THE PATTERNS OF SILENCE: PERFORMANCE STRUCTURES IN SENTENCE PRODUCTIONS

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The pauses produced by speakers while reading familiar material were used to obtain hierarchical sentence structures. Identical structures were obtained from parsing, indicating that the performance structures of sentences are not task specific. The linguistic surface structure of a sentence is a good predictor of the pause durations. However, speakers also revealed a tendency to place pauses between segments of equal length. A simple cyclical model combining, for each pause location, an index of linguistic complexity and a measure of the distance to the midpoint of the segment, accounts for 72% of the pause time variance as opposed to 56% for the linguistic index alone. The generality of the model is shown by its good prediction of the pause durations obtained in unrelated studies in English and American Sign Language.