Smart release: MaxTrans

Smart Communications Inc., of New York, who have long been a leading company in the field of controlled language and pre-editing, have introduced a new product, MaxTrans, which combines a text editing tool with a form of automatic translation.

With renewed interest being awakened worldwide in Controlled Language (it forms a major element in the EU's fourth framework Multilingual Action Plan, for example) this is likely to prove a major step forward in the processing of natural language, and *Language International* went to see the new system at the Smart 29th floor offices overlooking Third Avenue in central Manhattan.

The new tool incorporates the Smart Expert Editor, which is designed to prompt technical writers to stay within the bounds of controlled English. There is a basic technical vocabulary of 2,500 words, and product names and special terms can also be introduced for a particular working environment.

It combines this controlled language critique facility with the Smart Translators, which take the controlled English and translate it, in an X-Windows environment, into the selected foreign language. At present target languages available are French, Spanish, Italian, German and Greek. Another version of the tool translates into controlled English into Chinese (the simplified or pinyin version used in the People's Republic of China).

The product is already integrated with a number of word processors and desktop publishing systems, including FrameMaker 3/4, WordPerfect 5.1 for Unix, and Interleaf 6.

A major user already of the MaxTrans system is the Groupe Bull in Paris, which uses controlled English input as a means of controlling the quality of its documentation as well as an efficient means of translating into French (the operators at Bull, it appears, are called *maximiseurs*). Bull is also experimenting with Controlled Italian.

Another major user of Smart systems is the Rockwell Corporation, particularly at its Hyster subsidiary, where there are 40 work stations, using a specially written version of Controlled English called the Hyster Easy Language Programme (HELP). This has 5,000 rules, including rules to avoid sexism in language.

A recent user is the retail company Toys 'R Us, who have used Controlled English to make the instructions for use on some of its products, such as a baby stroller or Panasonic stereo equipment, after a number of problems were discovered with the original instructions. John Smart Communications Inc. were then called in to "fix" the language.

Three factors are combining to bring in new business, and boost the demand for the Smart approach, combining as it does language simplification and automatic language translation. One is the product liability factor, which is particularly important in a litigious society such as that of the United States. Manufacturers now want to ensure that their operating instructions are crystal clear, with no possibility of misunderstanding, and controlled language is the best way of achieving this. Another factor is that when goods or services have to be applied overseas quickly, before there is a time for translation, possibly when English-speaking instructors are having to install machinery or train staff, complex or ambiguous English can lead to difficulty.

A startling demonstration of this came when I was interviewing John Smart for this article. He broke off to take a telephone call, while I took a rare opportunity to gaze down from the window of his 29th floor office in central Manhattan on to that astonishing New York cityscape. The call, it turned out, came from Lithuania, where an American company found that its trainees could not understand the idiomatic nature of the English in the instruction material. John explained that all too often this call to "fix" a situation came in, whereas it was always much more efficient to plan in controlled language from the start.

The third factor is, of course, the well-proven fact that material written in controlled language can be translated automatically with some success,

whereas machine translation struggles often in vain with the ambiguities of natural uncontrolled language.

It takes about three days, using a professional trainer, to train a technical writer to use Global English (the current Smart name for their form of controlled English), and there is a 300+-word book which sets out all the parameters. Examples are shown in the illustrations.

The term Global English is used because the language is neutral as between US and UK usage. Very occasionally both variants need to be given, since to use one in the wrong context could cause trouble; gasoline/petrol is the major instance here. Variations between *assure* and *ensure* are eliminated by the use of the term *make sure*. Vagueness is eliminated. *Should* has to go, and the user must decide whether he means *can* or *must*. The active voice is always much easier to understand than the passive voice. The word *proper*, as in *proper procedures*, is vague and there is an actual incidence where this word was involved in a product liability case. Another case hung on the use of the word *rattle* in an aircraft problem report, and led to unnecessary grounding of expensive aircraft; the word *rattle*, which means different things in different contexts, would not be used in Global English. Where Imperial measures are used, feet and inches, gallons and pints etc., the system suggests that metrication should be
considered, and the equivalents are given.

The idea of a controlled language can be traced back to 1930, when C.K. Ogden brought out his scheme of BASIC (British American Scientific International Commercial) English, restricted to 850 words (not to be confused with the computer language, BASIC). The first successful commercial implementation of the controlled language idea, however, seems to be that of the Caterpillar Corporation in the USA in the early 1970s, with the production of Caterpillar Fundamental English for service and maintenance manuals. And that is where John Smart enters the picture.

In 1973 a story on Caterpillar English appeared in the *Wall Street Journal*, and elicited some 500 inquiries. This led Caterpillar to call a conference, and one of those who attended was John Smart. Earlier John Smart had worked for a Netherlands printing company, and had come across the problems met when a source text had to be translated into a number of target languages.

John Smart was one of those who indicated they were interested in following up the development of the idea, and Caterpillar gave him and Ted White the world rights, John Smart taking the world of North America and everywhere west, and Ted White Europe. To show how efficacious the system was, Cater-

pillar flew them to Iceland, to meet the local dealer, who worked entirely with Caterpillar English. Ted White created ILSAM (International Language for Service and Maintenance) which was promoted in Europe for several years but now seems to have faded away.

John Smart's company, however, has gone from strength to strength. Starting with his Plain English Programme (PEP), working under licence from Caterpillar, since 1982, when Caterpillar dropped out, his company has worked alone. There was an approach made at one time by Robert Maxwell, and John Smart visited the Maxwell head office in Oxford, but was not impressed by a display of vainglory by the great tycoon, who produced and served what he said was a bottle of wine worth $1000.

One of John Smart's biggest successes came in the 1980s, when his company received a contract for the installation of an automatic English to French translation system in Canada. This system, which translates job descriptions which are then instantly displayed in employment exchanges throughout Canada, continues to run without serious problems. Up to now the system has been run on a mainframe, but will shortly be transferred to 15 Local Area Networks.

Smart Communications has also developed a system for translators working for the Canadian government, producing replies to letters to ministries. Under the Canadian citizens' charter, a citizen has the right to a reply from a ministry within a specified time, and this, with the right to a reply in the citizen's own official language, puts pressure on the system. The translators, who have all been equipped with 486 MB PCs, a laser printer, a LANcard, and electronic mail, were reluctant at first, but are now accepting the automatic translation facility. The system at present uses SharkMail, but will eventually transfer to Lotus Notes. There will be an additional icon, indicating translation, and documents will be tagged according to the language in which a response is to be given.

One of the problems with automatic translation of correspondence is handling personal names, and 3,000 names have already been added to the system.

Forty per cent of Smart Communications business now comes from consultancy, helping firms to solve their input language problems, with something like two promising leads a month.
This is certainly one language area in which business is booming.