UNITED NATIONS

Group of Experts on Geographical names

Twelfth Session
Geneva, 29 September - 7 October 1986

WORKING PAPER No. 2

1 July 1986

Agenda Item 6(c)

BISCRIPTUAL VS. BILINGUAL GAZETTEERS

Paper presented by Israel

The following notes refer to questions raised as items 2C and 3C in Report No. 1 1985 in Report No. 1 of 1985 issued by the Convener of the Working Group on Toponymic Data Files (Gazetteers, Computer Assistance).

Bilingual Gazetteers

A bilingual (or multilingual) gazetteer includes toponyms of different languages written in the same script (perhaps with different diacritic signs), established between diacritics (such as a before a in German, e before e and e in French, l before l in Polish, etc.), but even without such an order of precedence, a fully integrated bi- or multilingual gazetteer can be produced, as used in most world atlases.

A Biscriptual Gazetteer

Biscriptual gazetteers reflect an entirely different set of conditions and present a different picture. Two scripts cannot normally be integrated as regards their alphabetic order (assuming alphabetic, not syllabic or logographic, script). While the alphabetic listing of names in the two scripts must be separated, this does not necessarily mean that the two sets of names, one in each script, cannot be produced in a single document, but the main alphabetic listing must follow the letter order of either one script or the other.

Two cases can be distinguished. A biscriptual country such as Yugoslavia might wish to produce an automated gazetteer of names printed in two different scripts in different regions of the country, e.g. Cyrillic and Roman. The second case would be a country with a non-Roman script wishing to produce a gazetteer of the original standardized, as well as the romanized form of all place names.

The Automated Gazetteer of Israel

A good illustration - and the first example of a biscriptual gazetteer ever produced by automation - is furnished by the gazetteer of Israel, which carries all names in both Hebrew characters and in the official transliteration into Roman script. A single integrated file includes the entire contents of the gazetteer, and each record carries the standardized name in Hebrew and in Roman characters. Separate printouts can then be obtained via suitable software, listed by any characteristic desired.

Thus, a list ordered alphabetically by standardized Hebrew name can be produced, or by the romanized name form (the latter in Roman alphabet order). Former name forms can also serve as main indexing characteristic. All the above are alphabetic criteria. Alternatively, numerical characteristics can be used. One of these is a listing by location coordinates in the Israel Topographic Grid, e.g. from northwest to southeast. Another, quite useful one, is the date of ratification of the name by the Government Names Commission. This reflects the annual rate of generation of new names. Thus, the years 1965, 1975 and 1985 (to name just three) resulted in 92, 122 and 107 new names, respectively. Altitude of the geographic feature is another listing index. But perhaps the most important one is the generic type of the feature named, represented by numerical code. Thus we know that on April 1, 1986, 18.6 percent of toponyms in Israel were names of populated places, 15.5 percent were antiquity sites and ruins, 17.8 percent were perennial and seasonal watercourses (wadis), 15.1 percent were names of mountains and hills, 4.1 percent were nature reserves and national parks and 0.3 percent - marine features. Since each record, i.e. the entry for each toponym, carries the full gazetteer information on the respective place, each of the gazetteers or printouts mentioned above, by whatever criteria it is arranged or ordered, carries the complete data against each name. Records in the automated file of toponyms of Israel are formatted, with each item or characteristic, whether alphabetic or numeric, whether Hebrew or romanized, occupying a specified field of given length. This enables simple software to produce the various printouts mentioned above.

Amendments

Amendments and revisions may take the form of new (additional) records, revisions to existing records, as well as deletions. In the past, when the gazetteer resided on a series of diskettes, all amendments were made here, new records being added at the end of the last diskette. The file was then read into main memory and processed for output. Today the entire file resides on main disk (with magnetic tape backup), where all amendments are introduced and integrated.

Lineprinter vs. Dot Matrix Printer

The first edition of the gazetteer of Israel was produced on an old lineprinter with a biscriptual Hebrew-Roman character chain (as used with many computers in Israel). At present a quality printer with biscriptual character "daisy" is being used. Since both types of lineprinter lack some of the diacritic signs in romanization, the latter must be deduced by the reader from the Hebrew form. This form, on the other hand, has no vocalisation (which is not usually required by the average Israeli reader, but which may be reconstructed in the main e.g. from the romanized form which, of course, is vocalised).

Since all characters, including diacritics and vocalisation in Hebrew, can be produced on a dot matrix printer with the aid of software, the next generation of the gazetteer of Israel will be amended so as to make use of the possibilities given by the dot matrix printer, even though this might mean a certain lowering of typographic, i.e. aesthetic, quality of printout.

Author's address:
Prof. N. Kadmon
Geography Department
The Hebrew University
91905 Jerusalem, Israel