

## PRESENT INTEREST IN MECHANICAL TRANSLATION

In November, 1940 [sic, i.e.1949], a round robin letter of inquiry was sent out concerning present work in the field of Mechanical Translation (MT). Now that all the various answers to this letter have been received, it was thought that a brief digest of their contents might be of interest.

### I. Men Working in the Field

- A. Harry D. Huskey, Assistant Director, National Bureau of Standards Institute for Numerical Analysis, University of California, Los Angeles.

Dr. Huskey wrote that he is interested in running pilot tests concerning MT on their SWAC (National Bureau of Standards Western Automatic Computer). This machine has an internal memory of 256 words at present, which is being enlarged to 8,000 with a magnetic drum and even 100,000 with a magnetic tape unit. SWAC was not designed for non-numerical work, but Dr. Huskey feels that it will be useful for preliminary testing. Cooperative studies are being carried out at U.C.L.A. both by Dr. William E. Bull of the Department of Spanish, who is making studies on vocabulary ratios and syntax translation problems, and by Dr. Victor A. Oswald, Jr., and Dr. Stuart L. Fletcher, Jr., of the Department of German, who have completed a manuscript entitled "Proposals for the Mechanical Resolution of German Syntax Patterns," which indicates that syntax problems can be numerically codified.

- B. A. D. Booth, Electronic Computer Project, Birkbeck College, 21 Torrington Square, London, W. C. 1, England.

Dr. Booth writes that they have done a considerable amount of preliminary work on the use of their computer as a dictionary translating machine. His approach is largely concerned with the problem of codifying words so that available memory space may be most advantageously utilized. He is collaborating with Dr. B. H. Richens of the Institute of Agricultural Genetics, Cambridge, England, whose approach deals mainly with dictionary translation, plus explanation, which enables account to be taken of word endings in accordance with the standard grammar also contained in the dictionary.

- C. J. D. Williams, Rand Corporation, 1500 Fourth Street, Santa Monica, California

Dr. Williams wrote us that before tackling any hardware experiments, they decided to survey the field in a series of small studies. The first of these was entitled "An Experimental Study of Ambiguity and Context," by Abraham Kaplan.

II. Men Actively Interested in the Field

M. Fisher, King's College, Strand, W. C. 2, London, England.

Jay Forrester, Massachusetts Institute of Technology,  
Cambridge 39, Massachusetts

D. B. Fry, Department of Phonetics, University College,  
London, England

Dennis Gabor, Imperial College, London, England

Donald MacKay, King's College, University of London,  
Strand, W, C. 2, London, England

Calvin N. Mooers, Zator Company, 79 Milk Street, Boston 9,  
Massachusetts

Claude Shannon, Bell Telephone Laboratories, Murray Hill,  
New Jersey

G. Timms, 114 Lime Grove, Eastcote, Ruislip, Middlesex,  
England

A. N. Turing, Manchester, England

J. B. Wiesner, Research Laboratory of Electronics, Massachusetts  
Institute of Technology, Cambridge 39,  
Massachusetts

SUMMARY:

From the above survey it would seem that there are two places that have partially applied translation problems to actual computing machines. In addition, the Rand Corporation is interested and has completed an initial study of ambiguity and context. Beyond these concrete endeavors there appears to be a broad range of interest in at least eight different laboratories.

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