

**The emergence of word order:
From improvisation to conventions in the manual and vocal modality**

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Many of the world's languages use conventional word order for expressing who did what to whom. But how did these word order conventions come into existence? Recently, researchers have started focusing on linguistic structure in the manual modality (gesture and sign language; lab data and natural data) to see how cognitive and interactive factors shape its structure (Padden et al. 2010, Goldin-Meadow et al. 2008). Silent gesture, an experimental paradigm in which adult hearing participants describe events using only their hands, has been a valuable tool for investigating the cognitive biases that play a role when no system of conventions is in place yet. Participants showed a language-independent preference for SOV for extensional transitive events (e.g. boy-ball-throw), but participants prefer SVO for intensional events (e.g. boy-search-ball; Schouwstra & Swart 2008). This variability—dependent on semantic properties—represents **naturalness**, reflecting cognitive preferences to put Agents first and more abstract/relational information last. The pattern is the result of improvisation (conveying information in the absence of a conventional system) and it is not typically found in existing languages, which are instead more regular.

Understanding the transition from naturalness to conventionalised regularity is a major goal of language evolution research. I will review a number of recent experimental results that address this challenge by extending the silent gesture paradigm. First, I will report an experiment in which silent gesture is used for interaction, and transmitted to new generations of learners, showing that word order starts out behaving naturally, becoming more regular over time (Schouwstra et al. 2016). Subsequently, I will present data on intensional and extensional events in Nicaraguan Sign Language. I will show that, despite being quite strongly V-final overall, this language shows traces of naturalness (Flaherty, Schouwstra & Goldin-Meadow in prep). Finally, I will address the question whether the word order patterns reported here reflect general word order preferences that arise in improvisation generally (rather than specifically in the manual modality) and show recent results that replicate the naturalness pattern in vocal word order improvisation.

Together, the data suggest a picture of the emergence word order conventions, starting from a semantically conditioned basis, and becoming more (but not entirely) regular over time.

References

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