

## Seminar Lecture

# Language as Charades: Communication through Collaboration

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Language is perhaps the most important product of human cultural evolution. In this talk, I argue that language arose through the continual reuse and refinement of improvised collaborative interactions to solve the communicative challenges of the moment. From this perspective, talking is like verbal charades: an improvisational game of spinning intricate patterns of words to get the message across. Our words don't have fixed meanings, like in a dictionary—instead we work out what words mean from the context in which they are used. Linguistic structure arises through processes of spontaneous order emerging from cultural evolution over generations of language users, rather than through a biologically encoded language “instinct” or “universal grammar.” I draw on different lines of research to explore the implications of this account, including cross-linguistic analyses of dialogues illustrating how interlocutors work together and flexibly deploy different conversational devices multimodally to establish and maintain a common understanding; studies of artificial language learning showing how communicative feedback facilitates the learning of complex language structure; lab-based cultural evolution experiments with humans and birds highlighting the flexible, open-ended nature of human language compared to the fixed, closed properties of animal communication; toddler language processing studies demonstrating that not all languages are equally easy to learn and use; and experiments with large language models suggesting that experience with language combined with idealized interactive feedback may be sufficient to acquire human-level language abilities. Together, this research underscores how the collaborative, improvisational nature of human communication has shaped our language skills.

### Main background reading

Christiansen, M.H. & Chater, N. (2022). *The language game: How improvisation created language and changed the world*. Basic Books. Available in Japanese from Shinchosha Publishing Co: <https://www.shinchosha.co.jp/book/507311/>

### Additional background readings

Dideriksen, C., Christiansen, M.H., Tylén, K., Dingemanse, D. & Fusaroli, R. (2023). Quantifying the interplay of conversational devices in building mutual understanding. *Journal of Experimental Psychology: General*, 152, 864–889.

Frinsel, F.F., Trecca, F. & Christiansen, M.H. (2024). The role of feedback in the statistical learning of language-like regularities. *Cognitive Science*, 48, e13419.

Kristensen-McLachlan, R.D., Contreras Kallens, P. & Christiansen, M.H. (in press). LLMs highlight the importance of interaction in human language learning. *Linguistics Vanguard*.

Trecca, F., Tylén, K., Højen, A. & Christiansen, M.H. (2021). Danish as a window onto language processing and learning. *Language Learning*, 71, 799-833.