

Navaho Indian Ethnoentomology



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Book Reviews

ETHNOLOGY AND GENERAL

Navaho Indian Ethnoentomology. LELAND C. WYMAN and FLORA L. BAILEY. (University of New Mexico Publications in Anthropology Number 12.) Albuquerque: The University of New Mexico Press, 1964. 158 pp., bibliography, index, 5 plates. \$3.00.

Reviewed by RALPH BULMER, *University of Auckland, New Zealand*

This monograph should interest any student of folk-biology. It will doubtless also be welcomed as a special contribution to Navaho ethnology, though the reviewer has no competence to discuss it in this context. It describes a field inquiry completed in 1949, presenting an annotated list of 381 Navaho terms for insects and other invertebrates, with biological identifications of specimens to which these were applied, followed by a list of over 800 biological species with cross-references to Navaho names. Interesting chapters on insects in Navaho myths and on representations of insects in Navaho dry-paintings conclude the work.

The folk-classification of insects is a daunting topic for investigation. Understandably, the literature in this field is very limited. Drs. Wyman and Bailey's study, which involved collecting several thousand specimens and enlisting the services of no fewer than 49 specialists to obtain over a thousand species identifications, attacks the biological problems of this kind of inquiry with a thoroughness matched by very few published studies in any branch of folk-science. This thoroughness makes possible the work's most striking finding—the convincing demonstration of the general lack of tidy correspondence between Navaho-named categories and biological taxa of any level. Most minimal Navaho categories overlap not merely several different species, but species drawn from two or more biological families, while most individual biological species are found to fall in more than one minimal Navaho category, and many to fall in two or more categories of higher order. There is a lesson here for any ethnographer or lexicographer still lazy- or simple-minded enough to equate folk-categories with biological taxa on the basis of identifications of a few casually collected specimens.

An unfortunate delay in the appearance of this report, which was submitted for publication in 1955, disarms criticism in a rapidly developing field. But with the hindsight of 1965 it may be said that the authors have not taken full advantage of their remarkable achievement. Rather than use scientific entomology as an indispensable aid in exploring Navaho classifications as Navaho themselves use and see them, they stick too close to their biological data and use biological taxonomy as their yardstick in defining Navaho categories. Some further account of their very painstaking inquiry may make this criticism clear.

Twenty-seven informants from different parts of Navaho territory were asked to identify varying selections from a collection of 801 dry specimens, these apparently representing nearly the same number of species but with some duplication to include a few larval forms and examples of adult dimorphism. The informants were also questioned about the origin, sex, relatives, habits, mythological and ceremonial associations, relations to agriculture, harmful properties, methods of control, and uses of insects they identified, and concerning the biology of insects in general. They provided 5,551 individual identifications, including over 1,200 different category names or designations.

In so far as it went, the field inquiry can hardly be criticized, except to suggest that the test collection might profitably have included several specimens of certain species of such groups as grasshoppers, where nymphs resemble adults, though much smaller. That it did not would perhaps relate to an initial assumption by the investigators that Navaho categories would, implicitly at least, give priority to species distinctions over size differences. But it is a pity that the field inquiry did not go further and investigate identifications of living insects in normal contexts of Navaho experience. This limitation may have been unavoidable, and the authors show that they are well aware of two of its consequences. Thus the test situation prevented informants from taking into account characteristic movements, sounds, and habitat of specimens, all features of considerable importance in real-life identifications, and this may have led to more inconsistency in naming than would be apparent under natural conditions (p. 23). The authors' solution of this problem is to categorize approximately one-seventh of all identifications as "confusions" or "mistakes" (i.e., what were to them pardonable or unpardonable errors) (p. 20). But the bases on which they took these decisions are unclear: although one is certainly entitled to make such distinctions, one must surely attempt to arrive at criteria for so doing in terms of informants' own formulations of their categories.

The tests also encouraged informants to attempt far more detailed discriminations than, one would imagine, they would ever require to make under normal circumstances. Although their preparedness to do this is itself an interesting and probably a significant finding (pp. 17, 20) it raises doubt about many of the categories recorded. The authors' interpretation of some responses as descriptive "generalizations" rather than "identifications" (p. 20) in part recognizes this difficulty, but again one wonders how they drew this distinction. In practice they appear to have included in their list as *valid Navaho terms* all designations given by two or more independent informants, or by one informant but also cited in existing literature, whether or not these could be interpreted as descriptive generalizations.

These *valid terms* are then classified as *Navaho generic names* (a class for which no formal definition is offered: it excludes the four or five broadest categories, "water animals," "moving animals," "flying animals," etc., in which Navaho place all living creatures and in each of which some insects are included, but appears to include all other unqualified names, whether descriptive or untranslatable, and names constructed of the stems *ž'oš* ("worm," "bug"), *ya.*' ("louse") or *wó* ("hard insect") plus qualifier), *Navaho specific names* (formed by a generic name plus a qualifying term), and *Navaho subspecific names* (specific names plus additional qualifier). For purposes of exposition, the authors assume a one-to-one relationship between name and category. In establishing content of each of the 105 *Navaho genera*, 249 *species* and 27 *subspecies* thus set up they combine etymological glosses with generalizations based on the list of specimens to which the name was ("correctly") applied, and in some instances with generalizations offered by informants.

The trouble with this procedure is that one simply cannot assume that nomenclature is an adequate guide to taxonomy. The fact that Navaho, like many other non-European peoples, use composite names in ways analogous to Linnaean nomenclature could be a trap. In part, the authors are aware of this: they note that *generic names* are often applied at two levels of inclusiveness, being used "not only for the group (*genus*) but also for definite members of it, much as generic names of plants are used by horticulturalists in our own culture (e.g., *Aster*, *Delphinium*, etc.)" (p. 16), though in their list there is no attempt to mark off "generic" from "specific" designations of specimens

identified by the same *generic* term. They also consciously include as *specific* names not only *generic* names qualified by terms indicating color, size, behavior, etc., but those qualified by a term glossed as "its young," even though these are applied by Navaho to what they regard, correctly or incorrectly, as immature specimens (pp. 19, 21). But these are not the only difficulties. The possibility that there are subcategories which lack any nomenclatural correspondence with their parent groupings (as, e.g., *Teal* and *Duck*, or *Ladybird* and *Beelle* in English) is not considered by the authors. This might account for some of the many *generic* synonyms which they report but define only on the basis of "interchangeability with one or more other *generic* names for the same biological species" (p. 20), again without explicit reference to Navaho's own formulations.

Finally, the authors' use of the terms *genus*, *species*, and *subspecies* to refer to nomenclatural categories of uncertain semantic status may also be objected to on the grounds that this obscures the issue of whether or not a "species" concept is significant in Navaho classification of insects. The reviewer's own view on this point is conditioned by his field experience in the New Guinea Highlands and by his personal interest in ornithology. He would argue that the observation of objective species-differences is likely to be an important factor in any folk-taxonomy applied to larger and more familiar fauna, and that most peoples probably hold, explicitly or implicitly, a "non-dimensional species" concept equivalent to that used by Linnaeus and pre-evolutionary Western zoological taxonomists in general (c.f. Mayr, Linsley and Usinger, *Methods and Principles of Systematic Zoology*, 1953, p. 26). Though it would be astonishing if more than a small minority of folk-taxa for insects in any culture corresponded well with biological taxa, it could nevertheless be the case that people extrapolate the kind of categories they use for creatures which they observe more fully, and conceive of insects as divided into species, and that this has some bearing on the way they classify them.

There is one passage in the book where redrafting or editing seems to have resulted in inconsistency with procedures otherwise adopted: on page 59 *species* 27H should surely be a separate *genus*, with 27I a *species* within it, while *genera* 28-31 should presumably be included as *species* within *genus* 27.

Kaibah: Recollection of a Navajo Girlhood. KAY BENNETT. With chapter illustrations by the author. (Great West and Indian Series XXVII.) Los Angeles: Westernlore Press, 1964. 253 pp. \$7.50.

Reviewed by FLORA L. BAILEY, *Public Schools, South Orange-Maplewood, New Jersey*

The author of this unusual book is a full-blooded Navaho who has lived and traveled in Europe and the Middle East, and has appeared on radio and television. Writing in the third person, using her girlhood memories, she tells the story of an "average Navajo girl . . . during the period from 1928 to 1935." Seasonal activities, summer migrations to the mountains and winter months at school are all described. Contacts with representatives of our culture reflect subjective and intense attitudes and values. Sibling rivalry is amusingly portrayed but throughout there is cohesive family love and interdependence. The change from wealth and security to the bewilderment following the enforced stock reduction program closes the story, and Kaibah leaves the Reservation to attend school in California.

The reviewer is puzzled concerning the intended audience for the book. The format