The dependence of metaphor theory on frame semantics: Time in the source and target frames of temporal metaphors

Fillmorean conceptual/semantic frames (Fillmore 1985, Fillmore et al. 2004) have always been understood to structure metaphor mappings in Conceptual Metaphor theory (Lakoff & Johnson 1980), though this structuring has not been discussed explicitly until recently (Bouveret & Sweetser 2009; Lakoff in press; Moore 2006; Sullivan 2007). This paper concerns an apparent paradox involving the experiential motivations of the Moving Ego and Moving Time metaphors, and the use of conceptual frames in its resolution. The analysis of temporal metaphors is particularly important because metaphors of this type often stand as examples by which metaphor theory is evaluated.

Essential to the idea of conceptual metaphor is *experiential motivation*, according to which correlations in experience within the source frame of a metaphor motivate the conceptualization of the target frame in terms of the source frame. Consider the Moving Ego metaphor, in which ego metaphorically "moves forward toward the future" as in *We are approaching the end of summer*. In the source frame of this metaphor (RELATIVE MOTION), each farther point that ego traverses in her forward motion correlates with a later time, so that a point which is ahead of ego correlates in experience with her expectation of her future (=later) arrival there. This motivates ego's metaphorical "forward movement into the future" in the target frame (EGO-CENTERED TIME).

In the Moving Time metaphor (e.g. *The end of summer is approaching*) the metaphorical "direction of motion" is "from future to present". The experiential motivation of this metaphor involves a scenario in which a distal object is moving toward ego, and the object correlates in experience with ego's expectation of its future arrival. This scenario motivates the mapping of an approaching object onto a future time, but it also seems to contain a paradox because any point that is ahead of the moving object correlates with a future time, just as in the motivation of Moving Ego. In other words, "the future (=later) to present (=earlier)" directionality of Moving Time seems to violate the temporal structure of motion events in which points farther in the direction of motion can only correlate with later times.

This apparent paradox is resolved via an elaboration of Fillmore's frame semantics that describes the details of the spatial and temporal structure of motion events and takes account of ego's perspective relative to those events. The relevant correlation in the source frame of Moving Time is between the object's getting closer to ego and its expected time of arrival, not between the object's successive locations and the times at which it occupies those locations, as is the case with Moving Ego. Moving Ego and Moving Time have previously been seen as mappings from the *domain* of space to the *domain* of time, a view that obscures the temporal characteristics of the source frame. If we view these metaphors as mappings between frames instead of domains, we are encouraged to take temporal properties of the source frame seriously, and we are not hindered by an artificial division of experience into spatial and temporal domains.

References

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