

A matter of sex

John H. Crook

Primate Paradigms: Sex Roles and Social Bonds.

By Linda Marie Fedigan.

Eden Press, Montreal, and St Albans, Vermont: 1982. Pp.386. Pbk \$18.95.

IN evaluating *Primate Paradigms*, the orientation of the author and of her intended readers is of prime importance. Dr Fedigan writes about primate behaviour from an anthropological and sociological standpoint that differs greatly from the usual position of a biologist, whose concern with genes, mechanisms, sociobiological evolution and the origins of proto-cultures tends to preclude too questioning a reflection on the bias which his or her own background and sex may have on the ideas presented. It is upon this issue that Fedigan focuses in her quest to inform an audience of "non-specialists of all kinds, of students and of specialists in Primatology and Women's Studies".

In brief this is the feminist critique of theories of primate and human evolution, theories that are held to be in large part the "mythological" constructions of male observers. And the evidence is both copious and convincing. There can be no doubt that the date of a primatological publication, the *Zeitgeist* of the period so far as sex relations are concerned, the sex of the author, his or her social background and political orientation have all played some part in determining the acceptability of many popular viewpoints and of theory construction in primatology.

In a text of considerable competence and erudition, Fedigan examines many paradigms in primatological theory. Especially to the fore are hypotheses concerning dominance and alliance, kinship, sociosexual behaviour, the development of sex differences, sex roles in societies, sexual selection in evolution and theories of the origin of human social life. In many instances recent work does indeed demonstrate that the earlier literature (say in the 1960s and early 1970s) tended to overemphasize the roles, the activity, the dominance and the evolutionary influence of males, and to assign a general lack of importance to evolution of the female sex. In addition it can be argued that the species most studied tended to be exactly those which demonstrated such conditions most forcibly. As the sample of species studied has widened, so a greater awareness of such biases has emerged. Yet since this also coincided with the development of women's studies there can be little doubt that the unconscious prejudices of the most recent generation of field workers have changed from those of earlier ones. Whether the result has been a more objective primatology is a matter the author leaves in doubt

and which her personal bias would in any case prevent her from saying.

For all that *Primate Paradigms* is a notable book for it will alert primatologists and popularizers of science alike to the power of human projection especially in fields that bear on human action and social history. It is, however, important to note the limitations of such a text. Fedigan's approach is to ferret out all available contrary evidence to the paradigm in question and thereby to raise doubt regarding its integrity. She is of course not alone in recognizing the inadequacies of, for example, the early baboon-based models of human evolution and male workers have supplied more than a fair share of the critical arguments. Her persistent scepticism leads to chapters which repeatedly show their subject matter to contain so much contrary evidence that few conclusions can be reached.

Perhaps the generation of provocative hypotheses and their vigorous disproof prior to the erection of another is especially characteristic of the polemics of male academics. Few of them suppose their version to be the final truth, yet the promulgation of debate, the discovery of new facts and the weaving of new viewpoints is the very life-blood of a science. Fedigan almost never confronts a hypothesis directly nor does she seem to have any theory of her own. An erudition that merely casts doubts, avoids direct controversy and asserts a personal viewpoint is not one that will attract those who enjoy the more confrontational tactics common to much of biology. But Fedigan here is not writing as a biologist. She is

essentially a *social* critic of a branch of biological science.

Her argument is strongest where the evidence is most controversial, as in theories of social behaviour. Where she begins to overreach herself, and where her critical abilities are weakest, becomes apparent in her attitude to fundamental biological theories such as the origin of sexuality itself and contemporary research on sexual selection. Her cavalier treatment of the speculations of biologists is based on the assumption that male scientists are asserting directly or indirectly that women are inferior because eggs are bigger than sperm. This exceedingly trite view of the motives and views of leading and thoughtful researchers requires explanation in terms of ways in which contemporary women view their own collective identity, a social psychological issue clearly raised by Fedigan's controlled passion. She consistently underestimates the power of biological theory in the attempt to explain sexuality in the animal kingdom, and her dismissal of almost everything as "myth" seriously undermines her case. Biologists, especially cell biologists, are not likely to be impressed.

Nonetheless this is a courageous and hard-hitting book that should generate serious reflection. Its true position in the continuing debate about women in society will become clearer only when the influence of feminism on the judgement of women social scientists has been properly assessed.

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What is wrong with Muslim science?

Francis Ghiles

Science and Technology in the Middle East.

By Ziauddin Sardar.

Longman/Gale Research: 1982. Pp.322. £39, \$85.

AT ITS peak about one thousand years ago, the Muslim world made a remarkable contribution to science, notably mathematics and medicine. Baghdad in its heyday and southern Spain built universities to which thousands flocked: rulers surrounded themselves with scientists and artists. A spirit of freedom allowed Jews, Christians and Muslims to work side by side. Today all this is but a memory.

Expenditure on science and technology may have increased in recent years though that increase has been, perforce, limited to oil-rich countries: Sudan, for instance, is internally bankrupt and countries such as Iraq are busy fighting wars which cost billions of dollars — no doubt they have little time for science. Trade structures are dom-

inated by imported technology and most countries have economic and scientific systems geared to imitation rather than originality.

Even the recent wealth provided by oil exports makes relatively little difference. As the author of *Science and Technology in the Middle East* points out, "science policy and politics, much to the displeasure of many scientists, are closely linked in the Middle East". The region is dominated by dictatorships, benevolent or otherwise, the volatile nature of regimes such as those in Iran, Iraq, Syria and Libya further complicating any attempt to allow science to take root indigenously. Not surprisingly — and contrary to the author's belief — the brain drain to industrialized countries continues to debilitate intellectual life throughout the Middle East.

The book includes a 75-page "Overview" and a bibliography, and then gives a catalogue of regional organizations and their specific aims. The author also looks at 19 countries individually and provides a directory of major universities and research institutions. Compiling a reference book of this sort is an immensely complex task, one fraught with difficulties because few countries provide information which can be relied upon to be accurate, let