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Book reviews

Human Biology of Pastoral Populations. Edited by William R. Leonard & Michael H. Crawford. Pp. 314. (Cambridge University Press, Cambridge, 2003.) £55.00, ISBN 0-521-78016-0, hardback.
DOI:10.1017/S0021932004215942

Pastoral societies in general and African pastoral societies in particular have frequently been interpreted by their ethnographers as models of biocultural adaptation to harsh and unpredictable ecology. What is new in this collection? First, it summarizes and expands the evidence base on ecological, demographic, health and biological aspects of herding. Second, several papers cogently present the argument that in order to understand the functioning of pastoral societies anthropologists must study them over long periods, and using a broad battery of methods. Third, it attempts to integrate ecology and population biology.

After a brief introductory chapter by the editors (M. H. Crawford and W. R. Leonard) outlining the structure and scope of the book, two chapters answer questions about population history and origins from detailed intra-population data on the genetic structure of Basque sheep-herders in Spain (R. Calderón) and of Evenki reindeer-herders and Kizhi-Altai cattle-herders in Siberia (M. H. Crawford and colleagues). These showcase the impressive capabilities now available for sampling many loci across the genome and comparing subpopulations even within small-scale societies. We learn that the more mobile and geographically peripheral Evenki show less genetic variation that the Kizhi-Altai, who probably have a history of greater contact with larger Asian and European populations, and that at least some of the Basques show greater genetic heterogeneity than previously assumed.

The next chapter (E. Kobliansky and I. Hershkovitch) is a rather confusing attempt to say something about the history, demography, marital patterns, migration and inbreeding of Israeli Bedouin. Use of the words ‘primitive’ (p. 64), and ‘devoid’ (p. 66) to describe the subsistence and social organization of the study population, the ambiguous contribution of ethnographic methods, and troubling assumptions such as that the keeping of slaves represents ‘admixtures’ (*sic*) (p. 70) weaken what is otherwise a particularly thorough analysis of the way in which endogamous marriage practices, high mortality and reproductive isolation result in an unusually high degree of inbreeding.

Two chapters explore the political, economic and diachronic dimension of pastoral life-ways, and are pioneering in their attempt to link such processes to shifts in demography and subsistence strategy. In a fascinating analysis contrasting change in vulnerability and subsistence of the Turkana and Karimojong, S. Gray and colleagues focus on the historical tensions between the ‘inherent instability’ of East African pastoral systems and the colonial and post-colonial notion of geographical and ecological ‘boundaries’, concluding that ‘the crisis in Karamoja is at once ecological and political’ (p. 121) and that ‘politics and weapons . . . are linked to cattle, and cattle are still inextricably linked to ecosystem dynamics' (p. 125). M. C. Goldstein and C. M. Bell focus on the interesting case of Phala nomadic pastoralists on the Tibetan plateau who, unlike most pastoralists elsewhere, have not suffered encroachment and competition from agriculturalists. They argue that the Phala system of production is persistent, although non-equilibrial, and that recent government policies based on the goal of preventing environmental degradation are potentially misguided.

Other chapters include a concise summary and update on the extensive studies initiated by the South Turkana Ecosystem Project, easily the most comprehensive and sustained programme of work on nomadic pastoralists (M. A. Little); an interesting analysis of Botswanan Herero nutrition and demography that adds to the growing number of studies failing to show associations with socioeconomic differences among families in pastoralist communities (R. L. Pennington); an impressive comparison of data on energy expenditure, activity and health status of the Evenki and other populations (W. R. Leonard and colleagues) that neatly evidences the effects of recent and ongoing lifestyle change; and a timely comparison of disease patterns between Sámi and other Finns (S. Näyhä and colleagues). The collection is rounded off with papers presenting evidence that link family organization to lowered female life expectancy among the Yomut Turkmen of Iran (Irons) and livestock keeping to lactase persistence across populations (C. Holden and R. Mace).

The central theme is that nomadic pastoralism is an adaptation to inherently unstable environments. Adaptive behaviours maximize some fitness-related utility and the ethnographic chapters present a consensus that herd persistence is the salient utility selected for in climatically extreme, seasonal and unpredictable places where dependence on livestock is the best subsistence option for human beings, and is the single utility to which all others are, if necessary, subsumed. One question that is barely addressed, however, is the extent to which the environments pastoralists inhabit are human-modified. It is often implied that pastoralism is the only viable mode of subsistence in these environments, when in fact several nomadic pastoralists co-exist with smaller populations of nomadic foragers, particularly in the sub-Arctic and East Africa.

As the product of an academic symposium, the coverage of topics reflects the work of those who contributed rather than a complete overview of work in this area. Therefore, the volume does not serve as a particularly engaging introduction to the human biology of pastoralists for use in teaching, and, regrettably we still lack an analogue for Barfield's serviceable sociocultural primer '*The Nomadic Alternative*' (1993, Prentice-Hall). The claim that the 'symposium drew together the leading scholars of pastoralists from anthropology [and related disciplines]' (p. 1) is a stretch. Many pioneering workers make excellent contributions here, but at least as many do not. Geographic and cultural coverage is equally patchy, and the editors make no comment on this or the general paucity of research on pastoralists. For example, Figure 1 claims to depict the 'Geographical distribution of pastoral populations throughout the Old World', but clearly fails to include a number of contemporary cultures and populations studied by anthropologists and is itself rather confusingly labelled (the Urals being mysteriously peopled by a group called '23'). Every pastoralist scholar is entitled to his or her own definitions of pastoralism, herding, nomad and other such grab-bag terms, but the exclusion of New World pastoralists is perplexing. Notwithstanding these limitations, the book makes an important contribution to anthropological understanding of a fascinating, resilient and broadly threatened cluster of life-ways.

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Tropical Forests and the Human Spirit. Journeys to the Brink of Hope. By Roger D. Stone & Claudia D'Andrea. Pp. 315. (University of California Press, Berkeley, 2001.) £13.95, ISBN 0-520-23089-2, paperback.
DOI:10.1017/S0021932004225949

Tropical deforestation has become a major international issue, and considerable human and economic resources have been mobilized over the past 15 years to protect the world's remaining tropical rain forests. This remarkably accessible book, written for a wide audience by two sustainable development specialists, takes stock of some of the most promising attempts to control deforestation in the Philippines (Mindanao), India (Madhya Pradesh, Haryana and Orissa), sub-Sahara Africa (Tanzania, Niger and Ghana) and Latin America (Brazil, Bolivia and Mexico). The geographical coverage is extensive, although one could possibly regret the absence of representative examples from Papua New Guinea or other Pacific regions.

Stone's and D'Andrea's central message that promoting community forestry is the most efficient way to prevent deforestation and the accelerating degradation of biological diversity is simple and compelling. It is also well supported by detailed case studies. Successful conservation efforts, they argue, are likely to be based on the allocation of management and protection responsibilities to local people dependent on forests for their livelihood and well-being. The stories, carefully researched over a period of 6 or more years, are told in a lively style and with a personal touch that enhances their academic relevance. The seriousness of the background research can be measured in the excellent first part of the book ('The dismal record'), as well as in the very useful annotated bibliography ('Further reading'). I found Chapter 5 on Indonesia's Kerinci Seblat National Park particularly compelling. It powerfully illustrates the fact that conservation is as much about the reallocation of resources and the restructuring of social institutions as it is about the protection of nature. As the authors note (p. 152): 'conservation implies a struggle over resources, and struggles over resources are simultaneously struggles over the meaning of those resources and over the identities of the people who depend on them.'

In its eulogy of the local and the non-governmental, this book is in total accord with the influential policy circles represented by organizations such as the powerful Washington-based think-tank 'Forests Trends'. Although I am, like the authors of this book, all in favour of 'community empowerment', I would be far more cautious about opposing civil society (as democratic) to national governments (as corrupt and inefficient). Not only do we need to question the nature of the relationship between civil society and non-governmental organizations (the latter are not natural, or automatic, expressions of the former), but we also need to ask why, and in which ways, have central governments been weak or inefficient. To defend the devolution of property rights in forest land from national governments to local communities as a principal good in and of itself may be dangerous. The context in which such devolution takes place must be examined, for institutional weakness and inefficiency can arise as easily at the local level. Furthermore, there is grounds to argue that in many instances the more appropriate scale for reforming the forest sector, and, more generally, for managing natural resources, is the national level. It is at the national level that existing institutions must be transformed, and new ones created, through national strategies and action plans combined with decentralized initiatives. For Stone and D'Andrea, sustainable development requires the mobilization of the human spirit. I acquiesce, but would add that, as their book shows, it is social institutions that need urgent remodelling.

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Towards a Sociology for Childhood. Thinking from Children's Lives. By Berry Mayall. Pp. 217. (Open University Press, Buckingham/Philadelphia, 2002.) £16.99, ISBN 0-335-20842-8, paperback.
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There are some recent, very important contributions to the understanding childhood from a bioanthropological point of view, particularly within the framework of evolutionary biology (see e.g. *Patterns of Human Growth* by B. Bogin, Cambridge University Press, 1999).

The aim of the present volume is to include children in the context of sociological thinking and to give a theoretical understanding of childhood from a sociological viewpoint.

The first chapter (the Introduction) gives a general background of some previous studies, as well as a theoretical framework of the study of childhood sociology. The author particularly favours the so-called 'adaptive theory' of D. Layder, which implies that social theories should be developed 'in the light of data' (p. 5).

Chapter 2 gives a retrospect on some sociological research on childhood and describes the author's own studies carried out in the 1990s, mostly in London (more details about the data are listed in the Appendix). It also explains a very important viewpoint held by Mayall on the similarity between children's and women's studies when children are considered as a minority social group working for the social order but oppressed by society. The concept of 'generation' in this context becomes equally as important as the concept of 'gender', and this is clearly explained in Chapter 3.

In the next four chapters we can hear the voices of children because the author brings into the text some of their interviews. Children speak about their relationships with parents, about their place in the family and at school, and their attitudes towards the 'adult' world. From this Mayall draws some important interpretations on such issues as 'the moral status of childhood', 'children's work', the role of children in the social order, children's standpoint, children's rights, etc.

Chapter 8 contains an important cross-cultural analysis of a comparison of 'two sorts of childhood' (p. 141) in the UK and Finland, and gives two different models of childhood in different societies, which mainly depend on differences in the recognition of women's – and children's – rights. Nordic society in this case is viewed as much more advanced than Anglo-Saxon. It would be interesting to analyse within the suggested framework the situation in some other societies, e.g. in Russia, where the political, social and economic changes of the last 10–15 years have brought about a shift towards much more powerful influences of some 'patriarchal' values than was the case in the former Soviet Union.

The final chapter brings together all of the previously considered topics in the context of a general discussion, with a very strong and well-grounded appeal for the upgrading the social status of childhood.

As a biological anthropologist involved in the study of child growth and development, I found this book particularly interesting because it gives us some ideas about what is the real place of children in some modern societies, how children themselves think about it, and what can be done in terms of respecting their rights. In my view, this book will be a useful read, not only for specialists and students in children's studies, sociologists and anthropologists, but also – and perhaps most importantly – for teachers and parents: that is, the general reader.

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From Genesis to Genetics. The Case of Evolution and Creationism. By John A. Moore. Pp. 231. (University of California Press, Berkeley, Los Angeles, London, 2002.) £19.95, ISBN 0-520-22441-8, hardback.
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Creationist books enrage scientists because they are so superficial, and that of course is where their public appeal lies. There are quite a few detailed scientific refutations of creationist 'arguments' (for want of a better word), but they cut little ice with the public precisely because science is complex, while creationism is simple. One feels that, somehow, there is a need for an approach that tackles creationism on its own terms.

This may be the book. John Moore makes it clear right from the start that it is important that evolution be taught in schools, because it is about the very nature of science. He examines why it is that people seem to want to believe in the paranormal (astrology and ESP, as well as literalist religious interpretations) in preference to the rational; he summarizes the origin of the Torah (Pentateuch), and of the Bible as we have it, and compares the P and J versions of creation in Genesis, showing that they are incompatible; and he briefly recounts some other creation myths, past and present. He places the Darwinian revolution in its scientific and cultural context, and shows how it explains embryology, taxonomy and vestigial organs. (Here is one the few criticisms I have: he uses the vermiform appendix as his prime example of a vestigial organ, which it is surely not.)

In two short chapters, Moore lays out all that a lay seeker-after-truth would need to know, to form a judgement about the relative merits of science versus creationism, about the fossil record, radiometric dating, genetics, speciation and the origin of life.

And about human evolution: my initial reaction was 'how grossly over-simplified', but of course this is exactly the right amount of detail! He rounds it off with a history of evolution denial in the 20th century: the Scopes trial, the shock of 'Sputnik' and how it caused a disgracefully short-lived attempt in America to take science education seriously, the rise of Creation 'Science', its success at the popular level and its failure at the legislative level, and its rebirth as 'Intelligent Design'. And why it is that creationists nearly always win public debates against scientists.

Maybe, just maybe, this is the book we have been waiting for. Certainly, if I were a creationist on a school board in the United States, I would be doing my damnedest to prevent it falling it into the hands of schoolchildren.

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Medical Knowledge: Doubt and Certainty (Colour-Enhanced Second Edition). Edited by Clive Seale, Stephen Pattison and Basiro Davey. Pp. 210. (Open University Press, Berkshire, UK, 2001.) £17.99, ISBN 0-335-20834-7, paperback.
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Designed as an undergraduate Open University text to be read in conjunction with a reader, this book serves its purpose well. Drawing on sociology, anthropology, history of medicine and human biology it clearly lays trails for study of the relationships between knowledge of health, disease, diagnosis and trust between lay and professional groups, illuminating paradigms as they have waxed and waned in the past. The 'further reading' list on sociology, history of medicine, complementary medicine and medicalization of the body lists key works for those newly challenged to doubt biomedicine as definitive truth.

The authors, drawn from Oxford, Cambridge, Essex and Goldsmith's College as well as the Open University, use tuberculosis, blood and hysteria as contextual examples of the complex relationships between social conditions, prevailing discourse, evaluation of medical intervention and medical ideas. The book successfully weaves complex ideology into short clear paragraphs managing to deconstruct the ideas of most major influential thinkers on health care and society: from Parsons, Foucault and Illich to Martin and Balint. *Medical Knowledge* facilitates understanding of social construction and relativism and of the illusion of modern biomedical certainty while promoting 'anthropological strangeness' as a useful perspective to view the truly ephemeral nature of all knowledge and the cross-cultural and inter-cultural variations possible even within one contemporary society. It is also visually pleasing and colourfully illustrated.

There is much here of use to medically oriented students of all disciplines, though some of the question and answer format is irritating and more relevant to a high school text, particularly referencing previous chapter points which can interrupt the flow of ideas. Yet overall, there are few physicians and health purchasers who would not benefit from a weekend reading its easily digested pages.

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