

# Government funding for machine translation system

## Grant for UMIST Japanese work

A grant for the design and implementation of a prototype English-Japanese translation system has been awarded jointly to the Centre for Computational Linguistics at the Manchester Institute of Science and Technology, in co-operation with International Computers Ltd, and a team from the Department of Japanese Studies at Sheffield University.

This is the first funding for machine translation under the British Government's Science and Engineering Research Council's information technology programme, known as the Alvey programme.

The Centre for Computational Linguistics (CCL), headed by Professor Juan Sager, was established in January 1980 as a separate teaching and research unit in the Department of European Studies and Modern Languages of UMIST in order to permit a greater concentration of effort in the field of computer applications of linguistics and information technology. Its main orientation lies in interlingual communication with an emphasis on machine translation, terminological data banks and multilingual information systems.

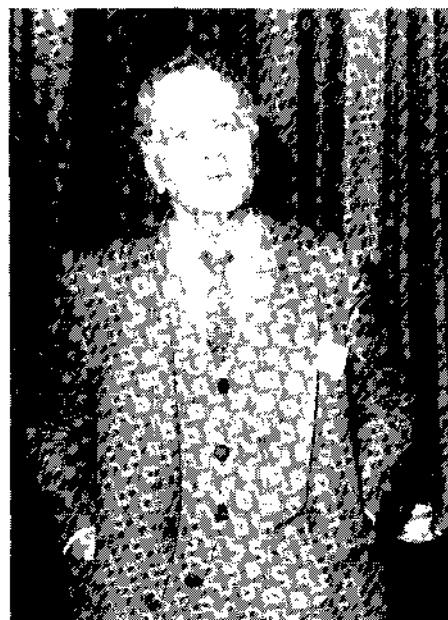
Designed by CCL staff, the system, it is said, will allow a writer knowing only English to produce high quality Japanese text in collaboration with the machine. Hardware and personnel for the project will come from ICL, who will also be responsible for marketing the finished product. The project will strengthen collaboration with researchers in Japan where MT is an important component of the Japanese Government's Fifth Generation proposals. CCL is one of the few places in the western world working on Japanese translation.

The Manchester Centre is currently involved in three other major projects: as a result of the Inter-university Term Bank project, terminology processing software has been developed to provide a multilingual terminology consultancy service to universities, industry and the public sector. Participating universities in the United Kingdom and partner institutions abroad will process terminology according to a common agreed format. It is then stored in a distributed network and can be accessed in various different modes from on-line consultation to printouts.

CCL are collaborating on EUROTRA, the European MT system sponsored by the Commission of the European Communities. Prototype software is being developed in co-operation with individuals from the CEC and from the Universities of Utrecht and Geneva. Linguistic research concerning the English language components of the system is conducted by CCL and the University of Essex, while members of the Centre continue to contribute to the project's central research and development work.

Terminological problems are being studied as part of a *Study of recent development in the relationship between science, technology and society in different economic, social and cultural contexts*. The study will deal with problems encountered during the exchange of new technology between developed and developing countries, taking into account the results of the TERMIA 1984 Conference held in Luxembourg.

The Centre also publishes several reports. Available now is its *In-depth study of machine translation techniques* edited by Peter Whitelock. This consists of an introductory overview of the linguistic and computational aspects of MT in general, together with appendices dealing with the following systems in detail: SYSTRAN, TAUM-Meteo, TAUM-Aviation, GETA's ARIANE-78, LRC-METAL, Wilks' Stanford system, SALAT, and SUSY. The survey costs £15 plus postage and packing, and can be obtained from Liz Diggle at CCL, UMIST, PO Box 88, Manchester M60 1QD, who can also supply a full list of reports and publications.



Professor Juan Sager, head of the Centre for Computational Linguistics

CCL members are involved in the production of two books on computational linguistics to be published later this year.

*Multilingual aspects of information technology* to be published by Gower Press, is intended to be an introductory textbook aimed at the interested lay reader and reflects some eight years' experience of teaching CL. Topics covered include machine dictionaries, term banks, machine translation and information science with particular reference to the problems of multilinguality.

The second work, *Valency and case in computational linguistics* by Harold Somers will be published by Edinburgh University Press. It represents a thorough review of the linguistic theories of Valency and case grammar, and concentrates on their applicability in computational linguistics, machine translation and artificial intelligence. It is aimed at a wide audience, including newcomers to CL, established CL workers from non-linguistic backgrounds, as well as theoretical and applied linguists less familiar with these particular theories or their relevance in CL.