



**The Department of Linguistics
is pleased to present**

**Matt Wagers
(UC Santa Cruz)**

speaking on

Setting healthy (mnemonic) boundaries

Friday, April 25, 2025

1:20 - 3:00 PM

in HUM 1 - 202

Abstract:

Nearly 20 years ago, Lewis & Vasishth (2005) applied the ACT-R modeling framework to language processing by creating an English parser fragment embedded in an associative memory. McElree (2000) and McElree, Foraker & Dyer (2003) informed this development by providing earlier arguments in favor of such a content-addressable memory. This proved to be hugely influential because it offered a general theory of dependency resolution which could be made precise by reference to any particular theory of linguistic features. Both strands of thought reoriented thinking in the field away from models of working memory that required serial search procedures and, generally, the discovery of widespread interference effects has vindicated that shift.

Much recent research has made progress in delineating what the representations are (Yadav et al. 2023, Keshev et al. 2025) and how they can be learned in an unsupervised manner (Ryu & Lewis, 2021). Relatively unexplored is how to characterize the information that can be attended to simultaneously, sometimes called the "focus of attention" (Oberauer & Hein, 2012). This is an important commitment of models like ACT-R and provides an attractive point of articulation to theories of locality or linguistic domains. In this talk, I will survey what we know (and don't know) about the focus of attention in language processing (Wagers & McElree, 2013, 2022) and relate it to recent thinking about the dynamics of context encoding (Healey, Long & Kahana, 2019; Balachandran, Wagers & Rich, 2025).