

Workshop on interaction processes and gesture research

AG Psycholinguistik, Paderborn University

July 8 – 9, 2026

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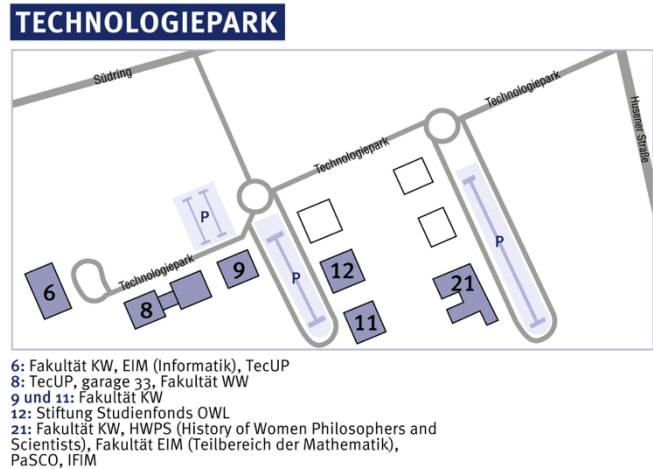
Format and Venue

In-person:

AG Psycholinguistik

Technologiepark 6, Raum 2.201

33100, Paderborn



Arrival:

By car – There is a paid multi-story car park opposite the building. The parking lots in front of the building are free of charge, but the duration of stay is limited to 2 hours.

By public transport: Line 7 (Stop: Technologiepark + 3 min walking), Line 100, 1, and 4 (Stop: Südring + 10 min walking); more information in the Padersprinter App and DB Navigator.

Hybrid via Zoom:

<https://uni-paderborn-de.zoom-join/j/65001413996?pwd=fqMzqwQIk1kBWq1aTQNru33SltxDB7.1>

Meeting-ID: 650 0141 3996, Kenncode: 730251

Program

July 7th – Studies on medical consultations

10:15 – 10:20 Opening words

10:20 – 11:20 Talk 1

Mohamed Irfan (KU Leuven)

Why is both verbal and non-verbal communication essential in unanticipated and emergency medical situations

11:30 – 12:00 SprachSpielLabor tour

12:00 – 14:00 A walk to the campus and lunch (personally covered)

14:00 – 14:40 Talk 2

**Josephine Fisher (Paderborn University)
& Vivien Lohmer (Bielefeld University)**

Exploring monological and dialogical phases in naturally occurring explanations

14:40 – 15:20 Talk 3

Stefan Lazarov (Paderborn University)

Changes of the topical structure of explanations are related to explainees' multimodal behaviour

15:20 – 15:40 Coffee break

15:40 – 16:20 Talk 4

Patricia Linnemann (Bielefeld University)

How patients' gestures become a shared interactional resource in medical consultations

16:20 – 17:00 Talk 5

Mariya Hristova (Bielefeld University)

Understanding Metaphors and Similes in Doctor–Patient Interactions

17:00 – 17:40 Joint discussion

18:30 Dinner in Paderborn (personally covered)

July 8th – Studies on co-speech gestures

09:00 – 09:40 Talk 6

Alon Fishman (Bielefeld University)

Interactive gestures accompanying linguistic creativity

09:40 – 10:20 Talk 7

Mohamed Irfan (KU Leuven)

General practitioners' use of gestures for communication

10:20 – 10:40 Coffee break

10:40 – 11:20 Talk 8

Gyulten Hyusein (Kadir Has University)

Effects of Co-Speech Hands Gestures, Mental Imagery, and Semantic Fluency on Creativity in Healthy Aging

11:20 – 12:00 Talk 9

Luyao Wang (Paderborn University)

The influence of shyness on response certainty and gesture production during object naming in preschool children

12:00 – 12:40 Joint discussion and wrap up

Day 1: Interactional phenomena in medical consultations

Why is both verbal and non-verbal communication essential in unanticipated and emergency medical situations?

Mohamed Irfan

Managing Language Barriers in Unplanned Care (MaLBUC), KU Leuven

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This presentation will provide an overview of the MaLBUC project, outlining its objectives and scope. It will also include a brief discussion of preliminary data and findings related to healthcare professionals' experiences.

The MaLBUC project aims to address these issues through an interdisciplinary framework that integrates approaches from sociolinguistics, interpreting studies, medical education, and healthcare communication. The research adopts a participatory case study methodology, actively involving key stakeholders, including healthcare providers and foreign-language-speaking patients.

Exploring monological and dialogical phases in naturally occurring explanations

Josephine B. Fischer¹ & Vivien Lohmer²

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Recent approaches to Explainable AI promise to satisfy diverse expectations of the users by allowing them to steer the interaction in order to elicit the content that is relevant. However, little is known about how the explainee takes part actively in the process of explaining. To tackle the empirical gap, we examined N = 11 naturally occurring explanations in doctor-patient-interactions. We analyzed the verbal behavior of both the explainer and explainee, in the sequential context and could identify phases that are either predominantly monological or dialogical. Further, by applying a structure of conversational jobs, we analyzed whether jobs proposed in the literature can be verified for our setting and what jobs were fulfilled in what kind of phases. The results display that naturally occurring explanations feature monological and dialogical phases. These findings offer important implications regarding the structure of an explanatory dialogue for future designs of artificial explainable systems.

References

Fisher, J. B., Lohmer, V., Kern, F., Barthlen, W., Gaus, S., and Rohlfing, K. J. (2022). Exploring monological and dialogical phases in naturally occurring explanations. *KI-Künstliche Intelligenz*, 36(3), 317–326. <https://doi.org/10.1007/s13218-022-00787-1>.

Changes of the topical structure of explanations are related to explainees' multimodal behaviour

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Everyday explanations are interactive processes with the aim to provide a less knowledgeable person with reasonable information about other people, objects, or events. Because explanations are interactive communicative processes, the topical structure of an explanation may vary dynamically depending on the immediate feedback of the explainee. In this paper, we analyse topical transitions in medical explanations organised by different physicians (explainers) related to different forms of multimodal behaviour of caregivers (explainees) attending an explanation about the procedures of an upcoming surgery of a child. The analyses reveal that explainees' multimodal behaviour with gaze shifts (and particularly gaze aversion) can predict a transition from an elaborated topic to a new one, whereas explainees' forms of multimodal behaviour with static gaze cannot be related to changes of the topical structure.

References

Lazarov, S., Biermeier, K., & Grimminger, A. (2024). Changes in the topical structure of explanations are related to explainees' multimodal behaviour. *Interaction Studies: Social Behaviour and Communication in Biological and Artificial Systems*, 25(3), 257–280. <https://doi.org/10.1075/is.23033.laz>.

How patients' gestures become a shared interactional resource in medical consultations

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I present joint work with Carolina Fenner (IDS Mannheim) on gesture use in medical interaction. Our study is based on 24 recordings of neurological anamnestic interviews with child patients in German. By applying Conversation Analysis (cf. Sidnell & Stivers 2012), we investigate how gestures, which patients use to depict their symptoms or self-remedies, are reused by the doctor for different interactional purposes. These iconic gestures have an illness-specific, local meaning. The doctor does not exactly copy the original gestures, but modifies them to a varying degree. However, this rarely leads to negotiation about the exact movement. During the course of the conversation, a micro-routinization of the gestures is observable, as they are abbreviated by both participants (see also Stukenbrock 2021). Thus, they become a shared interactional resource for addressing the young patients' experiences, which are unusual and difficult to describe.

Understanding Metaphors and Similes in Doctor–Patient Interactions

Mariya Hristova

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In this talk, I present my PhD project based on a corpus of doctor–patient interactions, focusing on semantically creative expressions, in particular metaphors and similes. As a first step, I provide an overview of the selected data, outlining the source domains of the creative expressions. I then turn to the central question of how these expressions are understood in interaction. I apply an extended version of the discourse model proposed by Farkas and Bruce (2010), showing how the common ground is dynamically updated in response to semantically creative expressions.

Day 2: Studies on co-speech gestures across different interaction domains

Interactive gestures accompanying linguistic creativity

Alon Fishman

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In face to face interaction, speakers use co-speech gestures for both referential and interactive functions (McNeill 2006, Rohrer et al. 2025). The interactive function of gestures includes conveying information about the interlocutors themselves (e.g., stance, certainty), and about concurrent linguistic expressions (e.g., emphasis, appropriateness) (Freigang & Kopp 2015). This study explores how speakers use interactive gestures while being linguistically creative, specifically when producing unconventional linguistic forms or re-purposing conventional forms. We predict that speakers proactively use interactive gestures to mark both unconventional and re-purposed forms. We conducted a multimodal reference game, in which 40 pairs of German speakers were tasked with describing and identifying visual stimuli. We elicited linguistic creativity by presenting target stimuli with no conventional labels, and restricting participants' speech to single word descriptions. We will present preliminary data from 17 participant pairs, comprising 346 interactive hand gestures (out of 1987 in total), and discuss representative examples.

General practitioners' use of gestures for communication

Mohamed Irfan

Managing Language Barriers in Unplanned Care (MaLBUC), KU Leuven

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This presentation will examine a case study involving a general practitioner and a patient communicating in a third language. It will focus on how the practitioner employs pragmatic gestures—both manual and bodily—to facilitate communication in a language-discordant clinical interaction.

Effects of Co-Speech Hands Gestures, Mental Imagery, and Semantic Fluency on Creativity in Healthy Aging

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Creativity in later adulthood may depend on the interplay between semantic knowledge, mental imagery, and embodied resources, such as gestures. This study examined how hand gestures interact with mental imagery and semantic fluency during convergent and divergent creativity tasks in healthy older adults. Twenty-one adults aged 69–84 completed tasks under restricted and encouraged gesture conditions. Convergent thinking was assessed with the verbal and visual Remote Associates Tests, and divergent thinking with the Alternate Uses Test. Mental imagery skills and semantic fluency were also measured. Results showed that gesture encouragement facilitated visual convergent thinking, whereas divergent thinking was higher when gesture was restricted. Verbal convergent thinking was not affected by gestures. Individual differences further shaped performance: mental imagery supported verbal convergent thinking under gesture encouragement, while semantic fluency predicted divergent thinking, especially when imagery was low. These findings suggest that embodied support for creativity in aging depends both on task demands and individual cognitive differences.

The influence of shyness on response certainty and gesture production during object naming in preschool children

Luyao Wang

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Extensive research has examined how shyness influences children's verbal behaviour, yet little is known about its relation to children's spontaneous gesture production (Colonnesi et al., 2024; Viertel & Tolksdorf, 2024). Given that shy children tend to avoid risk-taking under uncertainty (Morrongiello & Matheis, 2004), we examined whether shyness affects children's verbal and gestural responses during lexical uncertainty. Thirty German-speaking children (4–5 years) completed an object-naming task involving 18 everyday objects whose conventional names were expected to be unfamiliar, encouraging children to infer or guess object names. Responses were classified into four certainty levels (high, middle, low, almost no certainty), and gestures were coded as iconic, deictic, or non-referential. Mixed-effects analyses showed that higher shyness predicted more responses with almost no certainty, but not gesture production. Instead, gesture production varied with response certainty, suggesting that children's spontaneous gestures are more closely related to their commitment to an answer than to individual differences in shyness.