

file of life histories is exemplary for sociologist practitioners of historical methodology.

As more and more Americans face hard times during the '70's, the book assumes a measure of timeliness. It provokes thoughts about the future—namely, about the viability of current social institutions and Depression-era adaptation for the new forms of socioeconomic stress on the horizon. In that sense, *Children of the Great Depression* is more than a thoughtful assessment of the past.

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Sex Roles in Central Brazil

Women of the Forest. YOLANDA MURPHY and ROBERT F. MURPHY. Columbia University Press, New York, 1974. xvi, 236 pp. Cloth, \$10; paper, \$3.45.

When Yolanda and Robert Murphy studied the Tupi-speaking Mundurucú of central Brazil in the early 1950's, this small enclave of 1250 Indians was on the brink of social disintegration. Traditionally hunter-gatherers who also practice slash-and-burn agriculture, they inhabit circular villages in the savannahs of the Upper Tapajoz River valley. According to travelers' reports the Mundurucú were once one of the most warlike peoples of South America. Today, however, their warring activities have been sharply curtailed. No longer at liberty to roam the savannahs at will, a portion of the Mundurucú people have opted for another mode of life. Abandoning the traditional savannah villages they have settled along the banks of the Cururú River, where they currently are engaged in the rubber trade with local Brazilians.

This pursuit of a frontier life-style has brought about many modifications in Mundurucú social organization. Not the least of these are changes in the relations between the sexes. In *Women of the Forest* the Murphys portray the two worlds of the Mundurucú from the vantage point of the woman.

Traditional Mundurucú society is described as essentially an egalitarian one in which "sex roles are the most basic form of social distinction" (p. 70). The Murphys' account presents anatomical differences as the grounds for classlike divisions. As a result of the emphasis on sexual dimorphism Mundurucú men and women live separate and unequal lives in contiguous social settings. The women, anchored to matrilocal extended-family households, are responsible for the production and processing of

vegetable foods. Daily horticultural pursuits occupy their time away from the village, and much of their time in the village is spent in the production of manioc flour. A communal manioc shed serves the women both as a social club and as a common work area.

Men have no share in women's work. Domiciled exclusively in a men's house, adult males spend their days either outside the village in hunting and courtship expeditions or in the performance of rituals associated with an ancestor cult. The gulf between the sexes appears to be bridged only for the purposes of procreation and the distribution of meat. Quite apart from these intermittent transactions in which women receive meat and sperm in return for the female product—babies (who at birth are automatically members in their fathers' patrilines)—there is little that seems to bind men to women. Love relationships are described as diffuse and short-lived; divorce is easy and occurs frequently. Thus solidary relations are not forged between the sexes but exist within them.

Greater prestige is accorded to male occupations, with men always dominant in politics and religion. The Murphys try to account for these inequities between the sexes by resorting to a facile Freudian interpretation. Should public displays of sexual antagonism be regarded as merely cover-ups for male fears of inadequacy? Must the men's house and its secret rituals be viewed as fantasies constructed by the men to fool themselves and women into thinking that men are inherently superior beings? No doubt the Mundurucú myths and their symbolism are conducive to Freudian analysis, but at least this reader finds the validity of such interpretations questionable when used to explain cultural phenomena in non-Western societies.

Among the Mundurucú who left their traditional villages in the savannah and relocated on the Cururú River, the old system of sexual segregation seems to have broken down, the Murphys report. Women and men now work side by side in gardening and cooperate with each other in the extraction of wild rubber and other forest products. In this new situation hunting has become less important than fishing, and both have become individual rather than collective tasks. The nuclear family replaces the extended one in important household and village functions. Without a men's house and its male-associated ancestral cult the men now live with their wives and children. No one seems to lament the passing of the old order, least of all the women, who, the Murphys emphasize, are happier in the new setting.

That the Mundurucú women should indicate a preference for machine-age manu-

factured goods and the exclusive companionship of a solitary husband to a plurality of amorous liaisons and the convenience of child-care by coresident matriline may not be surprising to Western readers. What is surprising is that the Murphys have made it into an occasion for a comparison of Mundurucú women with American women. It does seem specious to assert, when so little is known about the psychology of the Mundurucú woman, that there is a commonality, a "sisterhood" (p. 232), between all women which cross-cuts cultural boundaries and is readily identifiable on other grounds, presumably, than biological ones. Such statements, were they to be proven exact, might well render social science studies of the kind the Murphys were originally intent upon both cumbersome and unnecessary.

To the trained ethnographer familiar with the repercussions of socioeconomic breakdown, it looks as if the Mundurucú women have exchanged one set of oppressions for another, for if they are no longer the occasional victims of male group tyranny they are now the dependents of husbands trapped in symbiotic trade relationships with Brazilians. Can one conclude then that it is preferable to be a victim of economic oppression than to submit to sexual humiliation? This is certainly the gist of the Murphys' book, but it is hard to determine the answer from the evidence they present. Clearly the costs and rewards of a new life for the Mundurucú need to be more carefully scrutinized. The Murphys' book, constructed more than 20 years after the original fieldwork took place, is a good beginning. The study of sex roles and their allocation, interaction, and rationalization deserves a prominent place in current anthropological research. One may hope that some of the issues raised in *Women of the Forest* will become the concern of future field projects.

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African Mammals

The Carnivores of West Africa. D. R. ROSEVEAR. The British Museum (Natural History), London, 1974. xii, 548 pp. + plates. £18.50. British Museum (Natural History) Publication No. 723.

The third and final volume of a series on West African mammals (the others were on bats and rodents, respectively), this book is crammed with information and is a valuable reference work on carnivores. It includes so many of the species found in

the Ethiopian faunal region, in fact, that restricting it to a limited geographical area seems unnecessarily confining when, with relatively little more effort, it could have been "The Carnivores of Africa." Of course, since the first two volumes were limited, both geographically and in the percentages of African bats and rodents included, the third volume had to follow suit. Also, the chief purpose of the series, as stated in the preface to volume I, was to serve the needs of African university students and amateur naturalists in the British Commonwealth territories of West Africa. Rosevear is too modest on both counts: his descriptions and taxonomic discussions are bound to appeal to specialists (and may not appeal to very many lay readers), and the region covered, following more or less natural zoogeographical boundaries, includes the vast expanse between the Sahara and the Congo basin (18°N to 4°N) from the Atlantic to western Sudan.

The literature on African carnivores has been thoroughly covered through 1971 and into 1972. Under "Habits," much of the behavioral and ecological information published up to that time is summarized for each species. It would have been more readily accessible if organized under subheadings such as "predatory behavior," "reproduction," and "social organization." Sources are sometimes inadequately cited, and occasionally, hunters' lore or anecdotal reports are passed along as established facts (for example, p. 86, wild dogs, *Lycaon pictus*, "certainly do not hesitate to eat the dead of their own kind"). Nevertheless, the wealth of material based on recent studies of living animals is what mainly distinguishes this book from descriptive and taxonomic works like Robert's *The Mammals of South Africa* and Shortridge's *The Mammals of South West Africa*. The author is to be commended for his thoroughness, the more since he is first and foremost a taxonomist whose own chief concern has evidently been with collecting, describing, and classifying museum specimens. This interest is reflected by the space allotted to those topics. For instance, six pages are devoted to the leopard's habits—followed by six and a half pages on its taxonomy and preceded by a three-page description. In my opinion, the detailed descriptions are valuable, whereas the taxonomic discussions—by their very nature—are often tedious.

Indeed, there is an old-fashioned quality about this work that faithfully reflects the ambience of the venerable institution that published it. The prose reminds me of Dickens, the layout is uninspired, and who else, in this age of offset printing, would stick to letterpress? Such a traditional ap-

proach can only suffer when compared with Jonathan Kingdon's innovative, superbly illustrated *East African Mammals*. Yet *The Carnivores of West Africa* is so rich in information that its literary and esthetic defects, and even its price, are outweighed by its value as a source book.

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Gene Control

Regulation of Gene Expression in Eukaryotic Cells. Proceedings of a symposium, Bethesda, Md., Apr. 1973. MAUREEN HARRIS and BRAD THOMPSON, Eds. National Institutes of Health, Bethesda, Md., 1974 (available from the Superintendent of Documents, Washington, D.C.). vi, 128 pp., illus. \$4.15. Fogarty International Center Proceedings No. 25. DHEW Publication No. (NIH) 74-648.

Although this collection of papers and discussions was presented at a symposium two years ago, it still provides a useful overview of the many possible levels of gene control in higher organisms. The edited transcripts of discussions following each presentation not only communicate the flavor of the conference but also give insight into the merits and pitfalls of commonly used methodologies. For example, the problem of multiple initiations in measuring chromatin template activity for DNA-dependent RNA polymerase is thoroughly examined, as are the disparities between *in vitro* and *in vivo* studies on RNA transcription and nuclear steroid binding sites. In some papers, however, although results are summarized, the lack of accompanying experimental data makes it difficult for the reader to evaluate the conclusions drawn. Subjects of interest for further investigation are delineated. For example, Siminovitch and Krooth point out that the genetic approach, which has been a powerful tool in the elucidation of gene expression in prokaryotes, is only beginning to be exploited in mammalian cells. Weiss draws attention to the usefulness of somatic cell hybrids in the investigation of cell differentiation and control of gene activity. The need is made evident for studies involving the use of purified RNA synthesized *in vivo* and hybridization conditions that permit detection of both unique and repetitive genes.

Genetic regulation at the transcriptional, translational, and post-translational levels are covered in this book. Felsenfeld and Cedar evaluate the structure and function of chromatin in RNA transcription, as

well as the problems with techniques generally employed to investigate this matter. Kourilsky and Gros give a succinct and well-illustrated summary of genetic regulation in prokaryotes. They detail the positive and negative control factors that influence the initiation and termination of transcription in prokaryotic cells and, in particular, the complex pattern of regulation in the bacteriophage lambda. They suggest that a detailed knowledge of prokaryotic regulation may conceptually help in the understanding of genetic expression in eukaryotic systems, but remark that the increased complexity of mammalian DNA limits the use of genetics and biochemistry with currently available techniques. Siminovitch summarizes the problems in somatic cell genetics and the types of mutants that had been isolated in mammalian cell populations in culture up to the time of the symposium. His review and Krooth's presentation, as well as experimental findings in different laboratories in the last two years, indicate that the genetic approach to the study of regulation in eukaryotes is not only valid and desirable but also feasible.

Steinberg, Scott, Levinson, Ivarie, and Tomkins present data indicating that the induction of tyrosine aminotransferase by glucocorticoids is the result of increased messenger RNA for this protein. They also discuss the possible role of nuclear processing and stability of mRNA in control of transcription. Unfortunately, nuclear acidic proteins and repetitive DNA sequences are not extensively examined as potential factors in regulation.

Initiation and termination of protein synthesis and the rate of chain elongation are probed as forms of translational control. Revel presents evidence for translational control by a protein synthesis initiation factor that specifically recognizes hemoglobin mRNA. Post-translational control by protein degradation and by protein modification are reviewed. Cox reports that steroid induction of alkaline phosphatase activity in HeLa cells is due to a decrease in the amount of inorganic phosphate bound to the enzyme. Hershko discusses factors such as protein structure, binding of specific ligands, and energy level that might influence the degradation of proteins.

At the price this book is not only a rare value but is also a good introduction to regulation in higher organisms for students and researchers in other fields. The evaluations of certain experimental procedures make it useful for those already in the field.

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