Cognitive and social aspects of adaptation to a communication partner

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Introduction
- Communication is a socially highly relevant form of joint action (Van Eemeren & Grootendorst, 2002).
- Well-studied phenomena: Speakers verbally adapt to each other (Branigan et al., 2005; Branigan & Eme, 2011), e.g. by using identical lexical terms / syntactic structures.
- Adaptation can be found on various linguistic levels (e.g. lexical, syntactic).
- Adaptation may contribute to communicative success (Branigan et al., 2005).
- Studies suggest that the interlocutor’s perceived language skills affect adaptation rates (Ivanova et al., 2007; Branigan et al., in press). But what about other factors?

Research Question:
- To what extent do speakers’ linguistic skills and cognitive capacities influence syntactic adaptation?
- To what extent do social and situational aspects influence lexical adaptation?

Confederate Scripting to Study Adaptation
1. Confederate describes prime picture
   - The red ball. or The ball that’s red.
   - The woman is cooking pasta. or Dispreferred LEXICAL term in German (preferred term: noodles)
2. Participant describes target picture
   - Adaptation! or No adaptation!
   - The bear that’s green. or The green bear.
   - The woman is eating pasta. or The woman is eating noodles.

Experiment 1
Syntactic adaptation in children: Morpho-syntactic abilities vs. working memory capacity?

- Participants 19 (12 male, 7 female) native German-speaking children (mean age = 4.9; SD = 0.5)
- Confederate scripting with alternative syntactic structures.

Additional Tests
- Taken from three standardized and norm-referenced language-development test batteries
- Morpho-syntactic abilities (mean score of five tests)
- Working memory (mean score of four tests)

Results
- Children adapted to both prime structures, but reliably more to ‘the red ball’ (Figure 1, p < 0.01).
- Interesting: Adaptation to the more complex syntactic structure (“the ball that’s red”)?
- Morpho-syntactic abilities: No effect of adaptation to complex structure (Figure 2).
- Working memory: Effect of adaptation to complex structure: Higher working memory capacity = more adaptation; lower working memory capacity = less adaptation (Figure 3, p < 0.05).

Preliminary analyses:
- When taking children’s age into account: Same effect of working memory capacity.
- BUT also effect of morpho-syntactic abilities: Higher morpho-syntactic skills = LESS adaptation; lower morpho-syntactic skills = MORE adaptation.

Experiment 2
Lexical adaptation in adults: Perceived language skills vs. situational pleasantness vs. personal closeness?

- Participants 23 (12 male, 11 female) native German-speaking Bielefeld University students (mean age = 25.33; SD = 5.33)
- Confederate scripting with dispreferred lexical terms and two different confederates (native vs. non-native German speaker)

Additional Tests
- Picture description pretest to determine lexical preference of experimental prime words
- Questionnaire asking about: confederates’ perceived language skills, situational pleasantness, personal closeness to confederate

Results
- The use of a dispreferred lexical term can be experimentally induced: Participants produced reliably more dispreferred terms in the experiment compared to the pretest (Figure 3, p < 0.001).
- Marginal effect of confederates’ identity on dispreferred term adoption rates: Numerically higher adoption rates with the non-native compared to the native confederate (p < 1).
- Reliable positive correlation between perceived personal closeness and dispreferred-term adoption rates: High personal closeness = more adoption; low personal closeness = less adoption (Figure 4, p < 0.01).
- Neither perceived language skills nor situational pleasantness showed a reliable correlation with dispreferred-term adoption rates.

Discussion and Conclusions
- The results of both experiments suggest that social-strategic and cognitive factors influence the amount of adaptation that may contribute to successful communication.
- In addition, cognitive and situational factors may influence adaptation behavior more strongly than linguistic factors.