoning powers, may contribute to his dominance.

I agree with Goldberg's initial premises. The male is, on the average, more aggressive than the female, and this difference does have a biological basis. It should be understood, however, that in all mammalian species whose behavior has been studied so far "innate" male aggressiveness is not simply an overarching tendency that can be seen in most situations. It is a specific response to specific eliciting conditions. Thus an animal that will chase and attack another under some conditions will accept the very same animal in a friendly way under other conditions. Furthermore, the fact that there is a biological basis for a behavior tendency does not mean that it is unlearned. Detailed studies of the aggressive behavior of young children and the effects of experience upon it show clearly that aggression is learned, in the sense that it is strengthened by successful fighting and weakened by losing. Thus biological differences between the sexes do not mean that boys "have" more aggression without having to acquire it; rather they have a greater readiness to learn it. It is important that the aggressive behavior of both sexes is subject to modification.

I also grant Goldberg's second premise: that males have been dominant in all human societies in recorded history. Granted too that this cannot be a historical accident; it strains credulity to suppose that, if there were no biological basis for the choice, every society could have assigned its leadership positions to men by chance. The question is whether it is male aggression primarily that has brought this about, and whether the links between aggression and dominance, and between dominance in face-to-face encounters and the assumption of the leadership of complex institutions, are strong enough to make patriarchy inevitable.

What is the relation of aggression to dominance in dyadic encounters? Among apes, dominance is maintained primarily by aggression. Dominance issues seldom erupt into serious fighting, because the dominance hierarchy among adult males has been established during the rough-and-tumble play of the juvenile period and remains fairly stable. Even among apes, however, aggression is not the only basis for leadership. DeVore found that "a

male's dominance status was a combination of his individual fighting ability and his ability to enlist the support of other males" (*Primate Behavior*, 1965). Among human beings, studies of young boys' play groups have shown that "toughness" is the quality that establishes a boy's position in the dominance hierarchy of his play group. In this sense, little boys are like apes in their reliance on aggression as a means of structuring their relationships. Boys are much concerned about who is tougher than whom, and it frequently happens that boys attempt to dominate one another. But they seldom attempt to dominate girls, and when they do they are not especially likely to succeed.

So for apes and little boys Goldberg is right about the link between aggression and dominance. But human beings grow up. In adolescence and adulthood boys break out of the single-hierarchy play group. Leadership is no longer exercised by coercion. In many groups leadership goes to the person with more money, or with more of the knowledge and skills that are relevant to the group's purposes. Business leadership may once have been exercised by the tough entrepreneur who forcibly imposed his will on others and ruthlessly cut down his opposition, and no doubt there are still some "killers" in the business world. But there seems clearly to have been an emergence of a different leadership style, one that depends upon the ability to conciliate among opposing factions and to foster the advancement of younger, less experienced people in return for their loyalty. Relationships in male-female pairs are usually maintained by mutual consent, not by aggression or threats thereof. In some instances, men do exercise dominance over their wives through physical brutality, and the wives submit either out of fear or because they have no alternatives for the economic support of themselves and their children. But such relationships are rare and probably growing rarer. In most cases, leadership within a marriage tends to be divided or shared, not lodged exclusively in either member of the pair.

We do not have a very clear picture of the changes in dominance relationships that have occurred in human groups through historical time. Goldberg's view is that with industrialization, and with increasing complexity and increasing "democratization" of societies, the role of aggression in achieving leadership increases. I suspect that he

is wrong about this. He uses the pygmies as an example of a simple society in which there is little sex role differentiation. But sex differentiation is very great indeed in other "simple" societies, and I believe it could be documented (i) that women are more completely subjugated in authoritarian societies than in democratic ones and (ii) that female liberation has been increasing at just the same time that technological development has been most rapid. In other words, the complexity of a society does not preclude the advance of equality between the sexes; it probably fosters it.

Goldberg believes that when there is a biological basis for a sex difference societies must emphasize and intensify this difference through child training: since girls are less aggressive, they should be trained not to attempt to compete with men; since they are more nurturant, all care of the young, the sick, and the aged should be left to them. Clearly there is an alternative position: that societies could train children in such a way as to minimize biological differences, by teaching boys to moderate their aggression and by fostering the nurturant side of their characters. Perhaps there is a limit to how far a society can succeed in such efforts. But it is not obvious that the social intensification of initial sex differences is either necessary or desirable.

Goldberg has raised some very intriguing questions about the relationship between social institutions and the biological nature of men and women. But his answers are simplistic. He has failed to appreciate the extent to which human beings are capable of being different from other animals; he has also failed to understand the scope of current social change. It is true, as he notes, that in the past men have chosen wives who were considerably younger than themselves and who were, by reason of their lesser experience with life, easy to dominate; at the same time, women sought mates older and stronger than themselves, perhaps because they felt the need of protection. But in recent years there has been a radical drop in the age difference between newly married pairs, indicating that many people are now attracted to one another on a different basis. In the history of biology of the human species, there is certainly a basis for Goldberg's assertion that "man's job is to protect a woman and woman's is to protect her infant." But what of a situation in which the limitation of population growth has become a biolog-

ical necessity, and life-spans have been vastly extended? The last few decades are the first time in the history of humankind that women have spent only a small portion of their lives in childbearing and child rearing; furthermore, more and more couples are childless by choice. In such a situation, men and women have other jobs to do, beyond the ones Goldberg believes "nature" has assigned to them. A social system must come to grips with these facts too. I would like to urge that social systems and social practices are not totally constrained by man's biological nature, although of course they cannot ignore that nature and should not even if they could. Human beings do have some choices. There is some variety in the social institutions that will work. It behooves us to consider what the choices are, rather than to assume that one pattern of relationships between the sexes is biologically inevitable.

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## Sex Roles and Economics

**Changing Women in a Changing Society.** JOAN HUBER, Ed. University of Chicago Press, Chicago, 1973. vi, 296 pp. Cloth, \$7.95; paper, \$2.95. Reprinted from the *American Journal of Sociology*, Vol. 78, No. 4, Jan. 1973.

Womanhood used not to be dealt with much in the writings and publications of sociologists. A symptomatic example is that at the University of Chicago, in what was at the time a most social-problems-oriented department of sociology, between 1896, when W. I. Thomas presented his Ph.D. dissertation "On a Difference of the Metabolism of the Sexes," and 1949, when Josephine Williams Metzger presented hers on "The Professional Status of Women Physicians," not a single Ph.D. dissertation was produced on gender roles or sex differences. Now, in 1973, the journal of that department, the *American Journal of Sociology*, is to be congratulated for bringing out a special issue on the subject Women, and the University of Chicago Press is to be commended for publishing it in book form.

Within less than a decade "women have become newsworthy," as Carol Ehrlich notes in her survey "The woman book industry," and as Arlie

Russell Hochschild demonstrates in her brilliant and often witty "Review of sex role research." The reasons for the growth of the movement are several. To be sure, it followed upon the civil rights movement, which raised social consciousness in American society generally, so that the contradiction between the equalitarian ethos and the reality of discrimination against women became more glaring. But more important, there were some basic changes in the economic structure of the country that brought into evidence the contrast between the cultural expectation that women would devote themselves to the family and the fact that they increasingly became part of the labor force.

This cultural expectation used to be met, as Valerie Kincade Oppenheimer explains in "Demographic influence on female employment and the status of women," by limiting women's admittance to the labor force to those who were single. The pattern has drastically changed since 1940. "Rapid increases in the work rate were shared by wives with preschool children as well as childless wives and those with older children. . . . The proportion of working married women 20-24 (husband present) with preschool children increased from 13 percent in 1951 to 33 percent in 1970" (p. 185).

Nor did this increased participation of women reflect simply the lure of higher family income in a society that emphasized the acquisition of consumption goods at the same time as it provided through its industries most goods and services that had traditionally been produced in the home. Oppenheimer shows with great clarity the structural changes that have taken place in the American economy: The well-known trend in latter-day industrialization, by which the office grows faster than the factory, resulted in an increased demand for female labor in clerical and service jobs at a time when there was a simultaneous decrease in the supply of single women. "By 1960 the supply of young single women was only one-third of even the lowest estimate of demand at that date" (p. 194). The pool of single women in the broad age category 18-64 declined between 1940 and 1960 for several reasons: The low fertility of the 1930's decreased the pool of young women, and the higher fertility of the postwar period increased the proportion of women with preschool children. To this must be added the decline in the age of marriage and also the prolonga-