

# Interactive Resolution of Intrinsic and Translational Ambiguity in a Machine Translation System\*

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**Abstract.** The paper presents the module of interactive word sense disambiguation and syntactic ambiguity resolution used within a machine translation system, ETAP-3. The method applied consists in asking the user to identify a word sense, or a syntactic interpretation, whenever the system lacks reliable data to make the choice automatically. In lexical disambiguation, part of man-machine dialogue refers to the analysis phase, while the other part is activated during transfer. For this purpose, entries of the working dictionaries of the system are supplemented with clear diagnostic comments and illustrations that enable the user to choose the most appropriate option and in this way channel the course of system operation.

## 1 Introductory Remarks. ETAP-3 Overview

ETAP-3 is a full-scale rule-based machine translation system that serves Russian-English and English-Russian pairs and has a number of small prototype modules for Russian-German, French-Russian, Russian-Korean, Russian-Spanish and Arabic-English translation. The MT system is developed as part of a multipurpose linguistic processor at the Laboratory of computational linguistics, Institute for Information Transmission Problems in Moscow [1-4]. Other modules of the processor include a parsing tool for deep syntactic tagging of text corpora, a UNL enconverter and de-

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