
REVIEWS

Crystals in the Sky: An Intellectual Odyssey Involving Chumash Astronomy, Cosmology, and Rock Art. Travis Hudson and Ernest Underhay (Foreword by Anthony F. Aveni and illustrated by Campbell Grant). Socorro, New Mexico: Ballena Press *Anthropological Papers* No. 10, 1978, 163 pp., figs., tables, photographs, \$8.95 (paper).

Reviewed by ALBERT B. ELSASSER
*Lowie Museum of Anthropology
University of California, Berkeley*

During the past ten years or so, followers of archaeo-astronomical literature have been exposed to a number of books or articles with new ideas pertaining to orientations and alignments of monuments such as Stonehenge, the "American Woodhenge" and the "Medicine Wheels" in Wyoming or Montana. The present volume, while dealing with some archaeological data in the form of rock art and some cult objects, is notably different from those on alignments and such in that it falls into what properly should be called the "ethno-astronomical" category. While the authors must necessarily have resorted to a good measure of speculation in assessing the importance and significance of about 25 stars or constellations known to the Chumash Indians, the book came through to the reviewer as a thoroughly convincing presentation, with most of the arguments well-buttressed with recently-published materials based upon long dormant notes of J.P. Harrington. These are supplemented by observations independently made by A.L. Kroeber, A.H. Gayton, and several other ethnographers on astronomical matters among neighboring Indians such as the Yokuts or Gabrielino.

Undoubtedly the information derived from Harrington's notes provided the catalyst for this book. Many of these data pertained to direct informant statements about stars or constellations, but it is evidently from mythology itself that the surprisingly extensive knowledge of Chumash astronomy can be reconstructed.

Sections dealing with astronomically related interpretations of rock art, decorations on "sun sticks" used in ritual, deer tibia whistles, quartz crystal tipped "wands," and other cult objects are particularly impressive and long needed. (I remember staring at the sun-stick stones and bone whistles at the Peabody Museum at Harvard University 18 years ago, and coming up with what now appear to be lame or naive conclusions about their originally intended purpose—even then it was frustrating merely to have to label such specimens "ceremonial objects," with little inkling about the significance of the decorations they bore.)

When examined from the viewpoint of mythology, Chumash cosmology or cosmogony as set forth in this book seems to have a peculiarly consistent quality, providing an intimate look into the ideas of pre-Contact Chumash on life and death. Especially *à propos* are the relating of astral forces with the "peon" or guessing game of Southern California Indians, and the powerful role of the 'Antap or "shaman-priests" in predicting stellar phenomena and thus being able to cope with their effects by conducting suitable rituals. Similar beliefs and practices are of course not uncommon among societies throughout the world who support elite intellectuals. However, the case has never before, to my knowledge, been presented so forcefully for California Indians.

The outline of the Chumash zodiac beliefs permits us probably for the first time to realize how little different the Chumash were from modern societies in their concepts of astrological forces and their effects on the everyday lives of people. Table 3 in the book has a column of astrological meanings for persons born under the various signs which sounds like something from yesterday's newspaper (unfortunately the source of this information is not specifically given with the table—a typographical error?).

Given the number of speculations about essentially arcane matters which occur in this book, I am not certain that the study can be carried much farther. This, however, is surely a quibble—there is enough here to convince any reasonable person that the book is an important landmark, even if nothing more is written on the subject.



Ancient Peoples and Cultures of Death Valley National Monument. William J. Wallace and Edith Wallace. Ramona, Calif.: Acoma Books, 1978, 34 pp., 26 photos, 1 chart, 5 sketches, \$2.95 (paper).

Reviewed by PHILIP J. WILKE
University of California, Riverside

The Wallaces' booklet on Death Valley is essentially a layman's summary of the prehistoric archaeology of the region rather than a contribution of new research findings. It presents in readable and well-illustrated fashion a synthesis of work conducted to date. The culture history is described by periods outlined recently by Wallace (1977:Table 1). These are Nevares Spring Culture (7000-5000 B.C., DV-I), Mesquite Flat Culture (3000 B.C.-A.D. 1, DV-II), Saratoga Springs Culture (A.D. 1-1000, DV-III), and Panamint (Shoshone) Culture (A.D. 1000-ca. 1870, DV-IV). Readily apparent in this synthesis is the hiatus from

5000-3000 B.C. The Manly Terrace finds are not mentioned, and I do not believe they should be.

Having myself tried on occasion to make chronological and paleoecological sense out of surface assemblages, I can appreciate the problems of Death Valley researchers, who have worked largely from surface finds and excavations documenting relatively brief periods of time. If stratigraphic excavations are ever possible on sites documenting long-term use, the picture of Death Valley prehistory will doubtless emerge better known and more complex than we now know it. For one thing, the elusive early Altithermal occupation may yet come to light. Certainly, the paleoecological data relevant to ancient subsistence practices are at present meager, especially for the time before A.D. 1. This dearth stems from the fact that the assemblages from the early periods consist largely of stone tools, and botanical and faunal remains are all but lacking.

There exists a substantial body of artifactual data on Death Valley archaeology, including the historic period. The unpublished manuscript reports, of which there are many, are listed by Wallace (1977). It is hoped that soon some enterprising researcher will attack this treasure house of data and present us with a detailed analysis of the prehistoric and historic archaeology of Death Valley. A glimpse at the richness of the data available is given in the present booklet.

REFERENCES

- Wallace, William J.
1977 A Half Century of Death Valley Archaeology. *Journal of California Anthropology* 4:249-258.

