

Discourse alignment and prediction

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Keywords: alignment, prediction, discourse analysis, corpus studies, interaction

In the course of (spontaneous) interaction, interlocutors tend to converge onto the same mental representation of the topic in a process called interactive alignment, a phenomenon that can be explicitly observed when interlocutors mimic each other's verbal or nonverbal choices (Pickering & Garrod, 2004; Rasenberget al., 2020). Meanwhile, to varying degrees, people tend to predict upcoming information before encountering it (Clark, 2013). Although once debated (see Kuperberg & Jaeger, 2016, for an overview) it is now accepted that speakers are able to predict on different levels (Huettig, 2015). Particularly, work on discourse suggests, amongst other things, that upcoming content (van Bergen & Bosker, 2018; Bosker et al., 2014), discourse structure (Scholman et al., 2017) and turn end (Bögels, & Torreira, 2015; Ruiter et al., 2006) are some of the phenomena speakers are able to predict. There is mounting evidence that both alignment and prediction make conversation easy, and a link between them in dialogue is expectable (Pickering & Garrod, 2021).

However, most studies concluded the findings about alignment based on rather decontextualized language production (see Garrod et al., 2018, for an overview), thus representing language, intentionally or unintentionally, as a relatively static unimodal system of categories and abstract descriptive rules that can be analysed within a clause range. In fact, in spontaneous communication, interlocutors need to package propositional thought based on the hierarchy of speech forms, structural units and nonverbal semiotics on the one hand (Bock & Levelt, 1994; McNeill, 1992), while dealing with the situated interactional issues on the other (Haselow, 2017). The dynamicity and multimodality of spontaneous spoken language communication have led scholars to conclude that spoken discourse develops in a radically different way from how scripted language is produced, which in turn triggered a battery of proposals for how spoken discourse should be adequately described (Chafe, 1994; Du Bois, 2014; Haselow, 2017). Yet, despite these many proposals, we still know surprisingly little of the way alignment is observable at the discourse level in dialogue. Given the scarce understanding of discourse alignment, the predictive discourse comprehension process is still unclear accordingly.

To make progress on these questions and voids, we believe it is necessary to gather contributions from multidisciplinary approaches, such as corpus work, lab-controlled experiments, statistical analysis and computational modeling methods, in an attempt to achieve a more clear and complete vision of the dynamics of these phenomena in natural conversation.

The aim of this panel is to bring together researchers interested in getting a firmer grip on discourse alignment and predictive language processing and the link between these two phenomena and mechanisms. We especially welcome contributions that make use of innovative multidisciplinary methods –mainly observational, experimental and computational– to explore alignment and/or prediction at the discourse level from one of the following perspectives:

- What is the unit of analysis of discourse alignment and/or prediction?
- How do nonverbal semiotics (e.g. gesture) coordinate with speech in dialogue?
- How to measure alignment and/or prediction at discourse level?
- How to statistically or computationally model predictive language processing at discourse level?
- What is the nature of (discourse) alignment, a neutral interactive practice or ultimate goal of communication?
- What factors (linguistic and extralinguistic) affect prediction in conversation?
- What experimental setting is ideal to measure prediction in interaction?
- What effects do familiarity between interlocutors, inferences of the speaker's cognitive state and engagement in conversation, amongst others, have in prediction?
- How do speakers and hearers make use of certain devices in interaction (e.g. discourse markers) to formulate predictions?

Acknowledgments

The research leading to this workshop has been supported by the European Union Horizon 2020 as part of the project Conversational Brains (n° 859588) (<https://cobra-network.eu/>).

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