

In the early years of the computer industry, English was the sole language used in programming and documentation. Software publishers are now beginning to realise the benefits of adapting packages for use in non-English speaking countries; here we look at the pitfalls and rewards of the translation process.

Until recently, nearly all software programs were written in English. English was the standard language of computing because of the domination of the United States during the 1950s and 60s.

introduction of However. the microcomputer in the late 1970s and early 1980s caused great problems in non-English speaking countries. This proved to be a great obstacle to the throughout microcomputing spread continental Europe and created a vicious circle. Businesses would not invest in software they could not readily understand and use, and software houses would not spend the money necessary to translate their programs into a country's language when proven sales were insufficient to meet development costs. The result was that Britain, with the enormous advantage of sharing a common language with the United States, became the most developed market in Europe for microcomputers.

This situation is now beginning to change. Software houses have realised the enormous potential market in continental Europe and have started translating their programs into the languages of the countries in which they hope to sell their products. Lotus Software, as one of the biggest suppliers of IBM business programs, was one of the first companies to produce foreign language translation.

Lotus 1-2-3 (see page 644) and Symphony are among the biggest sellers of the new generation of 'integrated software'. These packages generally incorporate a spreadsheet, database and some word processing and graphics capabilities. Data can be passed between each of these applications — allowing, for example, information held in a database to be manipulated on a spreadsheet, which can then be incorporated into a document.

The translation of such a program from English to, say, Italian may seem simple enough — any text commands that appear on the screen must be changed into the appropriate language. However, several difficulties immediately arise. Firstly, if the text is embedded in parts of the source code itself, finding the text in 120 Kbytes of code in which both text and program are represented purely as

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Because the UK started with the advantage of sharing a common language with the USA, British companies have so far outstripped the continentals in installing personal computers: It seems, however, that the dramatic UK sales growth is ending just as the market in other European countries is taking off: it is estimated that, by 1988, West Germany will have overtaken the UK in the total number of installed machines