

“EUROTRA and other recent developments in Machine Translation”

Talk given by Mr. John Hutchins of University of East Anglia and author of “Machine Translation, Past, Present and Future”, on 25 April 1991 at King’s College, London.

The EUROTRA project for a machine translation system of advanced design was originally authorised by the Commission of the European Communities in November 1982. It was conceived as a distributed system with researchers in each of the member countries responsible for translating from their own languages into a common linguistic representation and vice versa. It was planned that there should be a modest transfer component for each language pair, but it would appear that this is being reduced with experience.

It is hardly surprising that progress has been slow since the work of about 150 researchers in 12 countries has had to be coordinated in great detail. The last assessment report dated March 1990 recorded disappointment with achievement

to date but the programme has been continued in the absence of anything better and as a basis for continued research if nothing else.

Mr. Hutchins then spoke about a number of other systems under development.

SYSTRAN, which was started some 30 years ago and is in daily use in the European Community, is still being developed and extended to other language pairs reasonably successfully, in spite of its rather out-moded construction.

It is also interesting to note that Xerox are using SYSTRAN successfully with restricted input, sometimes referred to as 'controlled input'. This improves the clarity of their manuals in English as well!

TOVNA is a new commercial system, originally developed in Israel but now based in New York. Not much information is available about this system though it is thought to be under trial at the World Bank.

An Artificial Intelligence system based on an interlingua and using a knowledge data base is being developed at the Carnegie-Mellon University in the USA.

IBM are experimenting with a statistical approach based on the parallel texts in English and French from the Canadian Hansard. This system does not use any linguistic theory, but is reputed to be surprisingly good within its domain.

A Canadian system based on a reversible grammar and called appropriately enough CRITTER is being used experimentally to translate Canadian Stock Market reports.

Philips are still experimenting with their system, also based on a reversible grammar, called ROSETTA.

An interesting number of related products are being developed by and for translators themselves to aid them in their work. Most of these are of course based on text processing systems and usually include dictionaries of varying degrees of sophistication.