

Computer Assisted Tools for Septuagint Studies, vol. 1: *Ruth* (SBLSCS 20). By Robert A. Kraft, Emanuel Tov, *et al.* Atlanta: Scholars, 1986, 325 pp., \$11.95 paper (\$7.95 for SBL members).

This is the first hardcopy fruit of the CATSS (Computer Assisted Tools for Septuagint Studies) project primarily based at the University of Pennsylvania and partly based at Hebrew University in Jerusalem. Those who have been attending the computer section at SBL for the last few years or who have kept current by reading *BIOSCS* 14 will be familiar with the project itself, the encoding procedures, the personnel who have done the work, the texts used, and the like. Such matters are briefly reviewed in this book.

In some ways, this book is merely illustrative of the kinds of things the project can achieve. The first 80 pages or so are given over to an explanation of the abbreviations and symbols used for textual variants, the transliteration codes for Hebrew and Greek, the variety of symbols used in the Greek-Hebrew alignment of *Ruth*, technical aspects

relating to the partially automatic alignment of the Greek-Hebrew alignment, procedures adopted in computer-assisted morphological analysis, and so forth. The heart of the book (pp. 85–176) is a printout of the Greek-Hebrew aligned parallel text of Ruth, the MT text being BHS and the LXX being Rahlfs (though the project adopts the Göttingen text where it is available). This printout includes a full apparatus to the Greek and the appropriate codes that explain the alignment. The remainder of the book offers printouts of special applications that have arisen from this database: a Greek-Hebrew index of the main text (including variants) and a Hebrew-Greek index of the main text (without variants). To use this material most creatively, of course, it would be necessary to have access to the computers, database and programs that have generated this book, for as the authors themselves point out there is almost an infinite variety of ways in which these data can be processed to produce interesting and useful information.

Of course Ruth is short and relatively free of difficult alignment problems. But the project should not be criticized for that: The scholars involved have exercised enormous care and methodological responsibility to produce a work that serves as a foretaste of what will be available when the entire Hebrew canon and LXX have been completed. Eventually such work will be available on CDROMs that are read by relatively inexpensive equipment attached to PCs, and then even relatively small institutions will be able to profit from the immense industry and creative scholarship represented by this volume.

If the project has not yet demonstrated the applicability of its work to exegetical and interpretative questions, it has nevertheless focused on what must come first: proper encoding of the data, and corresponding verification, to achieve extraordinarily high accuracy.

D. A. Carson

Trinity Evangelical Divinity School, Deerfield, IL