

# An Assessment of Ethnology

**A Century of Controversy.** Ethnological Issues from 1860 to 1960. ELMAN R. SERVICE. Academic Press, Orlando, FL, 1985. xii, 353 pp. \$48. Studies in Anthropology.

In an attempt to depart from conventional histories of anthropological theory that deal with successive schools of thought or "great men," Elman Service focuses instead on what he considers to be the major topics of controversy in ethnology between 1860 and 1960. His interest lies in "the clash, mix, syntheses, and rejections of ideas" propounded through time by various theorists, with the aim of assessing the "intellectual progress" of ethnology (p. vii).

After setting the scene with an introductory section on 19th-century social theorists (with special homage to the work of Lewis Henry Morgan), Service reviews the differing viewpoints of important protagonists in debates about the following topics: kinship terminology, social structure (descent groups, totemism, and religion), the origins of government (conflict versus integration theories), economic organization in primitive societies (property, substantivism versus formalism), and the nature of society and culture (for example, debates about the superorganic and whether culture is located in some external reality or "in the mind"). Service's concluding section suggests (among other things) that anthropological debates through time have been underlain by a fundamental division into intellectual "moieties" that often misunderstand or talk past one another. "Moiety A" espouses natural science, determinism, evolutionism, social structure, generalization, comparative method, "environmentalism," and an organismic analogy; "moiety B" emphasizes the humanities, "free-willism," relativism, culture, particularism, holism, "mentalism," and a language analogy (p. 289). Although Service identified with moiety A earlier in his career, the "mellowing" of age has made him "doubt that the controversies had a necessarily right or wrong side" (p. 286). Social behavior can be viewed from varied perspectives, he says, and it is erroneous to believe that behavior must be, for example, either "subjectively patterned" or "objectively institutionalized," rather than both (p. 316). Finally, he concludes that ethnology has not progressed very far in terms of agreement about various issues discussed in the book. But it has achieved greater knowledge and sophistication about human societies and thus has contributed significantly to refuting commonly held but erroneous as-

sumptions and generalizations about racism, biological determinism, and the like.

Service gives ethnology a mixed review, and his book evokes a similar response, as well as several questions. First, it is unclear (at least to me) at what audience this work is aimed. Despite the somewhat unusual organization of the book according to topics, much of the material will be familiar ground to seasoned professionals, although Service's review could be quite useful to students and others needing a concise synopsis of who said what about certain issues. (Here he cannot avoid dealing with "great men" such as Spencer, Durkheim, Kroeber, Malinowski, and Lévi-Strauss, as well as Ruth Benedict.) Even old hands, however, may benefit from Service's pointing out new details of what seemed to be well-known territory, as well as his salutary warnings about potholes in our theoretical and methodological path. Readers may also be intrigued or disturbed (depending on their theoretical proclivities) by Service's shift away from the materialist-evolutionist-scientific stance of his earlier years to a more "sympathetic" tolerance toward "individuals with whom I once disagreed so heartily" (p. 286). (Some of his remarks on this point could also be construed as implicit criticism of some of his former confreres who are still staunchly allied with moiety A.)

A second point of puzzlement is the choice of issues and time period. Readers who are cognizant of Service's career will note that most of the topics discussed are ones that he has been concerned with in his previous works. Fair enough, one might say, since anybody's selection of subjects is bound to be subjective in one way or another. Still, one could question whether debates about kin terminology or totemism warrant such detailed consideration (even as illustrations of more profound theoretical issues) as against other points of controversy in the intellectual history of ethnology. The particular choice of topics and the cutoff date of 1960 (chosen, says Service, to afford a sufficient sense of perspective) give the book a somewhat antiquarian quality. There is some justification for the notion that it is difficult to make reasoned judgments about the recent past. But readers who are not anthropologists should be aware that post-1960 ethnology saw a number of intellectual developments that make some of the controversies in this book now seem very old hat or even, as Service himself says about one of them, "a terrible waste of . . . time" (p. 283). It should also be noted, however, that some

other debates (for example, points of difference between moieties A and B) still rage unabated.

Some other questions and reservations could be voiced. For example, it is a pity that Service decided to forgo "an attempt at an analytic 'sociology of knowledge'" (p. viii), because the result is that many of the theoretical debates seem to be esoteric wrangles in an ivory tower. Indeed, sometimes they were. But there are also linkages to be made between anthropological conceptions and a broader social context; and in scattered sections where Service notes these (for example, the connection between a liberal-reformist political stance and a theoretical emphasis on individuals and free will) his points are illuminating.

It is, however, perhaps unfair to dwell upon what the work might have been. Within the parameters he set, Service has provided a book that has both practical and intellectual value. It is a very helpful reference source for anyone needing a succinct, intelligent historical review of positions taken by major theorists on various topics. The book also reminds us of certain fundamental questions and problems underlying ethnological theorizing. Perhaps they can never be resolved, but we need to keep pondering them.

MAY EBIHARA

*Department of Anthropology, Lehman College, City University of New York, Bronx, NY 10468*

## North American Lakes

**Quaternary Evolution of the Great Lakes.** P. F. KARROW and P. E. CALKIN, Eds. Geological Association of Canada, Memorial University of Newfoundland, St. John's, 1985. vi, 259 pp., illus. \$C35. Geological Association of Canada Special Paper 30. From a symposium, London, Ontario, 1984.

The middle latitudes of eastern North America are crossed by watersheds between Arctic, Atlantic, and Gulf of Mexico drainage systems. The Laurentide ice sheet advanced and retreated across these divides, disrupting the preglacial drainage, excavating the basins of the Great Lakes, and causing vertical isostatic movements of the earth's crust. The evidence of these late Wisconsinan pulsations is a complex of interbedded glacial, lacustrine, and organic beds in a succession of interdependent lake basins with interlocking histories that have intrigued geologists since Louis Agassiz studied the Lake Superior basin more than 135 years ago.

This region of glacial lakes has been made

the subject of three symposia: The first one, on Lake Agassiz, the western part of the system between 10,900 and 8500 years ago, was held in Winnipeg in 1982. The volume reviewed here covers the central part of the system and is the result of the symposium in London, Ontario, in 1984. It will be followed by a volume reporting a symposium on the Champlain Sea, the eastern end of the system, held in Ottawa in 1986.

*Quaternary Evolution of the Great Lakes* contains 18 papers written by 27 Quaternary scientists. It is dominated by conventional geology (mapping, stratigraphy) but contains some paleontological interpretations (mollusks, ostracodes, pollen stratigraphy) and some freshwater "marine" geology. The papers are organized to deal with the individual lake basins from west to east. The evolution of each basin is summarized by a well-prepared paper, and each summary is followed by reports on recently studied specific sites and on more general problems.

The first paper, by J. T. Teller, is about the Lake Agassiz basin, which once contained the westernmost glacial Great Lake but which is no longer connected to the Great Lakes. Teller speculates about the effects of catastrophic discharges from glacial Lake Agassiz that entered the Lake Superior basin and may have temporarily raised the level of the receiving lakes by tens of meters.

The summary paper on the Lake Superior basin focuses on the warping of the strandlines and on the Marquette glacial readvance, which is a new concept. New knowledge of Lake Agassiz outlets into this basin and the availability of outlets to adjacent basins have resulted in a much-improved interpretation of its history. A second paper, by W. R. Cowan, gives a new interpretation of strandlines near Sault Sainte Marie, Ontario.

The summary of the Lake Michigan basin evolution by four authors contains a discussion of lake level changes caused by hydrologic adjustments to dry and moist climates. Changes of only a few meters in the levels of the later lake basin near the Chicago outlet area make this especially interesting. A paper by Schneider and Need presents evidence for hypothetical glacial Lake Milwaukee, which antedated the last major ice advance in the basin and is not represented by visible strandlines. Such lakes must have formed in all the basins, and evidence of them will emerge slowly. C. E. Larsen discusses the late, nonglacial Nipissing and Algoma Great Lakes and further explores the mechanisms of level change, again stressing hydrologic factors although not excluding conventional differential isostatic rebound and uncovering of outlets by ice margin retreat.

Five papers are devoted to the Lake Huron basin. The summary paper is followed by a discussion of the fossil molluscan assemblages, which show evidence of temperature changes affecting aquatic species and of migration of terrestrial snails across areas exposed during low lake levels. C. A. Kaszicki reports on strandlines and sediments near the Kirkfield outlet of glacial Lake Algonquin; P. F. Finamore reinterprets information on the related Fenelon Falls outlet; and W. D. Fitzgerald presents details of an embayment southeast of Georgian Bay with the aid of pollen and molluscan fossil data.

Four papers concern the Erie basin with its 18 or so former water levels, some shared with the Huron basin. New information on strandlines on the north side of the basin is given by P. J. Barnett, and on the south side higher strandlines are interpreted as of mid-Wisconsinan age by S. M. Totten. Coakley and Lewis in a "marine" geology study revise earlier knowledge bearing on lake levels and present curves of lake levels since 10,000 years ago.

The summary paper on the Ontario basin contains familiar maps (revised) by V. K. Prest and three previously unpublished maps of shorelines in the Trenton area by E. Miryneck. The last contribution is a "marine" geology paper on postglacial water levels by Lewis and Anderson. Lewis and Anderson document a nearly 100-meter rise of Lake Ontario caused by uplift of the Frontenac axis since 11,500 years ago.

The volume has a useful index; the numerous illustrations, mostly line drawings, are of excellent quality; only one or two places named in the text are not shown on maps; and typographical errors are rare if present. The key papers reviewing individual lake basins necessarily are highly condensed summaries of large masses of detail requiring the reader to make frequent reference to the illustrations and tables and hence are not easy to read. The authors have been meticulous in separating fact from interpretation, and in several cases the reader is left to make his or her own choice of hypotheses. There is no synthesis that assembles the information in this book into an up-to-date history of Great Lakes evolution. Nonspecialists may feel that there is more information than they want, but dedicated researchers will be delighted with the extent of the detail. All Quaternary scientists will benefit from this book, the high quality of which is a tribute to the editors and organizers of the symposium, Karrow and Calkin.

JOHN A. ELSON  
Department of Geological Sciences,  
McGill University, Montreal, QU,  
Canada H3A 2A7

## Stellar Development

**Birth and Evolution of Massive Stars and Stellar Groups.** WILFRIED BOLAND and HUGO VAN WOERDEN, Eds. Reidel, Dordrecht, 1985 (U.S. distributor, Kluwer, Hingham, MA). xiv, 377 pp., illus. \$59. From a symposium, Dwingeloo, Netherlands, Sept. 1984. Astrophysics and Space Science Library, vol. 120.

This book presents the proceedings of a symposium held to honor the 70th birthday of Adriaan Blaauw, who is best known for his work on expanding OB associations and the origin of "runaway" stars. The layout of the book is pleasant, with photographs taken at the conference interspersed throughout. An effort has been made to place pictures of individuals adjacent to their papers, which gives the book an immediacy not usually achieved. The volume also contains a reproduction of a painting of Blaauw that was presented to him at the symposium.

The contents of the volume are grouped according to five topics. The first two are the structure of star-forming regions and the stellar content of young groups. The third group deals with the evolution of massive stars and the fourth with star formation in other galaxies. The final group is devoted to Blaauw's life and career, including both his astrophysical research and his roles as director of the Kapteyn Institute, president of the International Astronomical Union, and director general of the European Southern Observatory. A complete bibliography of Blaauw's work is also included. In addition, the volume contains no fewer than three indexes: of subject matter, of astrophysical objects, and of names of persons.

The first two sections, dealing mainly with star formation and OB associations, seem to present a good review of the subject with a good deal of historical perspective, as well as some current research. Star formation in giant molecular clouds is discussed in detail, as well as the questions whether low-mass and high-mass stars are formed in the same places at the same times and whether the initial mass function describes star formation in OB associations.

The section on the evolution of massive stars has remarkably little to say about massive single stars and how they evolve. This is perhaps due to the fact that the researchers in the field who were present at the symposium have moved on to other interests. A theoretical overview could have been presented by C. de Loore or C. Chiosi, but both presented papers on other topics. Observational aspects of the subject are covered to some extent by Garmany in her discussion of the origin of WR stars in the previous section. Most of the papers in this section deal with massive binary systems or