

DLLL, Lecture Series in Linguistics and Applied Linguistics

Tuesday, February 25, 2014

5:15 pm

Room Ross S 562

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Efficiency in Sentence Processing

In this presentation, I will present psycholinguistic experiments that test a new model of language comprehension that I have recently developed. This work will help delineate the differences between grammatical vs. “extra-linguistic” factors, their relative timing, and the role of attention in language comprehension. A strong model of the different components necessary for real-time language processing will ultimately aid in the assessment and treatment of individuals with linguistic impairments.

We propose that there are two routes to language processing, one that applies in a shallow manner, using word meaning for interpretation, and one that applies in a deeper manner, using syntactic and semantic rules. The former is called heuristic parsing, a ‘fast and frugal’ mechanism, and the latter is called algorithmic parsing. I propose that for most sentences, heuristic parsing applies first, and algorithmic parsing second, perhaps as a way of preserving cognitive (attentional) resources. Furthermore, algorithmic parsing only applies if required under specific circumstances. This proposal turns the classical model of language comprehension on its head, since it has long been assumed that individuals unconsciously assign grammatical structure to sentences that they perceive. As such, the meaning of sentences would arise from the structure that was assigned. Instead, preliminary evidence from my lab suggests that individuals do not perform the work of assigning a complete structure to sentences. That is, results suggest that for certain constructions, language processing is superficial and deeper processing sensitive to structure only occurs if required. Finally, recent ERP results in our lab confirm these hypotheses.

Reception to follow in the DLLL lounge