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Machine Translation from Designers to Users Management Problems and Solutions

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ABSTRACT

Today Machine Translation (MT) systems are at best unique combinations of mathematical, linguistic and algorithmic theories, and of the absence of any theory of translation.

In most instances, be it or not because of the complexity of the theories and models involved, managers and translators have been kept out, or kept themselves out, of MT systems design and development. However, they are the ones who have to use and manage such systems (if they ever become operational), cope with their development and operational costs and, with the help of such strange tools, achieve objectives of better communication.

Clearly, since designers and users of operational MT systems are quite separate groups, it is not less than a transfer of technology that must occur for managers and translators, who are MT-wise developing professionals, to inherit the so-called achievements of developed computational linguistics theories.

Most of those technology transfer problems resemble the ones managers are faced with when a new computerized information system is implemented in its operational and user environment: system and acceptance testing, possible strategies of implementations, conversion from old (manual) to new system, training, resistance to change, operation per se, including file and data-base maintenance, on-going evaluation and improvement of the system, etc. The paper will briefly overview these problems as they arise in an MT environment.

Problems are interesting, but solutions are even more so. With examples mainly from the North-American experience, the paper will discuss original strategies that render easier the access of users to MT technology: early involvement of users in the development process, incorporation into existing operation environment, incorporation into a total document design and production system, total service by a translation firm making the system fully transparent to end-users, layered software structure, micro-computer implementation, direct connection and use through existing computer networks, and more ideas that will have emerged or been implemented by the time of the Conference.