

The Cultural Relations of Classification, an Analysis of Nualu Animal Categories from Central Seram. Roy Ellen. Cambridge University Press, Cambridge. 1993. Pp. 315. \$80.00 (cloth). ISBN 0-521-4311-4.

In *The Cultural Relations of Classification*, Roy Ellen has compiled an impressive collection of ethnozoological data complete with taxonomic charts, reviews of past theoretical approaches, appendices with local glosses and ecological zones, and his own definition of cognition as it relates to culture and classification. Although written in 1993, the book is still a relevant and important resource today with a resurgence of interest in the fields of ethnobiology and ethnoecology. The data for the book are drawn from a series of field visits to the Nualu of south central Seram, an island in eastern Indonesia. It is interesting to note that although classic ethnobiology has been generally perceived as "scientific," Ellen describes his impression of ethnobiology in the late 1970s as nodal, linking collective representations with cognitive processes. He states these processes are intriguing to him because they link "socio-linguistic positivism with interpretive post-modernism" (1993:2). Given this description it is easily understood how Ellen diverges from classic ethnobiological approaches. He focuses on the combination of scientific approaches with fluid boundaries, overlapping classes and fuzziness, while many ethnobiologists would most likely be appalled at any discussion of the post-modern in relation to ethnobiology.

Throughout this work, Ellen both heeds the accomplishments of his predecessors and contemporaries in ethnobiology while he simultaneously criticizes the methodological approaches and analysis of some of those same colleagues, particularly Berlin, Raven, and Breedlove (Ellen 1993, see also Berlin 1992).

Ellen's primary theoretical concern has been with classification as "situationally adapted and dynamic devices of practical importance to their users, reflecting an interaction...between culture, psychology and discontinuities in the concrete world; a lexical and semantic field firmly embedded in a wider context of beliefs and social practices" (1993:3).

Two areas where Ellen diverges from traditional ethnobiological approaches are: 1) methods of data elicitation and 2) the interpretation of the language of classification. The etic versus the emic view has been the subject of much debate in anthropology. Many believe that researchers tend to view cultures from an etic perspective even if they are skilled ethnographers. Ellen contends that the use of classic ethnobiological systematic methods, without unstructured ethnographic interviewing and observation may lead to faulty conclusions regarding classification and taxonomies. Furthermore, he believes that a predisposed belief in hierarchical structures such as the Linnaean system biases some ethnobiologists to assume that the societies they study do indeed possess a hierarchical system of classification. Ellen's discussion of the language of classification attempts to provide the reader with background on ethnobiological approaches of the past and at the same time critiques these approaches in comparison with his own. One problem with this critique is that his use of terms is often an inaccurate representation of the works he cites. Ellen's main point in offering this background for the reader is both to acknowledge the vast body of ethnobiological research that has pre-

ceded *The Cultural Relations of Classification*, and at the same time provide the groundwork for his approach to ethnozoology and classification of the natural world.

Ellen provides several specific cases that are intended to illustrate the biased methods he finds problematic. Here, I provide a brief description and counter-explanation of a few cases. Ellen gives an example (assuming he is replicating a biased classic ethnobiological approach) of the way in which the question "what is *nakatua wekae* (red-sided eclectus parrot) a kind of?" encodes an answer because the answer is *nakatua*. (1993:25). What Ellen fails to acknowledge is that in a systematic ethnobiological study, the question may not be asked in that way, because a specimen could be pointed to without using the name *nakatua* at all (Brent Berlin, personal communication 1995, Berlin 1992). Another way of asking the question would be, "Does *nakatua* have any relatives?" Moreover, Ellen provides another example of what he considers a culturally inappropriate elicitation method with the question (again, assuming a hierarchically biased classic ethnobiological approach), "What is *asu* (dog, *Canis familiaris*) a kind of?" (Ellen 1993:25). He points out that this is culturally inappropriate because a dog is not a kind of anything, except maybe an animal. At this point the reader is lacking information about whether or not there is more than one type of dog on the island of Seram. Later Ellen describes dog, *asu*, as one of Berlin's unaffiliated generics, whereas in Berlin's more recent approach, if there is only one type of dog, then the dog may be considered by ethnobiologists to be a monotypic genera, that is a generic class with only one member (Berlin 1992:33).

Other terms that are confused with current uses in ethnobiology are productive, optional uninomial and binomial. It is entirely possible that Ellen was unaware of, or lacked access to, other ethnobiological research that occurred simultaneous to the time of his writing. Regardless of the reason for this divergence of terminology, it is important that the reader is aware that Ellen often provides misleading secondary explanations of other ethnobiological researchers' usages of classification language. Another possible reason for differences in perspectives and approaches is that Ellen's work is ethnozoological, whereas much of the work of ethnobiology has been concerned with ethnobotany.

Ellen's attempt to link the ideational and operative is indeed different from the ethnobiological studies with which he compares his work. Ellen (1993), Hunn (1985), Rappaport (1979), Nazarea-Sandoval (1995), and Bellon (1995) all attempt to link the cognitive processes with behavior and decision-making. Different objectives seem to have motivated the various research approaches to which Ellen refers.

Early pioneers in the fields of ethnoecology, Frake (1962) and Conklin (1969), were interested in both classification and behavior through a cultural relativist approach. Some later ethnobiologists were inspired by their work, but pursued another direction, in search of universal compartments in the human mind. With the search for a universal understanding of how humans order their natural world, the debate between utilitarian and intellectual basis for classification of plants and animals was spurred in the late 1960s and early 1970s. Ellen's perspective clearly leans toward a utilitarian approach (Hunn 1985), but rather than rely solely on

usefulness, and/or cultural salience in considering the utilitarian categories, Ellen adds the dimensions of habitat, behavior, sound, smell, religion, and cultural context to a traditional cognitive categorization primarily based on perception of morphological qualities (and occasionally sound, as in the case of birds (Berlin 1995)). This tendency toward a more holistic ethnoecology is a valuable advance in the field. I find Ellen's attempt to include habitat and biotopes in his analysis especially useful when considering the field of ethnoecology in relation to decision-making regarding natural resource use.

Ellen seems to follow Rappaport's (1979) earlier attempts to include an analysis of ideational and operational basis for classification, a multilevel decision making process. In doing so he develops the theory of "prehension" which stresses the situational bias of classification. He believes that the kinds of cognitive processes that he has proposed are apparent in the "social construction of categories." It is this combination of approaches in which I find both the strength and weakness of Ellen's viewpoint. While the inclusion of cultural basis and a broader range of contributing factors in classification schema of particular societies liberates us from a rigid ethnobiological approach, it also de-emphasizes a cognitive approach that examines the way the human brain functions. It is clear that Ellen believes in a heavy influence of the sociocultural construction of cognitive processes. Ellen acknowledges some type of hierarchical ordering is necessary in the human storage of knowledge, but he proposes a system of overlapping levels of hierarchy, and clearly states that some forms of classification among the *Nualu* are varied, therefore they fit more than one level at a time.

I find the book to be a useful resource for ethnoecology, especially because Ellen has explored territories with limited previous research, but I propose caution regarding comparisons of his work with other ethnobiological works because of the differences in terminology and Ellen's sometimes misrepresented re-explanation of certain terminology and concepts. I also noted that Ellen's references include few sources of publications from the 10 to 15 years prior to publication of the book; he seems to be responding to and drawing mostly from works of the 1970s and early 1980s.

One should consider the purpose of Ellen's work along with Bellon (1995), Dove (1993), Frechione et. al (1989), Gragson and Blount (1999), Posey et al. (1984), Nazarea-Sandoval (1995), Nazarea (1999) and, Warren, et. al (1995), to name only a few, as examples of an integrative approach to understanding the cultural basis for classification and its implications for resource use. In these contexts, *The Cultural Relations of Classification* provides a functional reference for those interested in ethnoecology and ethnobiology, but readers should refer to other current research in cognition and ethnobiology (see Atran 1999) if they are more concerned with cognitive taxonomic classification.

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