

PANEL: FUTURE DIRECTIONS

What is happening in MT today? What are the trends, in both research and commerce, and what are MT systems likely to look like in 5 years' time? In 10 years? Will the recently developed statistical techniques, which seemed initially to promise so much for automated acquisition of translation knowledge, migrate successfully into practical systems? What additional capabilities will future systems include — speech translation, online word acquisition, domain adaptation? Will we see a plethora of specialized MT systems, one for email translation, another for the tourist, yet another for the small business? Or will MT remain a desktop or larger operation? Panelists and audience share their visions and skepticism.

Moderator: Joseph Pentheroudakis, Microsoft

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Two Directions of the Future

Lutz Graunitz, SIETECH Open Systems, Toronto

There are two directions for future MT work:

Technical and Application Point of View:

The future of MT lies in the integration of MT components with a range of other tools. Term Banks, Translation Memories, Phrase Books, etc. all put nicely into a standard text processing environment. Let us also include the integration of resources such as integrated lexicons and memories.

Linguistic Point of View:

Quality! In general the translation quality will be improved significantly. There are at least three ways to achieve improvements:

1. Integration of statistical and pattern oriented approaches based on the analysis of corpora and real texts. We must consider how we can integrate these into the current linguistic analysis components. We do not want to replace linguistics by statistics.
2. Reuse of feedback coming from postedited text (i.e. learning from the mistakes that MT systems make, which are usually corrected by translators) so that we may avoid those mistakes in future.
3. Steps towards a content based analysis, where a general purpose semantic component (as opposed to special purpose knowledge based representations) improves MT quality.

Support Tools are More Promising!

Pierre Isabelle, CITI, Laval, Quebec

Thus far, machine translation has failed to capture any more than a tiny fraction of the global translation market. Is there any evidence that this situation is about to change? Plainly, the answer is no. While traditional rule-based MT systems are still fighting to hold onto some marginal market fringes, the newer corpus-based systems have yet to establish that they will eventually reach the battlefield. Which is why, over the next decade, MT is likely to remain a gold mine for researchers and a minefield for salespeople and end users.

Now, for the good news. The corpus-based paradigm is in the process of giving birth to a new generation of translation support tools. Unlike MT systems, these tools will not attempt to produce translations on their own. Rather, the machine will keep its 'proper place', that of an increasingly clever assistant. The assistance will cover a wide range of tasks including: 1) searching previous translations for ready-made solutions to translation problems; 2) checking draft translations for simple kinds of errors; and 3) providing automatic transcription of dictated translations.

In translation automation, the future is in support tools.