Exploring Conceptual Metaphors with a Dual Model

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Recent advances in the brain sciences and neural computation have shed new light on the study of metaphor. Lakoff (2008), for example, has applied appropriate neural computational models to correspond with and strengthen the conceptual metaphor theory (Lakoff and Johnson, 1980, 2002). Whilst the application of neural models to researches of metaphor has yielded promising initial results, there is still much to be explored and debated in this new area.

In this paper, I will examine a dual model based on dynamic logic (Perlovsky, 2009). Building upon this dual model, I shall develop a detailed analytical account that is able to explain the metaphoric mechanism.

The dual model connects language (i.e. the linguistic models) and cognition (i.e. the conceptual models) with dynamic logic, which implements both top-down and bottom-up mechanisms to evolve vague and uncertain models into crisp and specific models through processes of differentiation and synthesis (Perlovsky, 2009). The dual model is hierarchical, with its lower-end models grounded in direct perception and embodiment, and its higher-end models representing more abstract and general concepts (see also Barsalou, 1999). Importantly, at every layer of this cognitive-linguistic model there is a similarity measure guided by one's aesthetic emotions that are greatly influenced by one's personal, social and cultural background.

In the case of metaphor, it can be argued that the cognitive drive for metaphoric processing is to extend a comparatively vague conceptual model (e.g. the concept that represents the target domain) to accommodate a new meaning by connecting with another conceptual model (e.g. the source domain) through a crisp linguistic model (e.g. the linguistic metaphor), with the satisfaction of the participant's aesthetic emotions.

In order to discuss the representation of this dual model in metaphoric interpretation, this paper will present a series of case studies that examine participants' construction, interpretation and evaluation of the LOVE IS X metaphor. In the pilot study that discussed the LOVE IS A TYPE OF FOOD metaphor (with the linguistic examples of 'Love is a buffet', 'Love is fast food', 'Love is a fancy dinner at a restaurant' etc), participants have demonstrated a tendency to rely on the more specific linguistic model to accommodate a less specific, and more uncertain conceptual model LOVE. The initial results have also shown the active role of participants' aesthetic emotions in metaphoric construction and interpretation. Detailed results will be reported in the paper.

It shall be argued that the dual model has provided promising solutions for some of the most fundamental issues in conceptual metaphor, as well as in cognitive linguistics.

References:

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