

several decades to the impact of the Ethiopian and British Sudanese governments closing off their western grazing lands.

Kelly's analysis is reminiscent of economic analysis, but although he uses the word "economic" frequently, there is little that can be called economics in this work, "economic" standing rather for "methods of production." This is too bad. I think an analysis like this would benefit from adding the economic dimension, which would not necessarily conflict with it and would add depth. A fundamental problem with Kelly's model is the lack of quantification of many important variables, so that it comes off looking like modeling without numbers, a heuristic exercise. The ratio of cattle to people is a crucial variable in Kelly's study, but not once in the book are any actual ratios given. Economic analysis, however, has shown that such things as ratios of labor input to output typically assume curvilinear form, with the result that dependable conclusions about such things as production cannot be made by merely projecting linearly these ratios from one level to another.

Kelly's analysis, therefore, while intriguing and worth consideration, is difficult to accept. Most particularly I find it hard to believe that the Nuer stress on the production of cattle beyond subsistence needs, can be explained by their desire to exceed the "ideal" bridewealth payments in order to gain more prestige. And it is precisely this claim which Kelly argues is the engine which drives Nuer expansion.

## References

Almagor, U.

- 1978 Pastoral Partners: Affinity and Bond Partnership Among the Dasanetch of South-West Ethiopia. Manchester: Manchester University Press.

Carr, C.J.

- 1977 Pastoralism in Crisis. The Dasanetch (sic) and their Ethiopian Lands. University of Chicago, Department of Geography Research Paper No. 180. Chicago, Illinois.

## Directions in Cognitive Anthropology

Janet W.D. Dougherty, ed

Urbana, Illinois: University of Illinois Press, 1985. 451 pp.

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Janet Dougherty, a cognitive anthropologist trained at the University of California (Berkeley) and subsequently a post-doctoral fellow in linguistics at the Massachusetts Institute of Technology, presents a challenging compilation of fourteen original and four reprinted articles, with pedagogical introductions, to demonstrate "current research by cognitive anthropologists reflecting the contemporary breadth and underlying unity of the field" (Acknowledgments). The unity expressed by Dougherty derives from concentrating on where concepts in folk classification come from—a preoccupation she acknowledges was inspired many years ago by Brent Berlin and Paul Kay (loc. cit. and p. 9). Also represented is a trend derivative of the work of cognitive anthropologists on artificial intelligence—research which con-

siders not only what computers can do, but also what people do, in text comprehension—thus three papers foreground the new interest of cognitive science in analyzing “schemata and discourse rather than categories and lexemes” (p. 429). Topics neglected in this book include ethnomethodology; language and the brain; language acquisition; language and literacy; linguistic pragmatics; nonverbal communication; structuralist, semiotic, and literary theory of symbols; syntax; text linguistics; and Whorfian cryptotypes. Other scholars would likely see unity in cognitive anthropology from the perspective of such areas of research.

Section I raises the problem of interface between thought and language in terms of the theory of fuzzy sets. Three papers, one of which proposes a new formal semantics, favor the view that non-fuzzy mental concepts, as represented in classical logic, become fuzzy as these are mapped verbally onto a real world which experience teaches is not black-or-white (discrete) but variously hued (graded). Conversely, a paper on color-naming in the Tarahumara language supports Paul Kay’s claim that colors and other natural categories are inherently fuzzy in thought. The latter position reoccurs in Section III, where a paper culturally analyzing “commitment” in American marriage supports the claim of George Lakoff and Charles Fillmore that the mind—unlike computers—operates by fuzzy logic. Section II papers view the individual as “simultaneously . . . a learner and creator of culture” (p. 8), showing that folk classifications change according to what they are good for, and alter as the individual becomes expert. This variationist theme appears also in Sections I and III, and Naomi Quinn’s paper in III is the most salient example of the new trend to utilize discourse analysis to arrive at “the relevance of [specified] schemata in a variety of expressions of group life, showing their repeated value in understanding them” (p. 430).

This collection makes demands on readers to be familiar with the ethnoscience and conceptualist discourse-analysis techniques of the Yale school, and to be patient when issues of metaphor and schema, Whorfianism, natural logic, semantics, taxonomic formalism, and the omniscient informant are not resolved. At the same time, it is a collection which everyone interested in language, thought, and culture should read.

### **Spiritualist Healers in Mexico: Successes and Failures of Alternative Therapeutics**

Kaja Finkler

Praeger Special Studies. New York: Bergin and Garvey, 1985. xii + 256 pp. Tables, figures, bibliography. \$27.95 (cloth).

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Unlike so many who write on ethnomedical beliefs and practices, Kaja Finkler, in a truly impressive study of Spiritualist healing in Mexico, goes beyond the commonly seen emic and functional analyses of folk medicine to explore something that most anthropologists fail to provide: quantitative data on the outcome of patients treated under the regime of a non-Western medical system. In so doing Finkler effectively intertwines quantitative data with qualitative materials drawn from case-histories