# GLOBALINK POWER TRANSLATOR 6 BARCELONA TECHNOLOGY

David E. Clements and John M. O'Hara Globalink, Inc. 9302 Lee Highway, Fairfax, VA 22031 703-273-5600 www.globalink.com

# 1. System Description

Globalink Power Translator 6 is the latest commercial MT system based on the company's Barcelona<sup>TM</sup> technology. Barcelona<sup>TM</sup> uses a rule-based, transfer system, with a proprietary rule editor that is accessible to users of the Power Translator Pro series. The software translates business documents, e-mail and Web pages. The program is targeted at end users in small to medium-sized businesses who seek a fast and cost-effective translation tool. The five language pairs currently available are: English to and from Spanish, French, German, Italian and Portuguese.

#### 2. Demonstration of System Features

#### • Bi-directional translation

• Document Mode

Power Translator allows full, automatic document translation. Open a document, click *Translate* and let the program complete the process. Save the completed translation project when finished, or start over again by clicking *Untranslate Document*.

#### Sentence Mode

Translate one sentence at a time, within a document or translation project. Highlight the desired sentence, click on *Translate Sentence* and Power Translator finishes the process. After translating, the user can choose *Untranslate Sentence* or save the sentence as part of a larger translation project.

#### • Interactive Mode

Many users desire a more precise control over the translation output of the program. This can be accomplished by clicking on *Translate Interactive*. Once having chosen Interactive Mode, the user will be presented with an interface that allows changes to lexical choices that, if made properly, can significantly increase the quality of the translated sentence.

## Barcelona Rule Editor

The Barcelona Rule Editor is used to create translation rules in the Barcelona language. There are two types of rules that are accessible to Power Translator users.

• Keyed rules

Keyed rules use the same pattern-matching syntax as the rules used by Globalink linguists to create the general systems that are released to the public. Keyed rules

differ from more general rules in that they activate only when finding a certain, "key" word within the text being translated. This word must also be a headword in the dictionaries.

## • Verb Frames

Power Translator does not allow lexical verb frames to be entered into the dictionary. Instead, users may use the much more powerful verb frame syntax. This somewhat simplified syntax centers around a source language verb, its associated objects, and the target language verb and whatever transformations are necessary to create the desired translation.

# • Dictionary Editor

The dictionary editor displays headwords, translations and lexical phrases, and allows the user to add to any of these elements. The editor also displays morphological information and a certain level of semantic knowledge.

## • Dictionaries

Power Translator is supplied with a general dictionary, and this can be supplemented with user-created or Globalink-supplied subject dictionaries. These dictionaries can be "stacked" in order of priority.

## • MTAPI and OLE Automation

OLE Automation and the Barcelona MTAPI (Machine Translation Application Programming Interface) allow users to translate from within another application, such as a word processor, spreadsheet or database.

## • Word Processing Format Preservation

Globalink Power Translator supports several popular document formats, including Text, Microsoft Word, Corel WordPerfect, Rich Text Format (RTF) and Hypertext Markup Language (HTML).

# 3. Other Features of Globalink Power Translator

#### • Web Translator

Web Translator uses the Barcelona engine and rules, along with MTAPI, to translate HTML pages from within a web browser. The program supports Microsoft Internet Explorer or Netscape Navigator. Pages can be viewed in their translated form, with the hypertext links preserved, and the translations can be saved to disk.

# Conversation

Conversation allows users to "converse" by using interactive translation windows within the program.

# • Translation Utility

The Translation Utility uses the Windows Clipboard to translate text from e-mail and other documents in the Windows environment.