

Abstract (200 words)

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Modality choice and integration in domain-specific multimodal discourse

Multimodal discourses are pervasive especially in science and engineering domains (Lemke 1998; O'Halloran 2004). In those domains, specific forms of information dissemination incorporating multiple modalities have developed in order to fit the content to be communicated. The observation of the multimodal nature of discourses in these domains raises questions concerning the semiotic function of the individual modalities as well as the principles underlying their choice and integration into coherent semiotic artefacts. Yet, in order to address such questions, it is necessary to systematically study modality choice and integration based on sufficiently diverse multimodal corpora and suitable models that support the characterisation of modality choice and integration.

This paper presents a model of multimodal discourse that characterises the semiotic properties of different visual, virtual and symbolic modalities and seeks to account for their choice and integration into coherent multimodal documents. The model presented is implemented as an OWL ontology (Web Ontology Language; W3C Recommendation Feb. 2004) and provides the conceptual basis for the annotation and analysis of a domain-specific corpus of multimodal documents. The suitability of the model for the analysis of domain-specific corpora will be exemplified based on sample analyses of multimodal documents from science and engineering.

References:

Lemke, J. L. 1998. "Multiplying Meaning: Visual and Verbal Semiotics in Scientific Text." In: J. R. Martin, Robert Veel. eds. 1998. *Reading Science Critical and Functional Perspectives on Discourses of Science*. New York: Routledge.

O'Halloran, K. 2004. *Mathematical Discourse. Language, Symbolism and Visual Images*. London, New York: Continuum.

OWL Web Ontology Language. W3C Recommendation 10 February 2004.

<http://www.w3.org/TR/owl-features/>