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Linguistic priming effects on constituent order in a gestural communication task: a test case for thinking-for-speaking

Several studies have demonstrated the effects of language on non-linguistic perception and behavior, linked to, e.g., categorization (Winawer et al. 2007), conceptual metaphor (Casasanto et al. 2004) and spatial conceptualizations (Majid et al.). Vice versa, cognitive, interactional and environmental pressures have been demonstrated to shape the emergence of novel communication systems (Christensen et al., in press) in semiotic communication games (Gallantucci et al. 2012). Taken together, these studies suggest tight couplings between language and cognition, at least in the domains relevant to both, such as the aforementioned examples. Others suggest that even abstract linguistic forms such as grammatical functions and word order can focus our attention on particular parts or trajectories in a given scene, yielding cross-linguistic differences in its descriptions (Slobin 1996, Cadierno 2010). Thinking-for-speaking, as this has been termed by Slobin (1996), suggests that while speaking (or listening, for that matter), our cognitive system is geared to attend to the elements profiled in our language. The present study investigates whether thinking-for-speaking can affect the emergence of a particular word order in an ad-hoc communication system. Participants had to signal either pictorial or linguistic stimuli to each other, using only gestures. When presented with pictorial stimuli, they made predominant use of the SOV-word order, replicating previous findings (Christensen et al., in press). When primed with linguistic stimuli, results were more mixed (some preferred SOV, some SVO), indicating that participants may have been effected by both linguistic and contextual priming. This presents interesting evidence to be discussed in terms of thinking-for-speaking, which it both corroborates and challenges.

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