EVA, a text processing tool designed to be self-contained and useful for a variety of languages, is described briefly, and its extensive coded character set is illustrated. Features, specifications, and database functions are noted. Its application in development of a Slovenian literary dictionary is also described. (MSE)
EVA - A Textual Data Processing Tool
(Software Demonstration)

Primož Jakopin

Institute for the Slovenian Language ZRC SAZU
Novi Trg 4
SLO-61000 Ljubljana
Tel.: +386 61 1256 068
Fax: +386 61 1255 226-253
E-mail: primoj.jakopin@uni-lj.si

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At the end of 1982, EVA developed out of an experiment, to test if a humble personal computer of the day and place, Sinclair ZX Spectrum, could be put to reasonable use for text and data processing instead of a mainframe computer. The positive answer lead to a full-blown text editor with integrated data base and graphics facilities in 1985, which in 1986 has been ported to the ATARI ST computer family (named STEVE). The DOS version has been in use since 1991; the Windows NT/Windows 95 version is under development. EVA has served as a software tool for processing of a sizeable amount of textual material and for preparation of various dictionaries in the Slovenian academic environment, where UNIX-based work stations have found very little response in the humanistic domain so far.

From the start, the program has been designed to be as flexible as possible, in order to allow the user to accomodate his own needs and situations with little external support. It is more or less self contained, with its own keyboard table, screen characters, DTP mode, graphics editor and OCR facility. To answer the needs for wide character sets such as UNICODE, a capability to process 8-bit and 16-bit characters in the same file has been introduced in 1993. If a line of text contains only characters with codes below 256, it is stored as a string of 8-bit characters in RAM as well as on disk. If, on the other hand, it contains one or more characters with codes above 255, it is stored as a 16-bit entity. In figure 1 the list of the first 1209 characters from the EVA character set is given.

Of special interest are codes 13 to 28, which modify the look of printed characters and sets 279 to 310, 327 to 354 and 365 to 369. The latter three groups represent the upper-, lower-, and through- diacritical characters which can all be combined with any other character to create characters, which are not part of the EVA character set.

A large set of data base functions includes general purpose routines such as sequential or indexed sorting and searching, as well as more specialised functions such as splitting of text into sentences, word or fieldwise translation and markup, or the computation of entropy. The majority of interfaces for import and export to other software is dual: ASCII file format (with user-definable filtering), RTF format (again with an open filter, for interface with Microsoft Word), WordStar file format, STEVE file type, open data record interface and the PCX picture format. For input there are also WordPerfect and TIFF interfaces.

Currently EVA is also used in production of a lemmatization dictionary of Slovenian, based on the Dictionary of the Slovenian Literary Language (93 151 headwords). So far, entries for nouns (54 522 lemmas to make 468 281 word forms) and adjectives (22 961 lemmas and 277 831 word forms) have been completed.
Figure 1: EVA character set – characters with codes from 0 to 1208