

Spatial and Temporal Cues in Statistical Cross Situdational Learning

Roy Seo

Indiana University

Damian Fricker

Indiana University

Chen Yu

Indiana University

Abstract: Discovering the link between words and objects is necessary for language learning. Cross-situational learning is that in order to learn word to referent mappings, learners track statistical possibility across ambiguous trials between words and objects. Learners may also track additional cues to reference such as consistent spatial locations and temporal contiguity. We hypothesized that associative learning is best when both cues are available and poorest when neither cues are available. To examine the effects of these cues, subjects will be given each of the four possible cue combinations. In conditions with spatial and temporal cues, 4 objects will be presented their fixed locations and 4 words will be played such that the first word was the last word in the previous trials instead of random orders. Also, analysis the association between learning data and eye-gaze fixation patterns will give us a window to continuously measure what takes place with the cues.