

Vienna conference on multilingualism and Machine Translation: East meets West

by Dr George Muskens

At an expert meeting convened on 17/18 November 1989 in Prague by the Vienna Centre and the Linguistics Research Group of the Faculty of Mathematics and Physics of Charles University, thirteen experts from Eastern Europe, twelve of their Czechoslovakian colleagues and nine Western experts discussed developments in machine and machine-aided translation and its applications.

As was stressed by Dr Muskens, scientific coordinator at the Vienna Centre, an expert meeting on Machine Translation was important as part of its broader programme on Multilingualism and Ethnicity (ML-ETH) which is planned as a very diversified series of scientific activities in the years 1989-1992. The intention is to study the many aspects and facets of tensions between ethnic identity, on the one hand, and the needs for cross-cultural communication in a predominantly plurilingual environment and community, on the other.

In the papers presented at this meeting, the participants gave an overview of experimental applications which are being developed within the recent wave of interest in machine translation. They made clear that research is going on and must continue.

A kind of scale of machine translation was proposed. The lowest level of MT is represented by machine-assisted human translations. It is followed by man-assisted machine translations; full machine translation (with only some pre- and post-editing) represents the most advanced level.

At the lower level there are systems of automated dictionaries and lexicons as well as intelligent work stations for translators. At this level large scale applications on mainframes and

PCs are possible, as was shown in many Eastern and Western contributions. At the level of man-assisted MT the aims are obviously more complex. It concerns very diversified man-computer interaction systems for high-quality translations in restricted areas. The Japanese developments presented must be seen in this respect. The most complex level is that in which we look for high-quality translations of all kinds in a ML-environment. This is more or less the aim of the EEC-project EUROTRA and of the research presented by Soviet, Czech, and East-German colleagues.

For the nearer applications of machine and machine-aided translations the main aim must still be the development of automated dictionaries, extended lexicons, and terminological DBs. As to the wider perspectives, the field is confronted with cyclical problems which have to be overcome. Better results are needed, a fact indicated by one of the Czech reports: 25% good, 60% not bad, and 15% nonsense. Better results could come from the development of a diversity of systems and applications on the market in relation to (research into) the need and psychology of users. Besides, there is a need for more money and concerted action in the field of fundamental research. If things do

not change, however, the time perspective is quite long for Europe and the USA, because R&D is still scattered. Prospects are possibly better for Japan.

Among the points raised in the discussion were:

a. The need for a central organisation for the exchange of information on developments in MT and MAT. Apart from publications in the professional scientific magazines, EUROTRA could extend its internal clearing house facilities in this direction. The changing political circumstances in Europe should facilitate such a development.

b. The obvious unavailability of imperfection in MTs. It appears that a lot of etiquette in language causes enormous problems for automated text handling and MT. It should be accepted that these problems are not completely solved by the machines.

c. MT as a discipline has certain advantages for linguistics in general: some language properties become clear only when formally stated. Therefore, fundamental research should also be supported.

d. There is hardly any relation between translation science and the discipline of MT. The one seems to the other not to be useful because the first is too "artistic" and the second too "formalised". But cooperation with R&D in the field of intelligent computer interfacing will certainly be quite useful.

e. Applications have to promote the further developments of MT.

f. Because things will never be perfect, special attention should be given to the education of users of MT, and especially of the translators who apply the systems, e.g. for technical texts.

A follow-up Vienna Centre meeting is scheduled for Saarbrücken (FRG) in Autumn 1990, at which the different systems are to be demonstrated. Participants are expected to present papers on the user interface as a special scientific subject.

The proceedings of the Prague meeting will be published by the Vienna Centre in its Occasional Papers series, in early Summer 1990.

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