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Metaphor Processing: Looking for Light in a Dark Room

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The major category extension models tend to have two underlying assumptions in common. First, the meaning of the metaphor is derived from the mapping of subordinate features of the vehicle of the metaphor onto the topic of the metaphor. In any metaphor, such as "Susan is a light in a dark room," the object of comparison, "Susan," is the topic, and the vehicle is the object to which Susan is being compared. Glucksberg, McGlone, and Manfredi (1997) differentiate between the contributions of the topic and the vehicle as constraint and ambiguity, respectively. Ambiguity refers to the range of meanings supported by the vehicle, so that a highly ambiguous vehicle like "light in a dark room" would support anything from descriptions of Susan's intelligence to her beauty. Constraint describes how the topic limits the relevant characteristics to be mapped from the vehicle onto the topic. Our conceptual knowledge of "Susan" as a person precludes our belief that she might be electric or have an on-off switch; thus that knowledge of "Susan" limits the range of possible applicable meanings of "light." While the ambiguity of the vehicle and the constraint of the topic do have an effect on the interpretation of the metaphor, the reverse is not true, so that topic ambiguity and vehicle constraint do not affect metaphor meaning (Glucksberg, et al., 1997).

Two major variants of the category extension approach to metaphor processing exist. The property attribution model takes the position that the category extension described above happens immediately upon exposure to the metaphor (Glucksberg, et al., 1997). The topic is treated as a prototypical member of the category designated by the vehicle long enough for the metaphor to be understood. This model accounts for the processing of metaphors which are explicit class-inclusion statements, such as "Susan is a light in a dark room." The other major approach, the conceptual metaphor model, is a more drastic departure from the comparison model (Lakoff & Johnson, 1980). The conceptual metaphor model argues that our representations of concepts in long-term memory are already partially metaphorical, so that the concept "PERSON" may be partially represented by a link to "LIGHT." Understanding linguistic metaphors depends on accessing these pre-existing conceptual metaphorical links. Conceptual metaphor theory appears to better account for the way metaphors can structure a text (Allbritton, McKoon, & Gerrig, 1995).

My previous work has supported Glucksberg and Keysar's (1990) position that conceptual metaphors need not be automatically accessed to understand metaphors in every situation. However, the property attribution model still does not preclude the existence of conceptual metaphors. The goal of this research is to continue the systematic ex-

ploration of the assumptions of the two models, to determine which model offers a better explanation of metaphor processing, and whether a comprehensive theory of metaphor may require multiple models of processing, depending on the nature of the task. This work seeks to accomplish this goal by directly comparing the two models' disparate predictions for the comprehension of metaphors that are more implicit category statements, such as "Susan lit up the room." Processing this metaphor could depend on treating the expressed feature as designating a category (property attribution). Alternative, a metaphor's meaning could be entailed by a partial metaphorical mapping of PERSON as LIGHT. This work will test this hypothesis via use of a priming paradigm adapted from Glucksberg et al. (1997). Subjects will be exposed to a priming sentence including either the topic and vehicle expressed in the sentence, or the conceptual metaphorical linkage that might underlie that structure, to see how each might facilitate the comprehension of a metaphor. In the above example, the primes would employ sentences featuring "Susan," "lit up," and "light," and measure response latencies for comprehension of "Susan lit up the room." The experiment will also test for constraint and ambiguity effects. This work expects to replicate the findings of an interaction between topic and vehicle, as well as implicating a conceptual metaphor link in the understanding of implicit category statements, and by extension, finding evidence for a multiple model approach to the processing of metaphor.

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