

Sneezing the napkin off the table

Online comprehension of grammatically creative sentences



Tobias Ungerer, Caitlyn Antal*, & Roberto G. de Almeida
 Concordia University | *McGill University (tobias.ungerer@concordia.ca)



Research questions

1. How do readers **comprehend** grammatically creative sentences **in real time**?
2. How can this inform **theories of verb-argument linking** (argument structure)?

Grammatical creativity

= novel but contextually interpretable structures
Valency coercion: a verb combines with non-canonical grammatical arguments (Busso et al., 2021)
 e.g., Frank sneezed the napkin off the table

Theories of argument structure

	Encoded by...
Radically lexicalist (e.g., Pinker, 1989; Rappaport & Levin, 1988)	Verbs
Interactive (e.g., Goldberg, 1995; Müller & Wechsler, 2014)	Verbs + constructions
Radically syntactic (e.g., Borer, 2003; Cuervo & Roberge, 2012)	Syntactic structures

Highlights/Conclusions

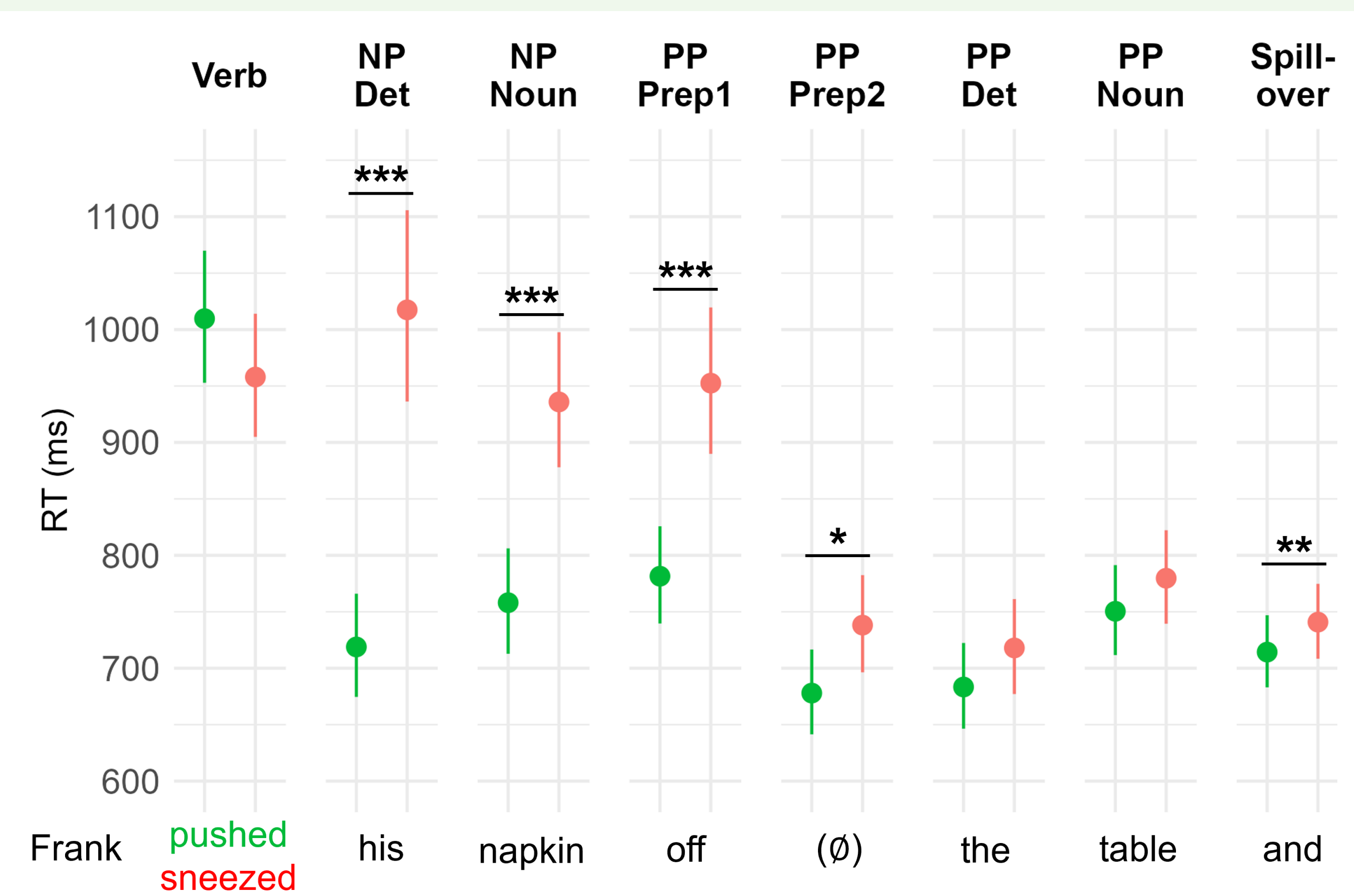
- (1) Reading measures shed light on understudied type of linguistic creativity
- (2) Comprehension of grammatically creative sentences is rapid and incremental
- (3) Support for interactive roles of verbs and constructions in argument encoding

Materials

24 text passages with 3 target types
 Frank swallowed a red chili pepper at the dinner table. Tears streamed from his eyes, and he reached blindly for his napkin. Unable to control himself, ...
 Frank *pushed/sneezed/arrived* his napkin off the table [prototypical/coerced/anomalous]
 ... and knocked over a few of the wine glasses.

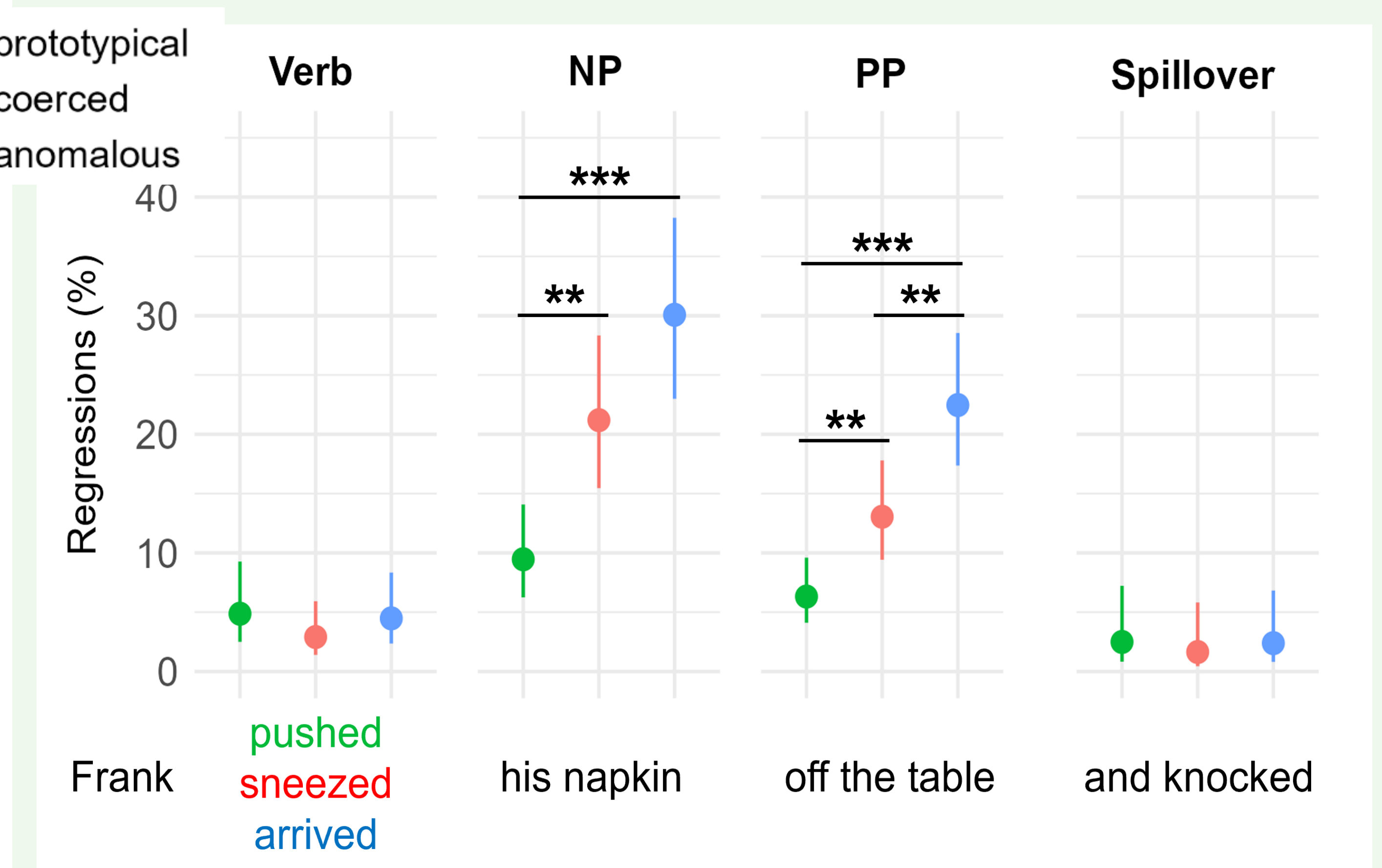
Exp. 1: Maze task (N = 80)

- Participants read sentences word-by-word
- At every step, they chose between the correct continuation and a distractor (Forster et al., 2009)
- Longer RTs after verb** of coerced sentences
- Processing difficulty decreases gradually**, especially after the locative preposition



Exp. 2: Eye tracking (N = 55)

- Participants read sentence-by-sentence
- Head-mounted EyeLink II eye tracker
- Largely no difference in first-pass reading time
- Outgoing regressions at NP and PP: prototypical < coerced <= anomalous**
- Most regressions land on the verb



Psycholinguistics & Cognition Lab



Borer (2003), Exo-skeletal vs. endo-skeletal explanations: Syntactic projections and the lexicon, in Moore & Polinsky (Eds.); Cuervo & Roberge (Eds., 2012), *The end of argument structure*, Emerald; Busso, Perek, & Lenci (2021), in *Cognitive Linguistics*, 32(2); Forster, Guerrero, & Elliot (2009), in *Behavior Research Methods*, 41(1); Goldberg (1995), *Constructions: A Construction Grammar approach*, U of Chicago Press; Müller & Wechsler (2014), in *Theoretical Linguistics*, 40(1-2); Pinker (1989), *Learnability and cognition: The acquisition of argument structure*, MIT Press; Rappaport & Levin (1988), What to do with θ -roles?, in Wilkins (Ed.)