

particular) can take over information structural tasks and serve to mark focus domains (Ebert, Evert & Wilmes 2011). In this workshop we want to follow up on the recent development to investigate gestures under formal semantic and pragmatic aspects.

## Speech-gesture Interfaces. An Overview

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Hannes Rieser / U. Bielefeld  
Mittwoch, 13.3., 14.00–14.30

AG11

Using theory of grammar tools for description of gesture is not popular among researchers trading in gestural matters. There is, however, an obvious link between gesture research and formal description of language and information: the notion of meaning. Given that we want to get at the meaning and function of gesture, we need a clear notion of meaning and this is not to be had disregarding philosophical, logical and semantic work in the meaning realm. Another link between formal theorizing and gesture research is bound up with the idea that gesture and speech interact: gesture emphasises, specifies or complements the semantics of speech, i.e. gesture and speech interface. The interface machinery useful in this context is a data structure bound to grammar allowing for the exchange of information, viz. the respective meanings of gesture and speech. Along these general lines the talk provides an overview on interface structures in recent research. We shortly introduce McNeill's ideas (1992, cf. Röpke 2011) on this topic and proceed treating proposition-bound interfaces based on Lambda calculus (Rieser 2009/10), Montague Grammar (Giorgolo 2010, Röpke et al. 2013) and HPSG (Lücking 2011, Lascarides and Alahverdzhieva 2010). There have also been various attempts to embed speech-gesture interfaces in dynamic theories of discourse and dialogue, most prominently Lascarides und Stone (2009) using SDRT, and Poesio and Rieser's (2009) approach extending the dialogue model of Poesio and Traum (1997). The following is among the questions of interest touched: Where is the interface situated, is it, e.g. located within grammar or does it constitute an external domain of its own? What are the interface's formal properties, i.e. how is it organized and represented? How is it tied up with the rest of the grammar? Furthermore, which notion of meaning is used to explicate gesture meaning? What is the effect of gesture meaning and meaning of speech: what do they achieve individually and collectively? Finally, a sum-up on the answers to these questions is presented completing the overview.

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## Gestures at the Semantics-Pragmatics Interface

Gianluca Giorgolo / *King’s College, London*  
Mittwoch, 13.3., 14.30–15.00

In this talk I will address the issue of how to best formally model the informational contribution of gesture with respect to our current understanding of verbal meaning. I will take for granted that gestures are used, both consciously and unconsciously, to convey information and that listeners make use of the information conveyed by gestures when decoding the messages of speakers. The open question is how this integrated interpretation is achieved and how we can model it given the toolkit offered by formal semantics.

I will start by overviewing a number of proposals in the literature that present alternative implementations of a unified semantics for verbal language and gestures. Some of these proposals feature a more semantic approach (e.g. Giorgolo [2010]) while other have a more pragmatic oriented point of view (e.g. Lascarides and Stone [2009]). I will explore the relevance of the distinction between lexical and compositional semantics and pragmatics for the issue of gesture semantics. In particular I will analyse the issues we face when modelling the semantic contribution of gestures in light of current developments in formal semantics that clarify the relationship between semantics and pragmatics and that point towards a multilayered picture of meaning contributions [Stanley, 2000, Potts, 2007]. I will reanalyse the results of Giorgolo and Needham [2012] according to this view and compare how gestures behave with respect to linguistic phenomena, such as presuppositions and different