

## Beyond propositional content: Modifying functions in gesture

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 modifying functions in gesture beyond propositional content. Kendon (2004) identified a *modal* function, which implicates how a verbal utterance should be interpreted, and is similar to the concept of Teßendorf's (2005) *metalinguistic comment*. We aim for a more detailed approach and are concerned with how these modifying functions are realised in gestures.

Modifying functions in gesture operate on top of the propositional meaning of either speech or the gesture itself. Thus, a gesture may carry a pragmatic modification if the meaning of the whole utterance is changed. Natural for pragmatic implications are that they depend on the context and the speaker's intent, which then also holds for modifying functions.

We observe modifying functions being realised in movement patterns: they may be a piece or a part of a gesture or a way of performing it. However, they can be realised in whole gestures as well. One modifying function can be realised in different gestures or movement patterns: e.g., uncertainty could be expressed by wiggling of the hands, shrugging one's shoulders or an open arms gesture.

Our research questions are: Which modifying functions of gesture exist? How do they influence the propositional content of gesture and/or speech? And what does the speaker unconsciously send or intends to convey by these gestures in a natural communication context?

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, 2002): i.e. they are *indicated* (unconsciously sent), *displayed* (consciously conveyed) or *signalled* (intended to be recognised). We propose four types of modifying functions: focusing, attitudinal, epistemic, and emotional.

1. The *focusing* category of modifying functions is used to signal relevance and importance of a proposition: e.g., "That was something!" accompanied by a pointing gesture into the air (importance).
2. With the *attitudinal* category one can reflect a stance towards the matter of a proposition (admiration, ignorance, doubt, among others): e.g., a 'throwing something over the shoulder' gesture accompanying the words "they got a new car" (ignorance).
3. The *epistemic* function enables the speaker to display the degree of certainty of a proposition: e.g., "it will rain today" accompanied by the common wiggling with the hands (uncertainty).
4. There are *emotional* function in gesture displaying an affective state (anger, sadness, boredom, joy, among others): e.g., "I'll call it a day soon" with an arms down and a tense posture (angriness).

Note that gestures and movement patterns can fall into more than one category at the same time. Most of these four modifying functions express either positivity or negativity related to importance, opinion, knowledge, or emotion. Besides that, various other interpretations are possible. A systematic study is underway, investigating the categories of modifying functions closely and testing for

the existence of more categories. We will discuss methodological challenges und present first results.

## References

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