

INTRODUCTION

Language is repetitive

Within a conversation, people tend to adopt the same conceptual framework and referring expressions [e.g., Garrod & Anderson, 1987; Brennan & Clark, 1996].

They also tend to adopt the same syntactic structure for packaging their messages [e.g. Branigan et al., 2000]

Lexical repetition is communicatively beneficial

Repeating referring expressions simplifies the process of mapping a term to a referent (normally a one-to-many problem).

- Addressees are faster to interpret (both novel and conventional) referring expressions upon second mention [Barr & Keysar, 2002]
- They are significantly slower to interpret a referring expression that differs from the one their partner previously used for a referent [Metzing & Brennan, 2003]

Is syntactic repetition also communicatively beneficial?

At least one theoretical framework says 'Yes'.

The Interactive Alignment Model (Pickering & Garrod, 2004) predicts that conversational participants should be faster to process an utterance if their partner uses the same syntactic structure that they themselves used, compared to one in which the structure is different.

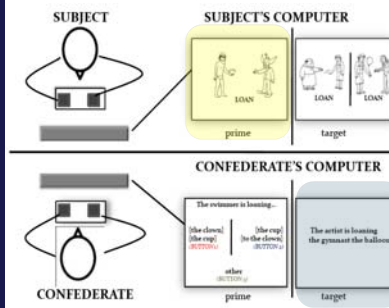
METHOD: REFERENTIAL COMMUNICATION TASK

2 blocks: Lexical and Syntactic -- 24 critical trials/block

Pictures on critical lexical trials could be described with 2 labels (e.g., *stroller / carriage*)

Pictures on critical syntactic trials could be described with 2 structures: a prepositional dative (PD) or a double-object dative (DO) (e.g., *The swimmer loaned [the cup] [to the clown] / [the clown] [the cup]*)

Example of a critical trial, syntactic block



PRIME (DESCRIBED BY SUBJECT)
Confederate recorded subject's description with button press

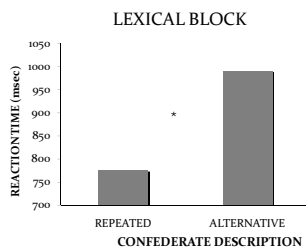
TARGET (DESCRIBED BY CONFEDERATE)
Confederate REPEATED subject's description (e.g., *stroller - stroller; PD - PD*) OR used an ALTERNATIVE (canonical) description (e.g., *stroller - carriage; PD - DO*)

Verb was always repeated on syntactic trials

DESIGN: Trial (Lexical, Syntactic) X Confederate Description (Repeated, Alternative)

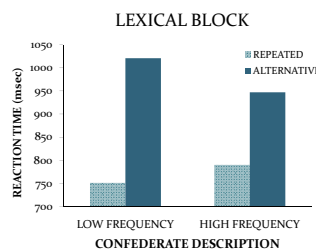
RESULTS

Repeated referring expressions were processed more quickly than alternative ones

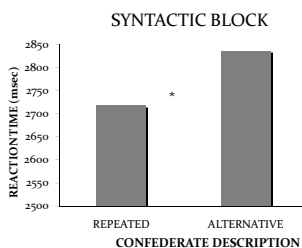


This was true even when the repeated expression resulted in a less-frequent label

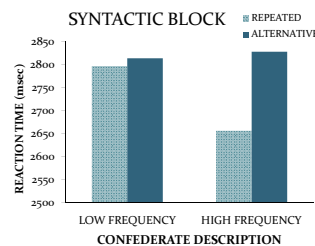
(e.g., in a pilot study, *stroller* was produced more frequently than *carriage* for that picture; PDs were more frequent than DOs)



Repeated syntactic structures were also processed more quickly than alternative ones



The effect of repetition did not interact with frequency



Finally, the repetition benefit was larger for lexical expressions (217ms) than for syntactic structures (114ms) – both when measured in raw RT ($F(1,46)=7.93, p<.05; F_2(1,46)=6.07, p<.05$) or in partial-eta squares (where the lexical effect is .72, the syntactic, .33).

CONCLUSIONS

The Interactive Alignment Model prediction is confirmed

Conversational participants comprehend sentences faster if they have the same structure as they have just used, even when the two sentences describe different content (though with the same verb).

The Interactive Alignment Model should be elaborated to account for different size effects at different levels

Perhaps interlocutors are more tolerant of violations of syntactic alignment than they are of lexical alignment because syntax is less closely tied to content.

Finally, the results suggest that global frequency (typically quite a robust influence on processing) can be overridden by local biases

REFERENCES

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