Intermodal Relations in Multimodal Text

Sabine Bartsch[1]

Abstract

Multimodality, i.e. the integrated use of different modalities such as figures, tables, and visual and virtual models alongside natural language is pervasive in a multitude of communicative contexts. These modalities jointly encode and construe meaning by interacting and making direct or indirect reference to one another in complex and intricate ways in a process termed multimodal semiosis (cf. O'Halloran 1999). From the observation of the predominantly multimodal nature of a large proportion of communication arise a number of questions concerning (a) the content and internal organisation of the individual modalities involved, and (b) the mechanisms of interaction between different modalities within a multimodal text which contribute to its multiple dimensions of meaning. The focus of this paper is on the latter type of issue.

This paper presents research towards modelling multimodal text with a focus on the relations obtaining between different modalities and their contribution to coherence and cohesion. The research presented is based on a multimodal corpus from the domain of data processing in construction, a subdiscipline of mechnical engineering. This discipline, which frequently has to encode meaning that is difficult to convey by means of natural language, has established specific types of modalities in addition to natural language, for example visual and virtual models such as computer-aided design (CAD) models which are used alongside natural language.

Drawing on Systemic Functional Linguistics (Halliday 2004) and Multimodal Discourse Analysis (O'Halloran 2004) as its theoretical background, this paper presents work towards a model of the interaction between different modalities. The paper presents the theoretical foundations as well as suggestions for a model of intermodal relations and introduces the XML-based encoding and annotation of a multimodal corpus. These efforts are exemplified based on some sample research questions concerning coherence and cohesion established through intermodal relations.

References

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[1] *e-mail*: bartsch@linglit.tu-darmstadt.de