

**Stony Brook University  
The Graduate School**

Doctoral Defense Announcement

**Abstract**

Impact of Working Memory Span on Referring in Conversation

By

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This dissertation project investigated the possibility that individual differences in working memory span can shape conversation, specifically, how two people set a joint perspective. A two-phase experiment was used to investigate this question. During Phase I, participants were administered a series of individual difference tests, consisting of one primary (Operation Span) and two other secondary working memory tests (NBack, CVLT), as well as a questionnaire (Interpersonal Reactivity Index) to determine their personal inclination to take their partner's perspective. After being identified by the primary WM measure as having a high or low working memory span, participants in Phase 2 were separated into pairs and assigned to one of four conditions consisting of different combinations of their individual working memory span and their role (director-matcher) in the communication task (e.g. High-High, High-Low, Low-High and Low-Low). Pairs were given 18 picture cards to match over 5 rounds. Pairs' prior knowledge about each card's perspective was varied by whether they had learned the Same, Different, or No perspectives beforehand. The results suggest a relationship between individual working memory span and perspective setting behavior, and also suggested that pairs' effort and accuracy when setting a joint perspective is highly influenced by prior knowledge.

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**Time:** 12:00

**Place:** Psychology Building A, Room 109

**Program:** Experimental Psychology

**Dissertation Advisor:** Susan E. Brennan