LOGOVISTA E TO J

John Richards Language Engineering Corporation

LogoVista E to J is an English to Japanese machine translation system for personal computers. LogoVista E to J has two major uses: for translators, it is a means to increase productivity and ensure that key terms are translated consistently; for Japanese speakers, it is a tool for gaining access to English-language information. With a set of available dictionaries that include more that 600,000 entries, LogoVista E to J can be used to translate a wide variety of business, scientific, and technical texts.

The translation process has three stages: preprocessing, automatic translation, and postprocessing. Preprocessing begins with importing the source text file. LogoVista E to J imports ASCII text files. The next step is setting translation preferences and loading the dictionaries to be used. The system's main dictionary contains more than 100,000 entries covering the core vocabulary of English; the twenty-one optional Technical Dictionaries include more than 500,000 specialized terms from business, science, and technology. Users can also create their own User Dictionaries containing noun, verb, adjective, and adverb entries. Users can rank the loaded dictionaries to give priority to the entries in selected dictionaries. The final step in preprocessing is scanning the text for words not found in the dictionaries. This allows users to correct misspellings and add missing words to a User Dictionary before the text is translated.

The second stage in the translation process is automatic translation. Automatic translation begins with preparsing, in which the preparser locates sentence boundaries. Once the beginning and end of a sentence have been identified, the parser analyzes the sentence's structure. LogoVista E to J is a syntactic transferbased system that uses semantic processing to select the most likely interpretation in a given context After the parses have been generated, they are ranked by experts, the highest-ranking parse is transformed from English to Japanese sentence structure, and the Japanese translation is generated.

During postprocessing, the final stage in the translation process, the user can improve the translation using a variety of tools, including the Part of Speech commands, the Alternate Word command, and the Translate Interactive command. The Part of Speech commands allow users to guide the translation by grouping words into phrases; by assigning a part of speech to a word or phrase; and by marking words or phrases that should remain in English. The Alternate Word command displays every translation in every dictionary currently in use, allowing users to review alternative translations quickly and substitute one for the

translation the system has chosen. The Translate Interactive command allows users to choose alternatives for the translation of a phrase or an entire sentence. This feature can be used to teach the system so that preferred translations are used during automatic translation. When any necessary revisions have been made, the translation can be printed or exported as a Japanese text file (in Shift-JIS format).

Available LogoVista E to J Technical Dictionaries:

- Applied Science: Agricultural Science; Applied Chemistry; Applied Physics; Biotechnology; Computers; Materials Science
- Business: General Business
- Engineering and Architecture: Aerospace Engineering; Architecture; Civil Engineering; Electrical Engineering and Electronic Communications; Mechanical Engineering; Naval Architecture; Urban Engineering
- Medicine: Medical Science
- Science: Biology; Chemistry; Earth Science; General Science and Technology; Physics; Zoology

LogoVista E to J Platforms

Apple Macintosh

680x0 processor with System 7.1 and the Japanese Language Kit, or KanjiTalk 7.1

or

Power Macintosh with System 7.1.2 and the Japanese Language Kit, or KanjiTalk 7.1.2

• PC

386 or 486 processor with Microsoft Windows 3.1 J

LogoVista E to J: available now; price \$1995 (Technical Dictionaries \$495 and \$995)

LogoVista E to J Personal: available November 1994; price \$795

LogoVista J to E: available fourth quarter 1995

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