

# A new system for typesetting Hebrew with Omega

Alan Hoenig  
City University of New York  
ahoenig@suffolk.lib.ny.us

March 11, 2003

**Abstract** It's easy (relatively so, at any rate) to typeset a language using a keyboard customized for that language. A more interesting problem arises when trying to set a 'foreign' language (say, Russian, Hebrew, or Arabic) using a native keyboard (American, for example). This leads to the problem of *transliteration*: how can you represent some language, call it *A*, using the conventions of a different language *B*?

This presentation concerns the author's attempted solution to one such problem: to create quality Hebrew typesetting using the conventions of an English language keyboard. Apart from the different alphabet, which invokes a different set of sounds than does its English counterpart, Hebrew can involve as many as two distinct sets of diacritics, uses special glyph forms (sometimes) at word endings, and is, of course, typeset from right to left. The solution involves using the Omega superset of  $\text{\TeX}$ . *Makor*, the name for this Hebrew typesetting system, consists of a user manual, fonts from seven distinct font families, and a special set of macros and conventions. Many examples of its use will be shown. All this software is publicly and freely available.