Second Year Project

Intro

* Variation informs mental representation
  + Importance of lexical selection
* Possible frames:
  + givenness, reference.
  + Information theory
    - Less (no new) information leads to faster production.
      * Reduction of established info.
* Lexical selection
* Arnold et al. (2013)
  + - Given discourse information is acoustically reduced when later mentioned.
  + Reduction can be interpreted in a information-theoretic perspective
  + Reduction is a reflection of speaker’s ease of information access. cf. relativizer work on ‘that’ omission.
* Levelt’s model of lexical access
  + Word naming skips the stages of conceptualization to morphological encoding phonological access
* Roelofs and Baayen (2002) – Morphology by itself
  + Use of implicit semantic priming
  + Found facilitatory priming effect on latency times for transparent and opaque complex words but no benefit for monomorphemic words
  + Conluded that morphemes may be the planning units in production, regardless of semantic transparency
* Balota et al. (1989)
  + Priming occurs for related items regardless of SOA
    - Shorter latency duration
    - Shorter production duration
* Hypotheses:
  + Null: There is no effect on word duration with priming
  + Alt1: There is a priming effect on word duration irrespective of word type. This would mean that there is only phonological priming, facilitation due to recently activated articulations. Priming for opaque, transparent and novel compounds, not for monomorphemic words.
  + Alt2: There is a priming effect on word duration that is morphologically governed. This would mean that duration effects would be due to recently seen morphemic constituents. For compound words, there would be a priming effect but there would not be one for monomorphemic words.
    - Makes the prediction that opaque compounds are lexicalized monomorphemics.
* Bets are on Alt1. In line with Roelofs and Baayen’s model prediction.
  + More convergent evidence of a semantics-free parsing stage that considers word forms as planning units for production.

Methods

* Experimental Paradigm
  + Read aloud task
  + Four word types
    - Opaque, trans parent, novel, mono-morphemic words
  + Priming
    - Identity
    - Constituent
  + 60 words per word type
* 960 tokens per participant
* 17 participants
* Analysis
  + analyze the acoustic data from the priming experiment for duration measures.
  + Software to use: Prosody Lab from McGill
  + -can be trained using one’s own data
  + -textgrids for word boundary information.
  + -analyze the whole word duration
  + -analyze constituent durations
* Model
  + Dependent measures
    - Latency – index of retrieval time
    - Duration – may be indicator of residual activation from priming
      * If duration times are shorter for constituent in complex word and not for embedded words in monomorphemics, may indicate parsing strategies for word production.

Duration, Latency = word frequency + priming\*wordtype|subject (+ priming\*wordtype|item)