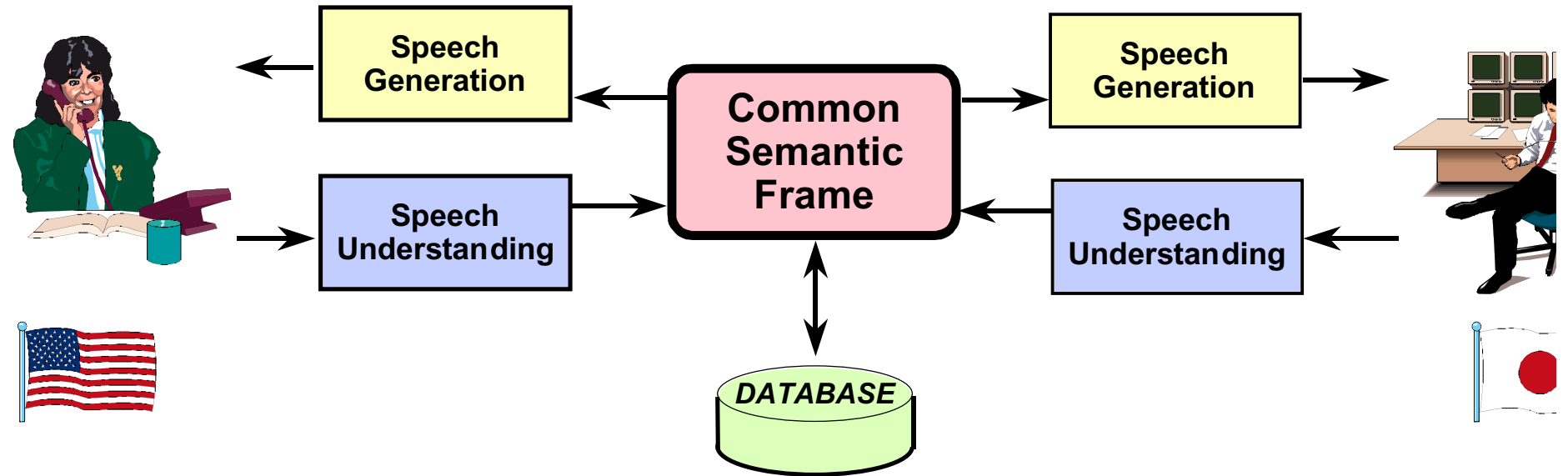




Multilingual Conversational System Research

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Explore language-independent approaches to speech understanding and generation

Develop necessary human-language technologies to enable porting of conversational interfaces from English to Japanese

Use existing Jupiter weather-information domain as test case

urrent Progress

- **Coordinated with NTT researchers for a visiting scientist with speech and language expertise to stay with SLS group**
 - **Dr. Minami arrived in late January, and will stay at least one year**
- **Met with NTT researchers (Tohkura, Aikawa, Minami) in December, 1998 to discuss project plans in more detail**
- **Dr. Minami's initial efforts have focused on infrastructure**
 - **Setting up computer environment on Sun UltraSparc workstation**
 - **Making NTT synthesizer operational at MIT LCS**
 - **Locating detailed Japanese weather forecasts for focus of Japanese Jupiter domain**

uture Plans

- **Port English Jupiter weather domain to Japanese**
 - 1 **Develop Japanese language generation capability using GENESIS system to allow for English input with Japanese output**
 - 2 **Develop initial natural language capability using TINA NL system**
 - 3 **Begin wizard-based data collection from native speakers**
 - 4 **Develop basic speech recognition capability using available telephone-quality corpora**
 - 5 **Begin system deployment with automated data collection**
- **Develop multilingual content-processing of weather forecasts**
- **Explore language-independent acoustic-phonetic processing, dialogue control, and speech understanding**