The tone we don't hear - analysing the modifying functions of gestures

Just as speech carries semantic propositions as well as modal and affective tones in prosody (e.g., Lu, Aubergé, and Rilliard, 2012), there can be "tone" in gesture beyond propositional content. Kendon (2004) differentiates between three pragmatic functions in gestures: The *performative* function carries the proposition of an utterance, the *modal* function implicates how a verbal utterance should be interpreted, and the *parsing* function contributes to the structuring of the utterance. Teßendorf (2005) investigated the Spanish "brushing aside" (annoying objects) gesture and found four pragmatic functions: turn taking organisation, structuring the verbal utterance, "metalinguistic" comment, and evoking/performing a speech act.

Here we are concerned with how gestures realise such modifying functions that operate on top of the propositional meaning. In particular, we are interested in how the evocation of these functions is restricted by the gesture itself while it also depends on the verbal and situational context. For example, a gesture holding up a fist in the air along with the words "she beat him badly" will be interpreted as depicting the action itself, while the same gesture along with an utterance like "I won the lottery" would be taken as expressing a feeling of joy. Yet, the very form of the gesture excludes other interpretations.

We hypothesize that certain sub-categories of modifying functions can be identified, which are often conveyed less explicitly and at lower degrees of intentionality (Allwood, 1976), i.e. they are mainly *indicated* (unconsciously sent) or *displayed* (consciously conveyed) but rarely *signalled* (intended to be recognised). We propose four distinct types of modifying functions: focusing, attitudinal, epistemic, and emotional. (1) *Focusing* gestures signal relevance and importance of a proposition (e.g., *"That was something!"* accompanied by a pointing gesture into the air). (2) *Attitudinal* gestures reflect a stance towards the matter of a proposition, e.g., admiration, ignorance, doubt, disappointment, or contempt. Ignorance, e.g., can be displayed by a "throwing something over the shoulder" gesture on the words *"they offer chips today"*. (3) *Epistemic* gestures display the degree of certainty of a proposition (e.g., the common wiggling with the hands to express uncertainty). (4) There may be *emotional* gestures displaying an affective state, e.g., anger, sadness, fear, boredom, or joy. Note that gestures can fall into more than one category at the same time or, depending on context, they may also shift in between these categories.

We have conducted an empirical pre-study on the occurrence of these gesture functions in the domain of describing "impossible objects" (optical illusions). Results show that modifying gestures (in this domain, predominantly focusing and epistemic) are an integral part of natural communication and occur frequently. A first systematic study is underway that investigates the interpretation of such gestures in isolation as compared to with different co-occurring verbal utterances. We will discuss methodological challenges and present first results.

References

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