

# Book Reviews

## Religiously Rationalized Social Movements

**The Paliau Movement in the Admiralty Islands, 1946-54.** Theodore Schwartz. American Museum of Natural History, New York, 1962. 210 pp. Illus. Plates. Paper.

**Sects and Society.** A sociological study of the Elim Tabernacle, Christian Science, and Christadelphians. Bryan R. Wilson. University of California Press, Berkeley, 1961. 307 pp. \$5.75.

**They Shall Take Up Serpents.** Psychology of the southern snake-handling cult. Weston La Barre. University of Minnesota Press, Minneapolis, 1962. 208 pp. Illus. \$3.75.

**The Religions of the Oppressed.** A study of modern messianic cults. Vittorio Lanternari. Translated from the Italian by Lisa Sergio. Knopf, New York, 1963. xxxii + 343 pp. \$6.95.

This quartet of volumes represents nicely the range of contemporary studies by behavioral scientists of the elusive phenomenon of religiously rationalized social movements. Schwartz and La Barre are American anthropologists; Wilson and Lanternari are, respectively, a British sociologist and an Italian historian. Their subject matter ranges from the Church of Christ, Scientist, in the contemporary English urban middle class, through snake cults in the rural American South, to revitalization movements of varying degrees of primitiveness in the tribal societies of Oceania, Africa, Asia, and the Americas. The approaches are various: Schwartz is primarily concerned with describing the dynamics of the process of cultural reformulation attempted by Paliau and his group among the Manus, when his social movement encountered various challenges and opportunities; La Barre is not so much interested in the cultural content or social structure of snake handling cults as in the psychodynamics

of the congregation and ministers, perceived in Freudian terms; Wilson systematically reviews the theological position, history, organization, social teachings, and social composition of each of three modern-day sects in England; and Lanternari reviews the whole range of messianic movements among the more or less primitive peoples of four continents and Oceania during the past several hundred years. Wilson and Schwartz each provide a detailed and technically competent description, in monograph style, of the movements under their observation [and it should be noted that the Paliau movement has been the subject of another interesting volume, Margaret Mead's *New Lives for Old* (1956)]. La Barre and Lanternari are more popular in style.

The most pretentious book of the four is Lanternari's *Religions of the Oppressed*, and because it not too modestly recommends itself as a general guide to the understanding of important aspects of the liberation process in colonial areas, and as a model of scientific method to boot, some cautionary remarks are in order. Lanternari's book was originally published in Italian in 1960. The viewpoint is a mixture of the sociological, the historical, and the cultural, and the author seeks to "explain" and to "justify" the messianic religious phenomenon in terms of the social and cultural conditions that generate it at a particular time in the history of a particular society. Lanternari has consulted widely the theoretical and descriptive literature, and his general point—that the desire for freedom and progress of "primitive" colonial populations has been a mainspring of thousands of religious movements—is well accepted by most scholars today (and probably has been for thousands of years). Nonetheless, the book must

be read with extreme caution because of the extraordinary inaccuracy of at least some of the accounts that it contains. Eight pages, for instance, are devoted to Handsome Lake, the Seneca prophet, who, in 1799, founded a movement among the Iroquois Indians of New York state. In these eight pages are literally dozens of egregious errors that are easily demonstrable in the very sources cited in the footnotes. For example, Lanternari asserts that the prophet's message came out "during the American Revolution" (p. 115). This statement stands ten lines below the (correct) date, 1799, for the origin of the new code. Not knowing the dates of the American Revolution leads Lanternari into a series of false deductions about the order of events and, thus, to false conclusions about the supposed "historical" circumstances that determined the message of the prophet. Lanternari has a "Quaker Community" settling on the site of the Cornplanter Indian reservation before the reservation was given to the Indians, and he asserts that the Seneca "joined the Quakers in great numbers" (pp. 116 and 117). Neither statement is true. On page 121 he asserts that when Handsome Lake emerged as a prophet (that is, in 1799), the Iroquois were beset by "armed warfare with the French" and by a "mass migration instigated by the Jesuit missionaries" (p. 121). The period of war against the French ended in 1701; the "mass migration" affected only a small band of Mohawks, long before the American Revolution. Lanternari has Tonawanda as "the capital of the Iroquois Federation" (p. 122); Tonawanda was actually a small village, and later a small reservation, and it was never a political center.

Lest this pattern of error be thought to apply only to the unfortunate Iroquois, consider what Lanternari says about the Paliau movement: "A Cargo cult was started on the island of Manus, in the Admiralties, by a native of Baluan called Paliau" (p. 216). Despite the fact that Margaret Mead's *New Lives for Old* (1956) describes this movement (which is also the subject of the Schwartz monograph reviewed here) and despite the fact that Mead's book is listed in Lanternari's own bibliography, no reference is made to Mead's 6 months of fieldwork, or to the year that Schwartz spent in the field. It is difficult to conceive how a reader of Mead's book

could have confused the Paliau movement with a cargo cult. Much of the effort of the Paliau movement was devoted to ideological combat with a cargo cult which, for a time, competed with Paliau's movement for adherents. The Paliau movement is, in fact, the best documented single case of a Melanesian revitalization movement in the anthropological literature: yet it receives only 11 inaccurate lines in a 39-page chapter devoted to "messianic movements in Melanesia."

It is distressing to see the scientific significance of this subject matter diminished by the sloppiness of some of the work devoted to it. Let us hope that future comparative works in this area emulate the studies by Schwartz and Wilson, not the one by Lanternari.

ANTHONY F. C. WALLACE  
Department of Anthropology,  
University of Pennsylvania

## Plant Taxonomy

**Biochemical Systematics.** Ralph E. Alston and B. L. Turner. Prentice-Hall, Englewood Cliffs, N.J., 1963. xii + 404 pp. Illus. \$13.25.

The more we learn about biology the more we find out that all creatures contain the same basic components. This is bad for biochemical systematics. However, we have also learned that there are special compounds, de luxe equipment, nonessential to the welfare of the plant, which are peculiar and unique to an individual species, a group, a genus, or a family. It is these nonubiquitous materials, these compounds produced at the plant's whim rather than for its essential well-being, that constitute the subject matter of plant biochemical systematics. Among these nonessential and nonubiquitous compounds are numerous very interesting materials: amino acid derivatives not contained in protein, the alkaloids, the cyanogenic glycosides, phenols of various kinds including the anthocyanins and anthoxanthins, quinones, terpenes, carotenoids of various kinds, tannins, isothiocyanates, and various odd organic acids. It is with these groups that Alston and Turner are primarily concerned in this pioneer volume. Overall, the reader must conclude that biochemistry is not yet a powerful tool for the systematist. It is true that biochemical diagnosis can

distinguish *Pinus jeffreyi* (heptane) from *Pinus ponderosa* (pinene and limonene), a classical case of biochemical systematics which we owe to Mirov, and one can distinguish the algae, which contain no anthocyanins, from any plant which contains an anthocyanin, of which there are many. In general, however, the present volume provides an orientation, rather than a key. The authors guide the systematic botanist toward the groups of compounds and the groups of plants in which biochemical diagnoses may be useful.

The first five chapters constitute an introduction to the subject (regrettably on an elementary level), apologetics for taxonomy, the history of plant taxonomy, the history of biochemistry, some discussion of the evolution of metabolic pathways, and some discussion of the history of the application of immunochemistry to plant systematic problems. The next nine chapters are concerned sequentially with the nonprotein amino acids, fatty acids, sugars, alkaloids, cyanogenic glucosides, phenols, quinones, terpenes, and miscellaneous compounds such as carotenoids, the betacyanins, tannins, lignins, isothiocyanates, and the organic acids. Of these groups of compounds, the phenols, including the anthocyanins and anthoxanthins, the terpenes, the betacyanins (nitrogen containing cyanine-type colored compounds), and the isothiocyanates appear to have the most power for taxonomic purposes, have received the most attention in past investigation, and deserve the most future investigation. In the cases of the anthoxanthins and of the terpenes, not only can one distinguish between species by chemical analysis alone, but one can also determine whether a putative hybrid is in fact a hybrid, since the hybrid in general contains the chemical components characteristic of both parent species.

Chapter 15 includes an overall summary of Turner and Alston's work on the biochemical taxonomy of the species of *Baptisia* and their hybrids. The method adopted in this study is that of fingerprinting; a whole cytoplasmic extract is subjected to paper chromatography, two dimensional, and we determine what compounds are not common to two individuals or species. By the same method, we determine which individuals are hybrids of which parents; all of this is accom-

plished without any chemical identification of the compounds involved. As an interim method, in the absence of biochemical sophistication, the fingerprint technique may well prove to be a valuable tool in the service of plant taxonomy. Chapter 16, evaluation, brings out a few of the broad generalizations of biochemical genetics. For example, it would be surprising to find an anthocyanin in a member of the Chenopodiaceae. This family contains betacyanin, and betacyanin and anthocyanin appear to be mutually exclusive.

The present volume brings together in a systematic fashion the facts of the distribution in plants of nonessential metabolites, and it lays the groundwork for the application of biochemical analysis to plant taxonomy. It is not an evaluation of a finished topic. Rather, in praiseworthy fashion, it lays the groundwork for the intensive application of classic tools of chemistry in the service of plant taxonomy.

JAMES BONNER  
Division of Biology,  
California Institute of Technology

## Descriptive Astronomy

**Pictorial Astronomy.** Dinsmore Alter, Clarence H. Clemenshaw, and John G. Phillips. Crowell, New York, ed. 2, 1963. viii + 312 pp. Illus. \$6.95.

Extensively revised since its first appearance 15 years ago, and with a new and third author, *Pictorial Astronomy* offers a brightly written and reasonably comprehensive story of the skies, a wealth of carefully selected and fresh photographs, and a glossary that leads the reader from aberration to zodiac. The book aims essentially at the interested lay reader, and it seems to me that the aim is fairly true. What is more, the book covers the field completely enough to serve as a good companion for one who is taking a first descriptive course in astronomy. There is neither extended mathematical analysis nor elaborate discussion of physical concepts, but one finds a number of tables crammed with useful numerical data.

The major subject headings are sun, earth, moon, eclipses, planets, comets and meteors, and stars and nebulae—an organization that is identical with that of the first edition. Following these