

# Educating and Assessing the Human Translator in an Age of Technology

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## Abstract

This paper presents a few ideas of the *Center for Translation Studies* at University of Illinois on the present and future of human and machine translation. In particular, as we will elaborate at our panel, we believe that we should focus more on how we prepare humanities students to succeed as translators in a technology-driven environment. At the MT Summit panel, we will discuss the interface between human and machine translation and the related pedagogical and research issues.

## 1 Introduction\*

Machine Translation (MT) as well as Computer Assisted Translation (CAT) have seen remarkable advances in the last decade. However, current MT tools are not a serious choice for professional translation in any language combination. Moreover, translation practitioners are still looking for productive ways to merge the two approaches.

Our belief is that a greater attention should be given to the process of training translators in an era of technology. The community should also pay close attention to empirical studies of translation so that

computational linguists will have a better idea of what really goes on in human translation and develop tools that will be more useful for the end.

The research component of the *Center for Translation Studies* at the University of Illinois at Urbana-Champaign addresses a variety of domains, such as literary translation, e-learning, machine and machine-assisted translation. Software is also being developed to make the assessment of translation quality more consistent and efficient (Minacori, this volume). The Center is committed to develop translation methodologies that foster interdisciplinary thinking; to establish liaisons and collaborative projects with translation organizations in other countries; and to build bridges between the study of the art and sciences and computer technology.

The goal of using computers for translation is not to replace human translation, but to produce rough translations which can serve as starting point for published translations, as the basis for information gathering, and as cross-language communication. The field of machine translation focuses on the usage, research and development of computer tools and systems which translate text passages automatically from one language to another. These tools and systems can range from large systems for corporations to translation aids for individual translators.

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\* This document is a preamble to the panel we organize at the MT Summit 2009: "*Preparing Translators for the current technology landscape*"; panelists: Roxana Girju, Patricia Batoma, Elizabeth Lowe (U. of Illinois), and Patricia Minacori (U. of Paris)

This is a promising direction as shown by the current research in cross-lingual information retrieval, multilingual summarization, multilingual text generation, multilingual question answering, and so forth. Thus, in addition to basic machine translation tools, in the near future we expect to see more computer-based tools and applications where automatic translation is just one component. Integrated translation software will be used not only by multinational companies, but will be affordable to anyone and they can use it either from their computer or from any mobile device.

In areas and services where the quality of translation is very important, both human and machine translation have their roles. Machine translation is demonstrably very effective for large scale and/or rapid translation of technical documentation, technical manuals, and many other specific datasets where the costs of MT plus essential human preparation and revision or the costs of using computerized translation tools are significantly less than those of traditional human translation with no computer help. By contrast, the human translator has and will have no competition for non-repetitive complex texts such as literature and law.

Thus, machine and human translation not only can and will co-exist in relative harmony, but they can interact in efficient ways.

Our panel will discuss how we prepare humanities students to succeed as translators in a technology-driven environment. We will discuss the interface between human and machine translation and the related pedagogical and research issues.

For example, one of the current research projects at University of Illinois focuses on the theoretical and critical aspects of transplanting a literary text from one language and/or culture into another and on comparative studies of multiple translations into English of the same work. The project will consider various translations of 'Alice in Wonderland' in a number of world's languages (Girju, Kibee, Beamer, 2009). The system will be used for comparative studies of various linguistic expressions encoded by different linguistic structures, which will be obtained after the text is aligned at both sentence and phrase level using state-of-the-art MT tools. The research findings gathered will bring new insights into important topics in Computational Linguistics, such as 'paraphrasing'.

Moreover, the tool will be used as a case study in our translation classes.

Thus, in our panel we will propose strategies for training language students to feel at ease with information technology in general and translation technology in particular.

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