

# Concordia University: PROMT Case Study



## Using PROMT in the Educational Process at Concordia University

PROMT translation solutions help students in Canada's Concordia University to learn Machine Translation.

The Département d'études françaises of Concordia University has been using PROMT for several years to teach a course on Machine Translation and computer-aided translation tools.

### Concordia University's Debbie Folaron, Associate Professor, and Jutta Ensel, Translator/Part-time Faculty Member, talk a bit about using PROMT:

From a teacher's point of view, PROMT is an excellent tool to learn more about Machine Translation (MT) and natural language processing (NLP). It allows the students to apply theoretical knowledge to concrete MT projects.

Before starting to use the PROMT translation software, our students learn about a few general concepts related to MT, such as the different approaches used and its history. We then use the general translation functions of the tool and produce a few MT outputs, which are subsequently analyzed by the students. Based on the translation errors identified, the students suggest terms which should be added to their user dictionaries in order to improve the MT output, and also to adapt the translation to the type of text being processed. Our students quickly develop the skills needed to use both the simple and advanced coding functions of the Dictionary Manager. This practical work also familiarizes them with the different types of linguistic knowledge used by the MT engine.

Besides the transfer for terms we also work on the transfer for certain syntactical structures, such as N + preposition or verb + noun. Thus, the French translation for the verb 'depress' when followed by the direct object 'price' would be baisser and not déprimer (!). Since PROMT also allows for semantic coding, we look at a few examples that show the importance of semantics in rule-based MT. For example, coding the word euro as a monetary unit enables the French transfer en euros for the English expression 'in euros', instead of producing a word-by-word translation, which would be dans les euros.

Using the PROMT Term Manager Lite helps students to learn a little more about preprocessing texts. The tool also facilitates their acquisition of more general knowledge on automatic term extraction, as well as on the creation of term or word frequency lists.

In class, we also work with other types of translation technologies, such as translation memory (TM) systems. Using the PROMT TM Manager is a good way to see how MT and TM can be connected or complement one another.

### Student Feedback:

Having been questioned on the new aspects they learned about MT by using PROMT, over 90% of the students agreed that even the basics were new, such as the possibility of dictionary creation and other translation customization

options. Nearly all the students also found the interface very user- friendly and easy to learn and were surprised about how much linguistic information is processed. Some commented that improving the MT output through advanced dictionary coding also means investing time and effort.

Asked if using an MT tool changed their opinion on MT, most students replied that knowing more about the different ways of improving the MT output allowed them to see MT from a different angle. Some students mentioned that they are surprised about the good, although of course not perfect, quality of the MT output once the dictionary work is done. A few students also mentioned that they would consider using MT for professional translation.

### **About Concordia University**

Concordia is increasingly recognized for a big thinking approach to teaching and research that examines societal issues from a broad perspective. We are an open and engaged university that encourages its 46,000 students to become active, critical, and concerned citizens. Recognizing that research drives big thinking, more than 7,000 students are enrolled in graduate studies, raising our community's intellectual temperature and elevating its ambitions. Concordia offers more than 300 undergraduate and 200 graduate programs, diplomas, and certificates and maintains formal ties with over 100 institutions in 33 countries.

### **About PROMT**

PROMT, with its development center located in Russia, is a leading developer of Machine Translation solutions for both enterprise-level clients and individual users.

### **PROMT has:**

More than 20 years of the successful development, advancement, and implementation of text translation solutions

15 supported languages, with many more in constant development

More than 15,000 corporate customers of all sizes in the fields of IT, the production industries, finance, trade, the sciences, education, translation services, and public sectors, among several others, all over the world.

Companies such as Norilsk Nickel, Gazprom, Lukoil, Adobe, PayPal, TripAdvisor, Mail.Ru, and many others are among PROMT's customers.

Online-Translator.com, an interactive online translation service.