Rapid effects of linguistic alignment on communication
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INTRODUCTION

Language is repetitive
Within a conversation, people tend to adopt the same conceptual framework and referring expressions [e.g., Garrod & Anderson, 1998; 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).
• Addresses 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.

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 (144ms) – both when measured in raw RT (F(1,46)=7.93, p<.05; F(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

Metzing & Brennan (2003). When conceptual pacts are broken: Partner-specific effects on the comprehension of referring expressions. JML 49, 201-213