Abstract

This paper describes our work-in-progress in automatic English-to-Korean text translation. This work is an initial step toward the ultimate goal of text and speech translation for enhanced multilingual and multinational operations. For this purpose, we have adopted an interlingua approach with natural language understanding (TINA) and generation (GENESIS) modules at the core. We tackle the ambiguity problem by incorporating syntactic and semantic categories in the analysis grammar. Our system is capable of producing accurate translation of complex sentences (38 words) and sentence fragments as well as average length (12 words) grammatical sentences. Two types of system evaluation have been carried out: one for grammar coverage and the other for overall performance. For system robustness, integration of two subsystems is under way: (1) a rule-based part-of-speech tagger to handle unknown words/constructions, and (2) a word-for-word translator to handle other system failures.