

## Research Question:

"How does unexpectedness affect the timing of turn-transitions in task-oriented conversations in people with Autism Spectrum Disorder compared to controls?"

## Background:

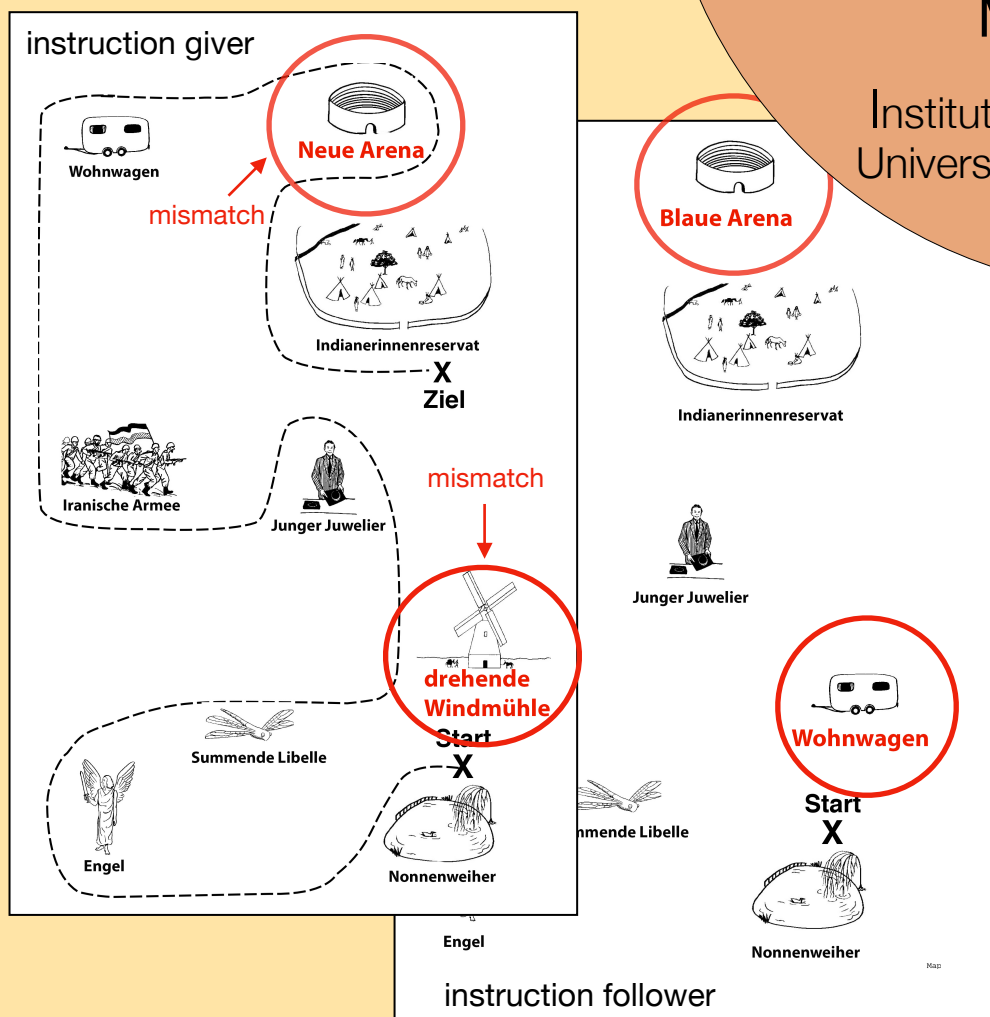
Precise turn-taking is important for successful communication [1] and requires accurate predictions about the end of the interlocutor's turn.

There is a clear preference for short-gap transitions across languages [2].

Long-gap transitions are rare.

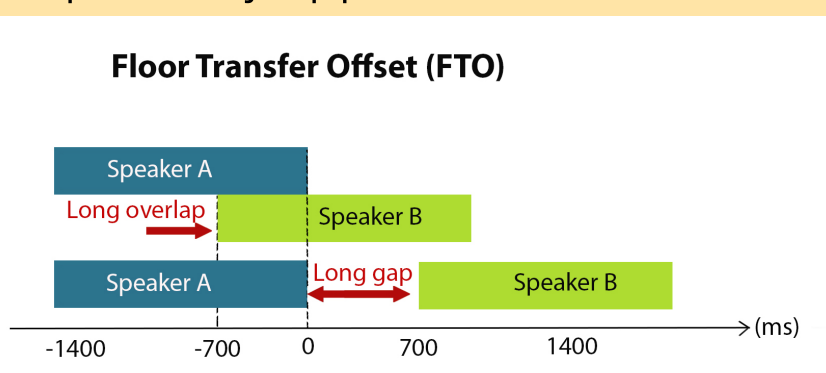
Autism Spectrum Disorder (ASD) involves general difficulties in social communication [3].

## Method:



28 speakers (14 with ASD, 14 controls) participated in collaborative task-oriented dialogues (map task) [4] in homogeneous dyads. Each dyad completed the task twice (Task 1, Task 2)

All turn transitions following introduction of a new landmark ( $n = 342$ ) were compared using an exploratory approach



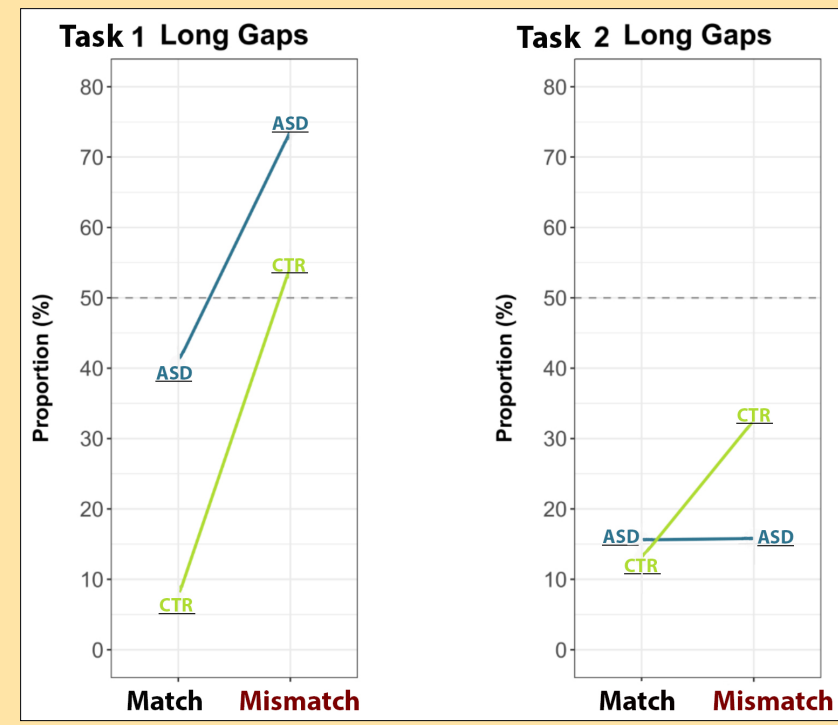
## References:

[1] Sacks, H., Schegloff, E. A., & Jefferson, G. (1974). A simplest systematics for the organization of 501turn taking for conversation. In *Studies in the organization of conversational interaction* (pp. 7-55). 502 Academic Press.

[2] Levinson, S. C. (2016). Turn-taking in human communication: Origins and implications for language 486 processing. *Trends in Cognitive Sciences*, 20, 6-14.

[3] Chasson, Gregory, and Sara R. Jarosiewicz. "Social competence impairments in autism spec- trum disorders." *Comprehensive Guide to Autism* (2014): 1099-1118.

## Results:



### Task 1:

More long gaps for ASD group

Long gap transitions (700ms silence) following mismatches in both groups

### Task 2:

Reduction of long gaps in both conditions and groups

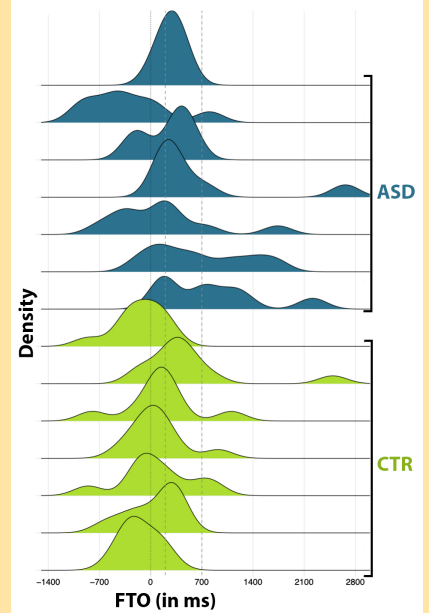
In ASD group no distinction in use of long gaps between matches and mismatches

## „Effects of unexpectedness on turn-transitions in adults with Autism Spectrum Disorder“

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### Task 1 all matches



### Overall:

ASD dyads more variable than CTR

## Conclusion:

Task 1: Both groups express **unexpectedness** using long gaps.

ASD speakers make greater use of long gaps even when reacting to **expected** information.

Task 2: CTR speakers still use long gaps to distinguish between matches and mismatches.

Possibly making it easier for interlocutor to identify problems to be solved

## Outlook:

Investigation of turn-taking and back-channeling behaviour in all remaining turn transitions

[4] Anderson, A. H., Bader, M., Bard, E. G., Boyle, E., Doherty, G., Garrod, S., ... & Sotillo, C. (1991). The HCRC map task corpus. *Language and speech*, 34(4), 351-366.

[5] Kendrick, K. H., & Torreira, F. (2015). The timing and construction of preference: A quantitative study. *Discourse Processes*, 52, 255-289.

[6] Vogel, D., Falter-Wagner, C. M., Schoofs, T., Krämer, K., Kupke, C., & Vogeley, K. (2019). In-terrupted time experience autism spectrum disorder: empirical evidence from content analysis. *Journal of autism and developmental disorders*, 49(1), 22-33.