in turn may have contributed to their demise at the hands of Cro-Magnon. I doubt that Wells was correct in assuming that Neanderthal people could only say "ugh," but they might have used this expression if confronted with this notion.

To the credit of the authors, much of this guesswork is qualified by phrases such as "hotly disputed," "widely challenged," and so forth. But the extent to which credence is given to these strange interpretations can only have a muddling effect on students facing initial exposure to the subject. In the last several years, an unfortunate trend has developed toward more showmanship and less objective instruction in introductory physical anthropology courses, as if students entered college to be entertained rather than taught. While these books may satisfy the needs of those who regard physical anthropology as a social science (or not a science at all), they are wholly inappropriate for those who feel that the discipline can be advanced through teaching.

Climbing Man's Family Tree: A Collection of Major Writings on Human Phylogeny, 1699 to 1971. THEODORE D. MCCOWN and KENNETH A. R. KENNEDY, eds. Englewood Cliffs, NJ: Prentice-Hall, 1972. x + 485 pp., charts, diagrams, drawings, figures, graphs, maps, tables, selected references. \$5.95 (paper).

## Reviewed by MILFORD WOLPOFF University of Michigan

This collection covers close to three centuries of human paleontology. Each of the five parts is preceded by a somewhat lengthy, but extremely useful, historical review dealing with the major innovative and empirical advances over the period spanned by the essays. These reviews represent far more editorial investment than is usual in other collections of writings, and as a result, the usefulness of the volume is greatly enhanced.

Earlier writings include works by Tyson, Blumenbach, Lamark, Huxley, Lyell, Darwin, Wallace, and a number of others. Given the twentieth century acceleration in scientific publication, perhaps it is inevitable that the later sections of the collection are less satisfying and less generally representative. Part Three, covering 1890 to 1925, includes Dubois, Keith, Gregory, and Elliot Smith. Yet the works of Dart, Vallois, and Schwalbe are absent, although there is reason to believe that the initial description of Australopithecus, the lengthy monograph on La Chapelle, and Schwalbe's earlier unilinear interpretations had far more impact on the present intellectual framework of the field.

Part Four, covering 1925 to 1959, is, in a way, unbalanced in the opposite direction. The Eastern European school is well represented, but there is no representation of the views held by workers such as E. A. Hooten or F. C. Howell. Part Five, extending through 1971, includes works by Coon, Mayr, Leakey, Simons, Pilbeam, Robinson, and Sarich. On the other hand, Brace, LeGros Clark, and Jolly are notably absent, although these authors have had an equal if not greater influence on the present generation of paleoanthropologists.

Perhaps it is impossible to adequately represent the development of paleoanthropology over the last three centuries in a book of this length. For most of its history, paleoanthropology has been in a pre-paradigm stage. In the absence of a uniformly accepted underlying theory, interpretations have been especially diverse because of lack of general agreement about the problems that were relevant. The synthetic theory of evolution, as developed in the early 1940s, is in the process of becoming generally accepted; consequently, paleoanthropology is in a new stage of its own evolution. This development, probably the most significant of the entire period reviewed, is never really discussed or evaluated. Perhaps this is consistent with the uneven choice of titles covering the twentieth century.

In any event, the collection and associated discussion and historical interpretation are worthwhile reading. While at times it seems as if the amount of change in the intellectual framework of paleoanthropology has been enormous, this historical collection suggests that extensive microevolution may, in fact, be difficult to establish.