

Everyday language use involves not only written and spoken but also gestured forms of expression. Nevertheless, most current models of linguistic structure do not account for speakers' bodily behaviors. This dissertation contributes to filling this gap by addressing the potential status of manual gestures in two specific frameworks: Functional Discourse Grammar and Cognitive Grammar. A theoretical assessment shows that the former is propitious for modeling the relation between gesture and speech from a formal and discourse-interactional point of view, whereas the latter reveals a close connection between gesture and conceptualization.

In addition, the dissertation reports on a series of web-based and corpus-based experiments which address the challenges that come along with a multimodal view on grammar. A first, exploratory study shows how the functional complexity of manual gestures can be mapped out using statistical techniques. A second study reveals that the functional interpretation of manual gestures depends only moderately on the accompanied speech. Third, the function of a gesture is shown to be largely predictable on the basis of a small number of form features. In addition, a corpus-based analysis reveals that expressions spoken with, versus without, gestures are characterized by distinct distributions of word types. Drawing on these theoretical and empirical insights, the final section of the dissertation provides parallel analyses of various spoken-gestured utterances, using Functional Discourse Grammar and Cognitive Grammar as points of departure.