REVIEW

Radiocarbon Dating Literature: The First 21 Years 1947–1968. Annotated Bibliography. Compiled by Dilette Polach. San Diego, California, 1988. Academic Press, Inc, 370 pages, \$24.00

As one who appreciates heavy-duty reconnaissance, I can report that I am very impressed by this nearly-3000-entry summary of the first score years of ¹⁴C dating. I can also save you time by recommending that you or your research library acquire this book forthwith.

Radiocarbon Dating Literature: The First 21 Years, 1947–1968 is a precisely explained presentation of numerous (nearly all known or possible English-language) articles and books on early ¹⁴C discovery, research and results. By "precisely," I mean that author and compiler Polach's Preface is brief and blunt and that her single sentence or single paragraph annotations are very informative, often more so, as Forewarder Chappell also notes, than the original author's own abstracts. Frankly, these annotations are excellent.

The range of ¹⁴C application has been immense, and there is a swell book-cover logo to emphasize this. In order to stuff us users into this diverse productivity, there are fourteen chapters. The first three are theory: Bibliographical, Theoretical, and Techniques and Instrumentation. The next four are topical: General Geology, Glacial Geology, Oceans and The Pleistocene. The next five are geographical: Africa, America, Asia, Europe and Oceania (this latter meaning especially Australia/New Guinea). Chapter 13 (only two pages) is a list of early conferences such as the early ¹⁴C Conferences in Copenhagen and Andover in 1954. Chapter 14 is a long set of the Date Lists as were published by the many laboratories.

Ms Polach has also provided a seemingly complete Author Index (Broecker, Libby, Suess, and Rubin loom beaucoup numerous as you might guess), as well as a Subject Index that I thought was really helpful (at least as long as one doesn't take subject words like "Wisconsinan," "wood," "shell chronology," "sea-level," "stratigraphy," and "validity" too seriously), and a valuable Locational Index.

In the modern style of word processing, every title with its annotation is uniquely number-keyed for practically instant acquisition throughout the book from these Indices. (You might care to check out the ancestral— 1946!—and wondrous 2.025, or even the single outlier 2.212 dating to 1940.) This clarity for users is no doubt a result of the author's profession as a librarian, from which she is now retired and serving as a Visiting Fellow at the Australian National University in Canberra. Her spouse, Henry, is the Director of ANU's ¹⁴C lab, and this was clearly an important assistance and support over the ten years which Ms Polach has labored on her effort.

It is totally symptomatic of modern "World Science" and electronic communication that Ms Polach created this holistic, comprehensive research tool in Australia, that it was published by Academic Press internationally in London and in the United States in San Diego, and that it was actually printed in Scotland.

Bruce Rippeteau

In using Radiocarbon Dating Literature: The First 21 Years, 1947–1968, An Annotated Bibliography, the main thing that must be held in mind, especially for those of us working on ¹⁴C in more recent times, is that it goes only to 1968. There are many classics seemingly missing—until we remember this ending date of compilation.

And perhaps I might note, with warm humor, that actually the title itself has the characteristics of a ¹⁴C date estimate. The "range" is given in the book title as 21 years, although in fact it is a 22-year period. Further, there are several citations (not counting the above 1940 outlier which we'll reject by Chauvenet's Criterion!) from 1946 (naturally!), and thus, the rendered period is actually a full 23 years. (Well; You know; Go for it!)

For the post-1968 ¹⁴C world, however, there is good news. For this review, I recently spoke (probably via 18 microwave towers, 2 satellites, and numerous land lines, and ending with a radiotelephone out in her rose garden; everything but tin cans and string!) with Ms Polach, and she is already creating a sequel for the next dozen years: 1969–1980. Since the ¹⁴C literature is on a fast-growth curve, rather than its subject's slow-decay curve, this sequel will have even more references for a much shorter period. The new effort will feature some organizational changes such as the addition of a chapter on Paleontology, the expansion of the Oceans material, and a separation of the Americas into North, Middle and South. Ms Polach intends it to be available for the next Radiocarbon Conference in Tucson in 1991. And in this connection, I really suggest that, if you have publications or references for her to consider, you might care to send her copies at P O Box 43, GARRAN, A C T 2605, Australia.

In summary (with $\pm 3 \sigma$ confidence), I highly commend this book. For such a grand boon as ¹⁴C dating, and from scrutinizing Ms Polach's book, you could learn a whole lot about whose shoulders we are standing on.

Bruce Rippeteau Director, Research Professor South Carolina Institute of Archaeology and Anthropology University of South Carolina 1321 Pendleton Street Columbia, South Carolina 29208