Conceptual metaphor theory needs more converging evidence – Combining an identification procedure with a computational tool

For contemporary researchers of metaphor, there is no way around Lakoff and Johnson's theory of conceptual metaphor (1980). Conceptual mappings underlying language use within various natural domains of discourse have been identified in hundreds of examples (cf. Kövecses, 2002). However, within and outside the cognitive paradigm, critical voices have been denouncing vagueness and subjectivity of conceptual metaphor analysis (cf. McGlone, 2007). With the intention to counteract such weaknesses, Steen (1999) and Semino et al. (2004) propose the five-step procedure for conceptual metaphor identification, a method which enhances analytical exactness and objectivity of conceptual metaphor theory.

In the proposed presentation, the five-step procedure will be compared to a semantic field analysis applying the computational tool WMatrix (Rayson, 2008). An overview will be given of how both methods independently scrutinize the interaction of concepts underlying metaphorically used words in collocations like *flexible instrument* within their natural context* (using selected cases from the fragments amm (paleontology), as6 (social science), and fef (electromagnetics) from BNC *Baby*, a subset of the British National Corpus). The conceptual core of the five-step procedure is a formalized comparison (step 3), whose sides (which correspond to conceptual domains) are labeled in step 4. In step 5, the conceptual mapping is spelled out. Overall objectivity and reliability is achieved by controlling the analysis with the *Macmillan English dictionary for advanced learners* (Rundell, 2002). The semantic field analysis is substantially distinct from the five-step procedure in that the computational tool WMatrix automatically assigns sets of semantic tags to the lexemes of a text.

The proposed paper is designed to juxtapose the WMatrix output with the domain labels assigned in step 4 of the five-step procedure and the mapping construction in step 5. For *instrument* in the example above, step 4 renders TOOL (source) and METHOD (target), which is supported by WMatrix's output 'objects generally' (source) and 'mental objects: means, method' (target). For *flexible*, step 4 renders MOVEABLE (source) and ADAPTABLE (target), which is supported by 'texture' (source) and 'change' (target). The specific mapping arrived at in step 5 could thus be AN ADAPTABLE METHOD IS (LIKE) A MOVEABLE TOOL. This mapping is supported by WMatrix's tags, which could analogously be composed to form an abstraction like 'change [=adaptability] of a mental object is like the specific texture [flexibility] of a concrete object'.

The paper thus aims to a) test the five-step procedure, and b) to deliver novel evidence for conceptual metaphor.

*BNC Baby, fragment as6: 'The Urban Programme consisted of grants and initiatives *under* the 1969 Local Government Grants Social Need Act which was intended as a *flexible instrument* to provide supplementary help *to* local authorities in the *fields* of housing, education, and health.' (Metaphorically used words printed in *italics* by the analyst.)

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