Empirical Evidence

Repetition in dialogue

“accommodation’, ‘alignment’ and ‘at-tunement’ are ... characteristic of successful or effective interactions”
(Giles, Coupland & Coupland, 1991)

“dialogue is extremely repetitive”
(Pickering & Ferreira, 2008)

Interactive alignment

Accommodation is the consequence of an “automatic, resource-free priming mechanism that underpins all successful human interaction”
(Pickering & Garrod, 2004)

“...priming is the central mechanism in the process of alignment and mutual understanding”
(Pickering & Garrod, 2006)

Experiment

take dyadic conversations from corpora of dialogue (DCPSE and BNC)

A: Are you going to go to all of the phonology lectures
B: I think I ought to do that
A: Yes. I think you had. Yeah
B: I mean I don’t know how much I'll take in
A: I think I'll go to most of them. But I won’t go to all of pragmatics the day before

create control dialogues

A: Are you going to go to all of the phonology lectures
C: Yeah. Well I’ll write to him now
A: Yes. I think you had. Yeah
D: Uh do you remember the ones you took of Napoleon’s bedroom
A: I think I'll go to most of them. But I won’t go to all of pragmatics the day before

score each turn for lexical and syntactic similarity with subsequent turn(s)

normalise

compare real and control figures

Predictions

1. Cross-Speaker Priming: Participants in conversation should match each other’s lexical and syntactic choices more than would occur by chance
2. Cross-Level Priming: Alignment at one level promotes alignment at other levels
3. Decay: Levels of matching should systematically decline with distance
4. Speaker-Hearer Interchangeability: Patterns of repetition should be the same within- and across-speaker

Results (1, 2)

Lexical: BNC: \( F(1,3775) = 532, p < 0.001 \)
DCPSE: \( F(1,140) = 98.3, p < 0.001 \)

People reliably match 4% of words from an interlocutors previous turn

Syntactic: BNC: \( F(1,3776) = 2.11, p = 0.15 \)
DCPSE: \( F(1,140) = 0.83, p = 0.36 \)

People do not match structure from an interlocutors previous turn

Results (3, 4)

Syntactic self-similarity decays; Cross-speaker alignment does not

Effect of Person on syntactic similarity:
DCPSE: \( F(1,140) = 21.4, p < 0.001 \)
BNC: \( F(1,5159) = 46.3, p < 0.001 \)

People are reliably more similar to themselves than an interlocutor

Conclusions

1. Cross-Speaker Priming: In ordinary conversation people systematically diverge from each other in their use of syntactic constructions. Structural repetition across adjacent turns is less than chance
2. Cross-Level Priming: Lexical and structural alignment follow different patterns within and across speakers. Lexical repetition increases structural self-similarity but decreases other-similarity
3. Decay: The likelihood of repetition with distance is different for self and other similarity. Self-similarity systematically declines with turn distance but other-similarity does not
4. Speaker-Hearer Interchangeability: Systematic differences in people’s repetition of their own and each other’s syntactic structures show an asymmetry between production and comprehension in ordinary dialogue

In ordinary dialogue people repeat only approximately 4% of each other’s words and systematically diverge in their use of syntactic constructions. This is inconsistent with priming as the central mechanism in dialogue and points to a model in which people move topics forward through, e.g., elaboration and novelty.

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Structural Divergence in Dialogue

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