Agreement attraction does not depend on time pressure

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Introduction

• Typical agreement attractors intervene between the head of the subject and the verb: the key to the cabinets is...
• Attraction errors (the key to the cabinets are) can be elicited in experiments, most of which put participants under time pressure
• Will the pattern of errors change when participants can take as long as they would like to perform the task?
• We directly compare minimally different speeded and unspeeded paradigms in comprehension
• Forced choice (Staub, 2009): participants read the preamble, then choose between is and are

Methods

• Unspeeded: the sentence and the two options appear on the screen together, unlimited time to read the sentence
• Self-paced reading + speeded decision (1500 ms timeout)
• Serial presentation (400 ms per word) + speeded decision
• Materials (Bock & Cutting, 1992): Match and Mismatch conditions
  PP Singular The demo tape from the popular rock singer
  PP Singular The demo tape from the popular rock singers
  PP Plural The demo tapes from the popular rock singer
  PP Plural The demo tapes from the popular rock singers
  RC Singular The demo tape that promoted the popular singer
  RC Singular The demo tape that promoted the popular singers
  RC Plural The demo tapes that promoted the popular singer
  RC Plural The demo tapes that promoted the popular singers
• 32 critical items and 56 fillers
• 128 participants in each paradigm (recruited on Prolific Academic)
• Excluded participants who made errors on 20% or more of the fillers (Unspeeded: n = 4; SPR: n = 4; RSVP: n = 15)
• Response times (RTs) transformed using the Box-Cox method

Conclusions

• Online forced choice experiments generally consistent with production experiments (Bock & Cutting, 1992)
• One exception: error rates are moderately higher than in production experiments (even in Match trials)
• Small relative clause advantage: significant overall and in SPR, nonsignificant elsewhere (no interaction with experiment)
• Consistent attraction with plural subjects calls into question the privative feature (markedness) account
• Time pressure does not modulate the qualitative pattern of errors, though errors are somewhat less frequent overall in the unspeeded paradigm
• Singular subject Mismatch preambles (which have the most errors) are read more slowly
• In contrast to Staub (2009), RVSP error RTs were longer than correct RTs in Mismatch cases