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Speech to Speech Translation System for Monologues-Data Driven Approach

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This paper describes ongoing research on a Japanese-to-English speech- to-speech translation system for "controlled monologue", such as TV news and commentary programs in which the speaking styles are controlled as a monologue. We have adopted the data-driven approach since the TV programs in question cover a wide range of topics, and because it seems much too labor intensive to handcraft translation rules. The approach therefore requires a gigantic parallel corpus for the target domain, although the absolute size needed is not so easy to obtain. There are also difficulties inherent in monologue such as the need to handle long sentences, averaging over 25 words, and the realization of simultaneity. These problems are presented in the light of our available corpora and we go on to present the kinds of problems we have to solve. Finally, we present our prospective system architecture and introduce the present status of the work.

Full Paper

<u>Bibliographic reference.</u> Tanaka, Hideki / Nightingale, Stephen / Kashioka, Hideki / Matsumoto, Kenji / Nishiwaki, Masamchi / Kumano, Tadashi / Maruyama, Takehiko (2002): "Speech to speech translation system for monologues-data driven approach", In *ICSLP-2002*, 1717-1720.

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