

European Community Policy on M.T.

by Loll ROLLING, Commission of the European Communities

One of the roles of the E.C. Commission is to help the European Community to overcome the language barriers that are presently hampering its cultural and economic unification. There are several approaches to attain this goal, and the Commission has chosen not to leave out any possibility of giving Europe a perfect multilingual support.

The Commission is supporting basic research, developing new tools and resources and promoting their implementation through the creation of compatible, user-friendly infrastructures.

On the research side, the EUROTRA programme (described by Mr. Perschke in the morning session) aims at supplying the E.C. not only with a modular M.T. system covering all European languages, but also with a valuable test bed for further research in computational linguistics.

In the framework of the ESPRIT programme, several projects are aimed at the integration of voice recognition devices in industrial equipment, but the main research project is one that has undertaken a thorough analysis of seven European languages with a view to creating reliable lexical resources for use in both text and speech translation.

The Commission also contributes to the development of standards for linguistic tools and resources, including lexical data banks, text and speech corpora, and multilingual thesauri.

Another major effort of the Commission has been its contribution to the development of the SYSTRAN system for a number of European language pairs.

After Dr. Toma's initial development of Systran for translation from Russian to English, the Commission asked him to develop further language versions for use in the European Community, where various government agencies are now making use of them. A French company which has now taken control of Dr. Toma's company, has already made Systran available on the French telephone network through the MINITEL system and is planning to create a rapid translation service from his own computer center near Paris.

Four other MT systems are being used in Europe, namely Logos, Weidner, Alps and Titus, and at least five are under development, including METAL (by Siemens), ROSETTA (by Philips), BSO (in Holland), CALLIOPE (in France) and SUSY (in Germany). It should also be mentioned that the Commission is presently making use of two Japanese-English M.T. systems, Fujitsu and Systran, for the translation of technical information from Japanese into English.

The Commission's future initiatives are likely to be in the field of language industry as much as in that of basic linguistic research.

User-friendly access to documentary resources will be made possible by combined use of M.T. and multilingual thesauri in intermediary systems, and the existence of multilingual corpora and text parsers will allow us to enhance the coverage and quality of present M.T. through sophisticated learning algorithms.

But the ultimate dream, for all linguists world over, is the emergence of speech translation systems in the next decade.

Our Japanese colleagues have started the development of so-called Telephone Interpretation systems, and E.C. scientists are now preparing the specifications for a major European research effort in this direction.