

THE USE OF DIACRITICS IN AN AUTOMATED
TYPESETTING PROCESS AT THE UNITED STATES
LIBRARY OF CONGRESS

Presented by Mr. Randall (USA)

Since April of 1973, the Library of Congress of the United States has employed a specially designed process for the production of catalog cards that carry place names with a full ~~xxx~~ range of diacritics and special marks and an equally full ~~g~~ range of type styles and sizes.

Called Machine Readable Cataloging Program, and referred to as MARC, the system was developed primarily to facilitate the processing of enormous quantities of materials acquired annually by the Library. A significant expansion of MARC took place when the system was developed further to allow the processing of cartographic materials containing place name information as part of the title or area identification appearing on catalog cards.

A major production component of the MARC is the VideoComp System, the heart of which is the RCA Spectra 70 Central Processing Unit (or computer). It is the VideoComp which actually transforms data on magnetic tapes and creates the ~~xxxx~~ materials from which the cards are produced.

In the first step of the process, MARC Editors in the Geography and Map Division of the Library prepare a basic source document for each card. This document contains bibliographic information and other descriptive details, including the place name, which is ~~plx~~ written on a page-sized sheet according to a specific format. For names requiring diacritics or other special marks, the MARC Editors enter codes at proper places within the name, which is spelled out in designated squares on the sheet.

The source documents then are sent to another unit of the Library where operators of Magnetic Tape Selection Typewriters (MTST) convert the written information to tape form. After the tapes are prepared, a printout is produced which is then reviewed by the MARC Editors who make corrections if needed. The proofed tapes are then processed by the VideoComp System in accordance to programmed instructions established to produce a photocomposed image of each card. The final result of the MARC is ~~the~~ photographically produced negative which then is directly used in the offset reproduction of catalog cards.

It is not feasible to estimate the cost to produce diacritics ~~using~~ by use of the MARC system. In the first place, work is done in "batches" (which is to say that a certain number of source documents are prepared at one time), and then these are processed by the ~~xxxxxx Processing Unit~~ VideoComp System on a time-share basis. An indicator of cost is provided, however, by the fact that individual catalog cards are sold to libraries and other users at \$0.05 per unit. This price is high enough to cover the cost of production and to earn a small profit. It would seem evident, therefore, that the MARC System as applied to the production of place names on catalog cards can provide diacritics and special marks at a reasonable cost. It is worthy of mention that the VideoComp System also permits complete retrieval, selection, addition, and deletion of names information.

Cards reproduced under the MARC are illustrated on the following page. A demonstration of the fact that transliteration system should fit the reference/user requirement, rather than any theoretical principle, is well illustrated by Library of Congress practice with Russian-language catalog entries. The title/author information is in terms of the long-established Library of Congress system of transliterations, but any geographical name occurring within the title is separately identified and transliterated in terms of the BGN/PCGN system (thus providing unambiguous reference to cartographic and gazetteer material.

G7002
.F7C5
1967
.L4

Leningrad. Nauchno-issledovatel'skii institut geologii Arktiki.
[Geologicheskaiā karta: Zemli Frantsa-Iosifa. Sostavil: V. D.
Dibner. Kartograf: T. P. Vlasovaj 1967. [Glavnaia redaksiia
"Geologiā SSSR." Moskva, Ministerstva Geologii SSSR]
1970.

col. map 21 x 44 cm.

Scale 1:1,500,000.

Depths shown by contours.

"Prilozhenie k XXVI tomu, Geologiā SSSR."

"M-28158."

1. Geology—Russia—Franz Josef Land—Maps. I. Dibner, V. D. II.
Vlasova, T. P.

G7002.F7C5 1967.L4

73-690771

MARC

Library of Congress

73

MAPS

G8021
.D2
1969
.V4

Vietnam. Nha Dia-Du, Quoc-Gia.
Việt Nam Cộng Hòa bản đồ thảo mộc. Republic of Vietnam
vegetation map. 1st ed. 1969. Dalat, 1969.

col. map 96 x 69 cm.

Scale 1:1,000,000.

1. Botany—Vietnam—Maps. 2. Vietnam—Maps.

G8021.D2 1969.V4

73-692147

MARC

Library of Congress

73

MAPS

G6931
.P94
1971
.S9

Svæðaskipting sjálfvirku stöðvanna. [n.p., 1971?]

map 16 x 23 cm.

Scale ca. 1:1,700,000.

Transfer line print.

LC copy annotated with title in English: Area division of the automatic
telephone system.

1. Telephone—Iceland—Maps.

G6931.P94 1971.S9

73-690085-

MARC

Library of Congress

73

MAPS