role of females in their societies, and in evolution as well. Importance is attached to social factors in evolutionary change, to cooperation rather than competition, and to the probable significance of plants both as food and as material for tool making. This information, along with details of fossil finds, is put together to provide a story of human evolution that more or less fits with what is known. But after all, so little is known — although this has never been a drawback for theorists in evolu-

tionary anthropology.

In addition, the book has unfortunate aspects. Palaeontological objections to assessments of phyletic divergence times based upon protein work are not thoroughly explored. The description of chimpanzee behaviour is not adequately set in the context of broader primate ethology, and is needlessly anecdotal rather than being presented in a rigorous scientific manner. Given the aim to show the role of female sociability as a force in human evolution, the chimpanzee female is not a particularly good analogue, since its social network is more restricted than those of many other higher primates. Further, there are things to object to in the palaeoanthropological sections as well, such as an idiosyncratic view of stratigraphy.

Perhaps worst, the text itself has been seriously affected by the contemporary problem of inflation. The material could have been better organized, and the style is very repetitious (with frequent parenthetical interruptions) and often says the same thing twice (or more). The maps are so reduced that it is impossible to see whether they would convey information even if larger, and the illustrations are inappropriately cute and sketchy for work of whatever sort this is — indeed it is difficult to guess for whom the book is intended.

Models have a limited value; plausibility is about the only thing they satisfactorily demonstrate. They raise questions and illustrate possibilities, for it is likely that transitional hominids were at least as complex as chimpanzees. But they can produce a confining and chauvinistic outlook. Tanner appears to reject anything that smacks of reductionism, but surely more reliance can be placed upon conclusions derived from a larger taxonomic base, from a method that aims to detect general principles. What are the consistent social correlates of a long life, for example, or a long period of infant dependence, in a wider range of mammals?

Anthropological beliefs are the product of their time, and while attempting to expose this and the role of nineteenth-century British male prejudice, I feel that Tanner falls into much the same trap by infusing her treatment with the equally parochial attitudes of some contemporary American women.

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Animal behaviour from A to W

Thomas E. McGill

The Oxford Companion to Animal Behaviour. Edited by David McFarland. Pp.657. ISBN 0-19-866120-7. (Oxford University Press: 1981.) £17.50. To be published in the US early next year.

THE 1973 Nobel Prize for Physiology and Medicine was awarded to the animal behaviourists Karl von Frisch, Konrad Lorenz and Nickolaas Tinbergen. That event was, of course, the major landmark in public recognition of the discipline. But it is still gratifying that Oxford University Press has selected animal behaviour as the subject of the first of their scientific "Companion" series.

The book "has been designed as a nonspecialist introduction to the study of animal behaviour". It contains an alphabetical series of 227 articles by McFarland and 71 other contributors. The essays, from Abnormal Behaviour to Wildlife Management (no Zoos?), range in length from a few lines — on, for example, immobility and gregariousness — to 18 pages on the history of animal behaviour. Many of the articles include excellent illustrations. The volume ends with a bibliography of 146 books and with indices of both the common English names and the scientific names of animals. Each index indicates the articles where a particular species is mentioned.

Six articles are devoted to people — the three Nobel laureates plus Charles Darwin, Ivan Pavlov and B. F. Skinner. The essays contain a brief biography and a discussion of the contributions of these luminaries.

While the book is designed for the layman, many will find it useful in teaching. For example, a two-paragraph article on vacuum activities provides some interesting examples and discusses how these behaviours might occur through stimulus generalization. A cross-reference leads to an article on generalization, containing other cross-references, and also a reference to the bibliography.

Aside from the inevitable unevenness of an edited work, the book has a major deficiency. It contains no listing of the titles of the articles, neither in a table of contents nor in an index. Thus one is left to guess the title of a particular subject. For example, while a scientific society and an international journal are called "Behaviour Genetics", there is no listing under that topic. Instead, the material is found under Genetics of Behaviour. There are no articles entitled Biological Clocks, Biorhythms or Circadian Rhythms; the relevant material is discussed in the contributions on clocks and rhythms. There is no entry for sociobiology (surely this topic deserves at least a crossreference).

Guessing and page-turning proved mildly annoying, so I made my own list of

the articles. I would advise others to do the same since this list proved a great aid in finding material and in browsing amongst unfamiliar topics. Certainly, there is treasure in this valuable book, but much of it is buried.

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The IQ agony aunt

Steve Blinkhorn

Straight Talk About Mental Tests. By Arthur R. Jensen. Pp.269. ISBN US 0-02-916-440-0; ISBN UK 0-416-32300-6. (Free Press, New York/Methuen, London: 1981.) \$12.95, £8.95.

WITH a publisher's blurb that would do credit to a headache remedy advertisement, and a shoulders-squared, plain brown wrapper of a title, Jensen's latest offering is a curious mixture. Part textbook, part highbrow agony column, it proclaims itself to be a plain man's guide and largely eschews mathematical formulae and reference to source material. But despite the obvious good intentions the book turns out to be no more than a competent rehash, lacking the brash vigour of Eysenck's brand of popular psychology and failing to compensate with novelty of argument or perspective.

What, after all, is there new to say about mental tests? Not enough, apparently, to merit a whole book, since the predominant theme of this one is the primacy and genetic determination of general intelligence, rather than the mental tests of the title. This is not to say that there is any evidence of lack of competence. As in Bias in Mental Testing (Free Press/Methuen, 1980), clearly the elder brother of this volume, Jensen shows considerable mastery of the issues. And when it comes to the evaluation of the role of IO measurement for practical purposes, there is no evidence of support for the kind of gee-whizzery and technical witch-doctory that mental tests can attract. It needs to be said by such as Jensen that tests are overused and often misused, but not thereby rendered useless, and he makes the point clearly and sensibly.

It is all the more difficult, then, to understand why he finds it necessary to pick continually at the scab of black-white IQ differences, why two of the six titles in the select bibliography concern race, indeed why he could not confine himself to the matter of mental tests, the jargon and technology of which are as often misunder-