

lation of Russian documents into the various target languages. It was soon found that while a very low quality translation could be produced which could be understood by an expert in the field of information dealt with by the document, a high quality automatic translation appeared to be a goal which might be reached only in the very distant future.

The NRC goal, therefore, is not automatic machine translation (translation without involving human translators or editors), but a much simpler goal — machine aided translation — to learn to what extent electronic data processing equipment can be used to aid human translators, or to require only monolingual editors having a knowledge of the target language and the information field.

The approach at the University of Montreal is a fairly sophisticated one, based on a knowledge of the structure of language and linguistic science. At the University of Saskatchewan, the

problem is along simpler lines, based principally on such things as the statistical occurrence of various orders in which parts of speech are found in the natural use of language. Although the two approaches to the problem differ, the successful features of either scheme may be fairly readily adapted to the other.

The full assessment of an MLT system will depend on the quantity of translation work which can be done by a person aided by a machine relative to the output of a person unaided, and the respective costs.

The continuing research work is monitored by a small inter-agency committee with representatives from the Federal Government's Printing Bureau, the Translation Bureau, and the National Research Council of Canada. A symposium is held annually at which representatives from all projects present a summary of recent work and progress, and at which discussions are held by all present, criticisms made,

and suggestions offered.

Although it has been recognized that high quality fully automatic translation seems unlikely to be a possibility in any reasonable span of time, the situation is steadily altered by the progress which is made in the technology of computers. As computer speeds increase, and particularly as the cost of the computer "core storage" decreases, the possibilities of eliminating one by one each of the problems which arise in machine translation improve. It is very difficult at this time to foresee an end to technological progress in computer design and manufacture. Consequently, the possibilities of progress in the future are virtually unforeseeable.

There seems to be little doubt that work in machine language translation will continue in many countries almost indefinitely. Since Canada appears to face a continuing translation problem, it is likely that work in this field will never cease, although the scale of the effort may well be altered appropriately from time to time.

DUCTION A L'AIDE DE L'ORDINATEUR

*Computer output in
target language
(100,000 words per day)*



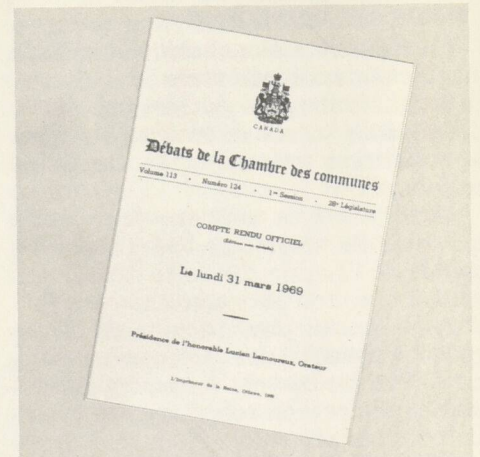
*Traduction en
langue-cible
(100,000 mots par
jour)*

*Output revised
by Editor*



*Traduction
revue par
un rédacteur*

*Finished
translation*



*Traduction
révisée*