

Symposium Linguistic and Non-Linguistic Cognition

Chairs: Barbara Kaup und David Dignath und Hong Yu Wong

Wednesday, 18.3.2026, HSZ Morgenstelle N3

This symposium examines the interplay between linguistic and non-linguistic cognition. While some cognitive functions appear to depend on language, others seem rather independent of it and many more integrate both aspects. In psychology, however, the distinction between linguistic and non-linguistic cognition is rarely made explicitly and there is currently no consensus on how language may shape, enable or constrain thought.

The symposium brings together perspectives from cognitive research, developmental psychology and animal cognition to address three questions:

- (1) How are language and thought related?
- (2) Which cognitive functions are inherently linguistic, and which are not?
- (3) To what extent can language modulate domains traditionally considered non-linguistic?

Part 1 brings together comparative and ontogenetic perspectives, focusing on animal cognition and human development. Lena Veit will speak about vocal communication in birds. Marlen Fröhlich's contribution deals with pragmatic inference abilities in orangutans. Paul Gallenkemper studies expectation formation in conceptual and non-conceptual contexts. Krisztina Orban and Hong Yu Wong look at pointing in human and non-human primates as well as from a development perspective, concluding that pointing is a proto-linguistic behavior bridging the gap between non-linguistic behavior and fully developed language. Claudio Tennie discusses the hypothesis that human culture requires language and language in turn requires know-how copying abilities, that are nearly or completely absent in non-human apes.

Part 2 adopts a cognitive psychology perspective. First, Carolin Dudschig examines common mechanisms in linguistic and non-linguistic processing by means of electrophysiological investigations. Rasha Abdel-Rahman's contribution addresses the question of whether language influences the formation of visual representations. Senne Braem investigates how semantic knowledge guides learning of new tasks. Tally Miller tests the influence of verbal labels on the categorization of musical stimuli. Finally, Günther Knoblich discusses the role of linguistic and non-linguistic cognition in joint action.

At the end of the double symposium, philosopher Hong Yu Wong will integrate these diverse perspectives in a concluding discussion, aiming to clarify when, whether, and how cognition harnesses the faculty of language.

Keywords: language and thought, cognitive psychology, N400, comparative psychology, culture, pragmatic inferences, developmental psychology, pointing, episodic memory, thinking and language, mental imagery, verbal labels, architecture of the mind

Part I: Linguistic and Non-Linguistic Cognition - Comparative and Developmental Perspectives

9.00 – 10:30

Room: HSZ - N3

Chair/s: Barbara Kaup, David Dignath, Hong Yu Wong

Lena Veit (University of Tübingen, Germany): *Syllable sequencing in birdsong*

Marlen Fröhlich (University of Tübingen, Germany): *Pragmatic Inference Without Words? Evaluating RSA in Great Ape Communication*

Paul Gallenkemper (University of Hamburg, Germany): *Expectation Building and Violation in Infancy: Insights from Eyetracking and Pupillometry in Categorical and Non-Categorical Contexts*

Krisztina Orbán (University of Tübingen, Germany): *Pointing as Proto-Linguistic Behaviour*

Claudio Tennie (Tools and Culture among Early Hominins Research Group, University of Tübingen, Tübingen., Germany): *Language Needs Know-How Copying and Human Culture Needs Language*

Part II: Linguistic and Non-Linguistic Cognition – Cognitive Perspectives

11.00 – 12:30

Room: HSZ - N3

Chair/s: Barbara Kaup, David Dignath, Hong Yu Wong

Carolin Dudschig (University of Tübingen, Germany): *Parallel Mechanisms in Linguistic and Non-Linguistic Processing: Insights from the N400*

Rasha Abdel Rahman (Humboldt-Universität zu Berlin, Germany): *Effects of language on mental imagery*

Senne Braem (Department of Experimental Psychology, Ghent University, Belgium): *Harnessing Semantic Networks for Efficient Task Learning*

Tally Miller (Brain Language Laboratory, Freie Universität Berlin, Germany | School of Mind and Brain, Humboldt Universität zu Berlin, Germany): *Enhanced Neuronal Distinction: How Verbal Labels Restructure Perceptual Representations*

Günther Knoblich (Central European University PU, Vienna, Austria): *Linguistic and Non-Linguistic Cognition in Joint Action*