TUTORIALS

A Gentle Introduction to MT: Theory and Current Practice

Eduard Hovy
Information Sciences Institute, University of Southern California

This tutorial provides a nontechnical introduction to machine translation. It reviews the whole scope of MT, outlining briefly its history and the major application areas today, and describing the various kinds of MT techniques that have been invented—from direct replacement through transfer to the holy grail of interlinguas. It briefly outlines the newest statistics-based techniques and provides an introduction to the difficult questions of MT evaluation. Topics include:

- History and development of MT
- Theoretical foundations of MT
- Traditional and modern MT techniques
- Newest MT research
- Thorny questions of evaluating MT systems

How to make MT Work for You

Marjorie León
Pan American Health Organization

A successful MT operation is the result of good planning, an incremental approach, dedicated and talented people, and MT software that is capable of handling the types of text to be translated. The presenter will share insights gained during 20 years of experience with the development and implementation of machine translation at the Pan American Health Organization and the experiences of users of several MT systems. Topics include: evaluating candidate systems, making a commitment, preparing the environment, training, choosing input texts, postediting, building the dictionaries, requesting program enhancements, monitoring progress, and justifying the investment.

The MT software available today can increase your productivity if you are willing to put in some initial effort to learn the system and tailor it to your needs. Then MT will start working for you!

MT Evaluation: Old, New, and Recycled

John White
PRC Inc. and Federal Intelligent Document Understanding Laboratory

The tutorial addresses the issues peculiar to machine translation evaluation, namely the difficulty in determining what constitutes correct translation, and which types of evaluation are the most meaningful for evaluation "consumers." The tutorial is structured around evaluation methods designed for particular purposes: types of MT design, stages in the development lifecycle, and intended end-use of a system that includes MT. It will provide an overview of the issues and classic approaches to MT evaluation. The traditional processes, such as those outlined in the ALPAC report, will be examined for their value historically and in terms of today's environments. The tutorial also provides an insight into the latest evaluation techniques, designed to capture the value of MT systems in the context of current and future automated text handling processes.

Post-editing MT

Karin Spalink
Internationalization and Translation Services, Inc.

The tutorial will introduce purpose-dependent levels of translation. The levels will be defined and it will be shown how to correct errors in relation to those levels. Error collection procedures as well as file storage and naming procedures will be discussed. Examples will be discussed that show how to read MT output for a particular level of translation. The implications of a purpose-oriented interpretation on client relations will also be introduced, and helpful hints on how to deal with the new parameters will be given. No previous knowledge of machine translation is required for successful participation in this session.