Bunsetsu-based Japanese-Sinhalese translation system and handling ga and wa

Ajantha Herath, Yasuaki Hyodo, Y. Kunieda, Takashi Ikeda Gifu University, Gifu 500, Japan

> Tel: 81 582 93 2744; Fax: 81 582 30 1895 email: ajantha@ikd.info.gifu-u.ac.jp Tel: 81 582 93 2744; Fax: 81 582 30 1895 email: ikeda@ikd.info.gifu-u.ac.jp

Susantha Herath Aizu University, Aizuwakamatsu 965-80 Japan

Tel: 81 242 37 2536; Fax: 81 242 37 2549 email: herath@u-aizu.ac.jp

As the Japanese to modern Sinhalese pair of languages is virtually unexplored in its machine translation prospective, efforts are being focussed on determining the reasonable minimum of grammatical knowledge of Japanese necessary for obtaining intelligible modern Sinhalese output. Japanese, a non-Indo-European (IE) language, is thought to be in the central Altaic language group. Sinhalese is an Indo-European language. Bunsetsu provides a simple, very useful concept for characterizing the Japanese language. The function words **wa** and **ga** play an important role in the Japanese sentence. Its usage is very complicated. The distinction in meaning between **wa** and **ga** is a problem that perpetually troubles both students and instructors of Japanese. This paper discusses the Bunsetsu Based Japanese-Sinhalese Translation system and handling **wa** and **ga** in machine translation from Japanese to modem Sinhalese.