Frames 3.0 – Are all human concepts frames?

Sebastian Löbner (Universität Düsseldorf)

The talk gives an elementary introduction to the notion of frames. Frames have attracted growing interest in linguistics and other fields. The interest is in frames as a very general, but at the same time precise, structure that can be used for describing about everything. In linguistics, applications have been developed in various fields: lexical semantics and semantic composition, syntax, morphology, and phonology. The frame approach is related to formalisms such as HPSG (Head Driven Phrase Structure Grammar). It is, however, more than a formalism. It is part of a general theory of cognitive representations.

The talk will introduce the notion of frames in an informal way, using many examples, some from everyday life, others from linguistics. The notion of 'frame' that is applied here goes back to the cognitive psychologist Lawrence Barsalou. He came up with the 'Frame Hypothesis': that all cognitive representations, i.e. all concepts in our minds, have the form of frames.

The Frame Hypothesis, if true, has far-reaching consequences for linguistics. It predicts that it should be possible to describe as different things as word meanings, syntactic structure, and linguistic sounds in a uniform way. The talk will discuss linguistic examples from semantics and syntax.

The notion of frames emerged in cognitive science (Marvin Minsky, 1974), Linguistic Semantics (Charles Fillmore, 1982), and Artificial Intelligence (Roger Schank & Robert Abelson, 1977): Various Frames = Frames 1.0.

It was developed further, enriched, and defined more precisely by Lawrence Barsalou (1992): Barsalou Frames = Frames 2.0.

In the years 2011 to 2020, a major research group at Düsseldorf University (SFB 991) has developed a formal theory of frames in order to test the Frame Hypothesis in many fields of application: Düsseldorf Frames = Frames 3.0.

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