Introduction
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The European Association for Machine Translation (EAMT) is one of the three regional associations which make up the International Association for Machine Translation. Each regional association organises activities, conferences and workshops in its own geographical area with the aim of bringing together users, developers, researchers and others interested in this increasingly important field of computer aids and systems for translation.

In the last few years, there have been a number of far reaching and important changes in what is traditionally called Machine Translation (MT). Developments have been made possible by the increased power and storage capacity of computers, the increased availability of machine-readable documentation, and the expansion and wider use of global telecommunications (most recently the internet). Recent years have seen a trend away from mainframe systems (installed mainly in multinational, organisations and large translation services) towards computer-based translation aids for professional translators, PC-based software for individual translation needs, and networked services for translators and for occasional translation.

The large mainframe MT systems were originally intended to produce translations fully automatically, but in practice they are rarely used without human intervention. Only if MT systems are restricted to narrow subject domains is it possible to take unedited source documents and produce good quality output without assistance from translators. Invariably, MT output must be revised if it is to be of publishable quality. However, rough unedited versions can have some value for information assimilation, as drafts for correspondence, or for assessing the need for later human or human-aided translation. In large multinational organisations, where a single source text (e.g. a technical manual) must be translated in many languages, it is increasingly common practice for input texts to be 'pre-edited': i.e. prepared for machine translation by reducing ambiguities of vocabulary or grammatical structures, and/or already written in a 'controlled language' (e.g. a simplified form of English) to ensure that the output does not need major revision.

The appearance of cheaper and more accessible PC-based translation software is satisfying primarily occasional translation needs, mainly by non-professional translators or by people with little or no knowledge of source or target languages. These systems have often relatively small dictionaries and sometimes lack of specialist vocabulary — although the deficits are becoming less significant as more powerful PC-based systems appear (many of originally mainframe systems are now available in PC versions.)

In general, professional translators do not like to work with systems (whether mainframe or PC) which attempt fully automatic translation. Output is rarely good enough for use in professional contexts: too much has to be changed, and translators do not want to be human assistants to machines. For their needs the development of the translator's workbench is far more attractive. Workbenches offer a wide range of facilities, from multilingual (and multi-character) text processing and editing, telecommunication facilities, management of terminology, access to previous translations, and the option of using MT when desired. The translator remains fully in control: the workbench is an extension and elaboration of traditional translation

practice. In particular, they offer 'translation memories', corpora of aligned bilingual texts (source documents and their translations), allowing whole segments of previously translated material to be easily incorporated. Such translation memories are made possible only with the increasing availability of machine-readable documents, whether created internally or externally.

The need for translation is itself growing ever more urgent: with shorter production times demanding more quickly produced translations (a feature particularly strong in the area of software localisation), with wider global markets requiring translations into more languages, and with the growth of telecommunications bringing to more people an awareness of resources and databases in other languages. To meet the demands there is a widening range of types of systems (and of potential types of uses); and translation facilities are increasingly available on networks (as services for both professional and occasional translators.) The question, as always, is what are the most appropriate systems for each particular need or situation. There are no perfect solutions (the problems of linguistic processing and of translation are alone too great); the best use must be made of those systems that are available, and the producers and developers must be encouraged to improve and introduce new facilities to meet user needs. Users and potential users need to be informed about what is possible and what is not.

This EAMT workshop was devoted to the exploration of machine translation and computer-based translation tools ('translation technologies') in actual use and under development. In publishing the following collection of papers given at the workshop, EAMT hopes to encourage further collaboration and discussion between those with practical experience of translation aids and systems, the developers of new systems, and those wanting to find out what is available now and what may be coming in the near future.