Book Reviews

Meaning and Cultural Symbols: Analytic Approaches

Meaning in Anthropology. Papers from a conference, Santa Fe, N.M., March 1974. KEITH H. BASSO and HENRY A. SELBY, Eds. University of New Mexico Press, Albuquerque, 1976. xii, 256 pp. $17.50. School of American Research Advanced Seminar Series.

Cultural anthropology's main contribution to science has always been the investigation of the range of human cultures and the demonstration of the variety, including variety in symbols and meanings, in these cultures. In recent years, anthropological interest in meaning and symbolism has increased and moved into new types of analysis. *Meaning in Anthropology* is a useful array of papers representing some of these. Linguistics has had an especially strong influence on this movement, and a number of the contributions show that influence.

The volume begins with a sternly opaque paper by a linguist, Michael Silverstein, whose thesis is that only language is a "true symbolic mode" and that the major portion of culture has only pragmatic meaning. He holds the interesting view that cultures need to be described as ill-integrated series of pragmatic meanings which give rise to social categories, but he is as spare with explanations as he is generous with concepts, and his position is an extremely difficult one to understand. Susan Ervin-Tripp's paper is from the same intellectual tradition, but it accessibly blends the strengths of a linguistic approach with an interest in such nonlinguistic phenomena as social learning, group boundary maintenance, and hierarchies of prestige and authority. Her sociolinguistic study is concerned with alternative means of saying the same thing and what significance ("meaning") the presence of these "alternations" has for users and hearers. She shows that the alternative means of giving commands themselves have meaning apart from the meanings of the commands being given and that the choice of means communicates information and provides instruction for children about which of different groups speakers and hearers belong to, the relative ages of those involved, and differences in power and status.

The influence of linguistics on the study of meaning is less strong and pervasive in the other contributions to this volume, but in the form of an interest in semantics it can be seen in several. Two authors deal with the usefulness of viewing actors' understandings of the concepts they use according to a "distinctive features" model. This model holds that the defining characteristics of concepts provide the basic meaning of those concepts. Thus, Harold Scheffler, a main developer of the "distinctive features" view, argues that kinship terms are defined for participants in kin relations by genealogical ties. Scheffler's essay is concerned with showing that another anthropologist, David Schneider, is wrong when he argues, in his well-known monograph *American Kinship*, that features that do not define kinship concepts (such as the kinds of behavior called for in kin relations) are as important to the meaning of those concepts as are the ties of marriage and descent that define them.

The importance of features other than those that define concepts is demonstrated in the second paper concerned with the distinctive features view of concepts' meanings. Roy G. D'Andrade uses the data and sophisticated analysis from his study of American beliefs about illness to construct models representing actors' cognitive systems. One is based on multidimensional scaling analysis and represents the distinctive features view and the other is based on the analysis of causal relations. D'Andrade shows that for his informants "the attributes of disease with which informants are most concerned and which they use in making inferences about diseases are not the defining or distinctive features but the connotative attributes of 'seriousness,' 'contagion,' 'curability,' and the like." He notes that if a cure for all cancers were discovered, the defining features of "cancer" would not change but that the way people think about the disease—what it "means"—would certainly change.

Keith H. Basso's paper analyzes the trenchant metaphors the Western Apache call "wise words." In it he calls attention to limitations in the linguists' view of language use. These stem, he maintains, from the view that there are right and wrong utterances. This view leads to the silly notion that metaphors are "just mistakes" because they do not follow the usual set of rules about how to use the language. Basso shows that the meanings in metaphors result from creative acts and thereby add to the language ability of their users, making them better able to meet changing communicative needs.

If Basso's paper remains within the sphere of linguistic influence despite his focus on the inadequacy of mainstream linguistic analysis, Fadwa El Guindi and Henry A. Selby present a paper entirely outside that sphere. They analyze the "conceptual underpinnings" of the Zapotec of Mexico by examining the "dialectical tensions" between the basic concepts in that culture and the "mediations" of those tensions or oppositions. They follow the sociological implications of their analysis in an attempt to explain such matters as "the distribution of witches in the community, the frequency of wife beating, and the permissible substitutions of personnel in ritual activity." They demonstrate that their dialectical approach to concepts and cultural systems is a useful one, but they fall a good deal short of showing that it is an essential one.

What is useful and what is "essential" in the analysis of culture and of meanings and symbols depend ultimately on the theory of culture held. David Schneider presents a new formulation of the well-known views he holds about culture. He believes that the symbols and meanings—and, as in the case with many of the authors in this volume, his treatment of these two concepts and their relations is less than rigorous—form a system whose integration is separate from the integration of the specific instructions for behavior in particular situations (for example, family life and religious rituals). He argues that the traditional interest in the "symbolic-meaningful" aspects of the clusters of specific instructions for behavior in situations ("institutions") is misdirected since the system of symbols and meanings cuts across the boundaries of institutions. In accordance with this view, he holds that the "traditional ru-

brics, such as religion, myth, ritual, economics, and so forth" are poor guides to research and analysis since they do not represent the realities of integrated systems of symbols and meanings.

The last paper in the book also concerns the realities of meaning and symbol, but it asks how these are experienced by the people who live in the societies studied. Clifford Geertz argues that anthropologists cannot perceive the world as the people they study do ("What happens to *verstehen* when *einfuhlen* disappears?") but what they can and should do is find out "what they perceive 'with'—or 'by means of' or 'through.' " Doing this entails discovering and understanding the "symbolic forms—words, images, institutions, behaviors—in terms of which people actually represent themselves to themselves and each other." Geertz presents these forms of self-representation for the people of each of the three societies he has studied, but the contrast in his description between the fascinating and gracefully integrated self-representations of the peoples of Bali and Java and the incomplete and broadly drawn self-representation of Moroccans raises some questions about his approach. One of these is whether it might not be that only some cultures provide the means for a uniform, neat self-representation while others provide only scraps and pieces that are variously stuck together by individuals in idiosyncratic ways. It is true that "no society consists of anonymous eccentrics bouncing off one another like billiard balls," but the symbolic means by which people represent themselves surely need not in all cases be as complete and uniform as those in Bali and Java.

The volume as a whole lacks any tight integration, but I have always been puzzled at reviewers' displeasure at "nonbooks." A collection of strong papers makes, for me at least, a worthwhile volume. The one criticism I have of this one as a whole is that it lacks papers representing the important work still being done in the traditionally central fields of religion, ritual, art, myth, and folklore. These fields were once very nearly the only ones in which there was a consistent concern with symbols and meanings. It is useful to be reminded that important work is now going on in other areas, but the more traditional ones are still vital, and it is a pity to have nothing at all from them.

MARC J. SWARTZ
Department of Anthropology, University of California, San Diego

Arthropod Biology

The Insect Integument. H. R. HEPBURN, Ed. Elsevier, New York, 1976. xx, 572 pp., illus. $63.50.

This volume is dedicated to A. Glenn Richards on the eve of his retirement and on the anniversary of the publication of his *The Integument of Arthropods*. It is intended, according to the preface, as a "compilation of those areas of insect integumental biology which have been developing most rapidly over the last few years." An introductory chapter by Rockstein traces the life and career of Glenn Richards and includes many personal accounts and tributes from his former students and colleagues. It concludes with a classified bibliography of his publications covering the years 1931–1975. From this bibliography and from the many citations of his work elsewhere in the book it is clear that Richards has contributed much to our knowledge of the insect integument.

The remaining chapters of the book are organized into two sections dealing with the basic properties and the versatility of the integument. The papers attest to "the need for bringing together erstwhile disparate fields of science in the resolution of biological problems" (preface) emphasized by Richards in his book. The first part includes reviews by Rudall on the molecular structure as determined by x-ray diffraction and sodium dodecyl sulfate (SDS) gel electrophoresis; by Muzzarelli on the biochemical modification in chitin, with emphasis on the variety of technical approaches; and by Hackman on the interactions of cuticular proteins, with comments on adaptation to function. Anderson deals with the cuticular enzymes involved in sclerotization, and Karlson reviews, with Sekeris, the work done over the last two decades, for the most part in his laboratory, on the control of tyrosine metabolism and sclerotization by ecdysone. Furneaux and Mackay present a comprehensive review of the structure and mechanism of formation of the insect eggshell. Such work combines SDS gel electrophoresis, amino acid analysis, and electron microscopy. Hepburn and Joffe relate the mechanical properties of the cuticle to the properties of the matrix, of which there are three kinds: plastically deformable, brittle, and a hybrid. The other papers of part 1 deal with more specific topics. Strout, Lipke, and Geoghegan, using molecular sieving and sedimentation analysis, determine the changes in molecular weight of formic-acid-soluble chitin during pupariation in *Sarcophaga bullata*; Wigglesworth, using histochemistry, examines the distribution of lipids in *Rhodnius*; electron microscopy is used to describe the arrangement of chitin fibers in phasmid cuticle (Dennell), the formation of the epicuticle of *Boophilus* (Filshie), and the role of the plasma membrane and the Golgi complex in cuticle deposition (Locke). Finally, Caveney shows the insect epidermis to be a functional syncytium.

Part 2 covers a variety of topics that attest to the versatility of the integument. These chapters are more variable in their aims and are not all equally up to date. Three are concerned largely with water relations; Beament deals with waterproofing; Nemenz deals with water uptake but is very selective in his aim of presenting "a speculative account" of the relative importance of the cuticle (and epidermis) in osmoregulation; Ebeling describes water loss caused by insecticides and dusts, abrasive and nonabrasive. The recent interest in peritrophic membranes is represented by discussions of their adaptability to form cocoons (Kenchington) and of their resemblance, structural and chemical, to surface coats and basement membranes (Peters). The mechanical role of the cuticle is considered in four contributions. The contribution of the cuticle to color and color change is reviewed by Hinton, and Vincent, on the basis of his own work on the highly elastic locust intersegmental membrane, presents a naïve model of the "soft biological tissues as filled rubber composites." Bennet-Clark discusses the various sorts of cuticle as energy stores in jumping insects, and Barth describes the spider slit sense organ in detail in discussing problems relevant to measurement of strains in the cuticle.

Zacharuk, in a rather disjointed chapter, describes the changes in the structure of the cuticle associated with moulting. It is not so easy to discern the versatility of the integument in the molting and development of undersized fly larvae as described by Fraenkel. I found the most interesting contribution in this part of the book to be that of Whitten, who points out the basic hexagonal pattern that pervades not only the cuticle but also the epidermis. She also describes her initial attempts at finding an intracellular, structural, organizational basis for this pattern in *Sciara* tenent cells. Finally, the very recent advances in the use of synthetic hormones in organ culture are described by Marks and Sowa.