AUTOMATIC BRAILLE TRANSLATION

IN THE

UNITED STATES OF AMERICA

by

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There are several points I would like to cover in a brief survey.

Inadvertantly, I left some extra copies of MITRE Technical Report No. 2119, "A Portable Translator for Braille", at the Dusseldorf airport. We do have three copies here which we can pass around the room. Ten more copies will be arriving shortly to be distributed among each country represented here. As some already have copies. perhaps they can rely on their present holdings rather than depriving someone else by taking another one. I will pass them to my right and around the table.

Another document which I have here, MITRE Technical Report No. 1829, gives the theory behind DOTSYS. I have only three copies of this document, which perhaps can be shared. I will pass these around the table.

Fifteen installations have requested and received DOTSYS III. Although it has been run successfully on seven or eight different systems in different installations, most of which are IBM 360/370 systems, DOTSYS III has been run successfully on other computer manufacturers' equipment. (Mr. J. E. Sullivan will cover the details of DOTSYS III in his talk.)

Mr. Louis H. Goldish of the American Foundation for the Blind is currently collecting information about and reporting upon equipment which produces Braille. This report discusses page printers that are production models or production prototypes. The fact that some Braille embossing devices for paper tape are available is not, to my knowledge, being reported upon in any organized way. These embossing devices are a product of the Phylab in Israel, Triformations in New York, and the Teletype Corporation in Skokie, Illinois, to name a few. The Teletype Corporation in Illinois offers an ASCII embossing feature for its Model 33 and up teletypewriter at no extra charge with the purchase of the teletypewriter. Mr. Morrison of Arizona is slowly producing single copies of his tape embosser, several of which were reported on in our Proceedings of the Cleveland Conference, 1969[1].

The programs for translating inkprint to Braille (Grade 2) that are now available in the United States are:

1. The DOTSYS III Program, which Mr. Sullivan is going to speak on,

2. The PL/I program, which Dr. Lois Leffler is going to discuss,

3. Three programs produced by the American Printing House for the Blind:

    a. A program by Schack,
    b. A modification of Schack's program; and
    c. A program by Mr. John Siems, which is a few years old,

4. A program by Mr. Kenneth R. Ingham at the Protestant Guild for the Blind, Watertown, Massachusetts, which is a PDP-9 Braille translator using 8,000 words of memory. The output is slightly less than Grade 2, but it is still quite adequate. I do not know of any other Grade 2 (or approximating Grade 2) translators in the United States.

There are quite a few one-cell Braille output translators which are similar to the one Mr. Coleman mentioned. By one-cell Braille translation I mean that there are no contractions used. It is a strict transliteration. Also, there are no two-cell representations for one print character. A very prominent one is being circulated by Mr. Richard Snipas of New York City (he is the Associate Editor for the SICCAPH Newsletter for matters concerning the blind).[2] Many one-cell Braille translators for different machines are available, but to my knowledge, a survey reporting on these different one-cell translators has not been published.

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1) The Proceedings of "The Blind in Computer Programming: An International Conference", held in Cleveland, Ohio, October, 1969, may be obtained in print or Braille from The Association for Computing Machinery, 1133 Avenue of the Americas, New York, NY 10036.

2) Editor's note: The status of the ACM Special Interest Committee on Computers and the Physically Handicapped changed in mid-summer 1973 to a Special Interest Group now known as SIGCAPH.