MOLTO - Multilingual Online Translation

Non multa, sed multum

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http://www.molto-project.eu

List of partners
University of Gothenburg, Sweden (coordinator)
Universitat Politècnica de Catalunya, Spain
University of Helsinki, Finland
Ontotext, Bulgaria

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Summary

MOLTO will develop a set of tools for translating texts between multiple languages (up to 15 languages) in real time with high quality using multilingual grammars based on semantic interlinguas and Statistical Machine Translation (SMT) to obtain multilingual translations without sacrificing the quality. An implementation of this technology is provided by GF, Grammatical Framework. GF in MOLTO is complemented by ontology standards (such as the Web Ontology Language, OWL) to enable multilingual natural-language-based interaction with machine-readable knowledge, and by SMT for improving robustness and extracting grammars from data. There is a well-known trade-off in machine translation: one cannot at the same time reach full coverage and full precision. In this trade-off, MOLTO opts for precision (hence the slogan "*Non multa, sed multum*", not quantity but quality) in three domains with a well-understood language: mathematical exercises, biomedical patents, and museum object descriptions.

A few results have been already achieved during the first year of the project's lifetime. Two applications of the MOLTO translation web services are online on the project web pages:

1. The travel phrasebook translates sentences to 14 languages.
2. The MOLTO KRI, Knowledge Reasoning Infrastructure, demonstrates natural language query languages to retrieve answers from an OWL database.
3. GF Grammar editor in the cloud.

MOLTO technology will be released as open-source libraries for standard translation tools and fit for standard workflows.