

Spoken Dialogue System DUG-1

Kohji Dohsaka, Mikio Nakano, Kiyooki Aikawa, and Takeshi Kawabata

Abstract: DUG-1 (Dialogue Understanding and Generation-1), unlike previous spoken dialogue systems where dialogues proceed in a system-question/user answer format, performs a task through a cooperative dialogue with humans. Two new features make DUG-1 unique. First, it can incrementally understand utterances word by word as the user speaks even if those utterances include complicated linguistic expressions. This enables DUG-1 to acknowledge by making backchannel utterances and display-incrementally generates responses phrase by phrase, which allows it to change utterance plans according to the type of user interruption. These features make dialogues with DUG-1 more natural than those with previous systems.