

Think of it as: Spacebuilders and Grounding in Public Science Discourse
Carol Lynn Moder
Oklahoma State University

In cognitive linguistics, early studies of metaphor gave scant attention to the form of metaphorical expressions and their relation to their discourse context (Lakoff and Johnson 1980, 1999). In Blending Theory, Fauconnier & Turner (2002) do grant a role to form by positing that grammatical expressions cue the listener in constructing a blend, but they do not specifically consider situational discourse relations. Oakley & Coulson (2008) extend the blending theory approach to encompass Langacker's concept of grounding (1999), emphasizing that situational knowledge of the speech event and its purposes and participants are critical to an understanding of the ongoing mapping cued by the discourse. The ways in which metaphorical expressions ground discourse relations between speakers and hearers has been further elaborated by a number of recent discourse-based studies (Cameron 2003; Semino 2008, 2010, Moder 2004, 2008, 2010). One key aspect of such situational grounding which needs further elaboration is the relation of the speaker's construal of the listener's domain familiarity to the form and mapping of the metaphorical expression.

This paper focuses on the mappings cued by two specific space builders often used in metaphorical expressions in natural discourse, *like* and *as* (*Think of the sweet receptor protein as a lock and key, Think of the skin as a desert, What goes on in the playroom is like kittens wrestling*). The domain for the investigation is spoken news media discourse on science. The public science domain is of particular interest because it involves participants with widely discrepant background knowledge of the target domain. The metaphorical expressions in this domain may encode mappings that are conventional to the scientist, but novel to the public audience or they may encode deliberate novel metaphors. The way these different metaphorical expressions cue the relevant mental spaces and mappings is critical to the hearer's ability to understand the discourse topic.

The metaphorical expressions were drawn from a researcher-collected corpus of American National Public Radio news magazine programs (1,000,000 words). We selected segments in which a scientist discussed a recent finding, examining all instances of metaphorical expressions using *like* or *as*. Expressions were categorized through larger corpus searches as representing technical metaphors common to the field of study or more novel metaphors introduced by the scientist for discourse specific purposes. These two categories of expressions were then analyzed with respect to the space builders used to cue them and the position of the target domain inferences in discourse.

For the more novel metaphors, the metaphorical expressions were generally cued with multiple space builders, which explicitly cued target domain information given earlier in the discourse and mapped it to source domain inferences elaborated following the metaphorical expression. For the more conventional technical metaphorical expressions, there was variation in the use of space builders and the explicitness of inference elaboration. The inferences cued by these expressions often were less elaborated, leaving the hearer to run the blend using limited domain knowledge. The implications of these findings for modelling blending in ongoing discourse will be discussed.