Metaphor Understanding and Accessing Conceptual Schema: Reply to Gibbs (1992)

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Gibbs (1992) argued that metaphoric expressions may reflect preexisting conventional metaphoric mappings in long-term memory. The class-inclusion model, in contrast, focuses on conceptual structures that are constructed and accessible in working memory during metaphor comprehension. The authors agree that prestored metaphoric mappings may be available, but they may not be accessible and hence not used in any given context. The authors point out problems in identifying those metaphorical mappings that may be relevant to a given metaphoric expression and suggest that conceptual metaphors may not be identifiable until after a metaphor has been interpreted.

Gibbs's (1992) article raises a number of important issues concerning both the conceptual and communicative functions of metaphor. These issues were not discussed in detail in Glucksberg and Keysar's (1990) article but certainly merit examination. Glucksberg and Keysar argued that metaphors of the form *a is b* are understood directly as class-inclusion assertions, not, as had been argued earlier (cf. Miller, 1979; Ortony, 1979), as implicit similes (i.e., *a is like b*). In such metaphoric class-inclusion assertions, the metaphor topic *a* is assigned to an attributive category that does not have a conventional name of its own, hence the motivation to use the metaphoric form in the first place. The metaphor vehicle *b* simultaneously serves as a prototypical category member and as a name for that category (see also Brown, 1958). To take a well-worked example, when someone says "My job is a jail," the metaphor topic *my job* is declared to be a member of the category of things that the metaphor vehicle *jail* typifies—situations that are unpleasant, confining, difficult to escape from, unrewarding, and so on.

Before addressing the issues that Gibbs (1992) raises, we indicate some areas of general agreement and clarify our original position in light of Gibbs's concerns. We agree entirely with Gibbs's three programmatic conclusions. As he points out, our class-inclusion proposal does require explication of the role of conceptual structures in metaphor comprehension, and in particular the role of conventional metaphoric mappings as proposed by Lakoff and his colleagues (Lakoff, in press). The conventional metaphor position, in turn, requires clarification and specification of precisely how, and under what circumstances,

conventional metaphoric mappings play a role in the production and comprehension of metaphorical expressions. Finally (as will be all too apparent below), we need to develop empirical methods to ascertain (a) the nature of conventional metaphor mappings and how to identify them, (b) how ad hoc metaphoric attributive categories are constructed during the production and comprehension process, and (c) the role of metaphor in everyday thought and categorization.

Gibbs's (1992) primary claim is that conventional metaphorical mappings in long-term memory motivate the meanings of everyday metaphorical expressions. We did (and still do) acknowledge the potential role of conventional metaphors in the generation of ad hoc attributive metaphor categories. We did, however, also argue that such conventional metaphoric mappings *need not* be accessed or used in the production and comprehension processes. The issue then is not how many (very few, some, many, or, as Gibbs argues, the vast majority of) metaphorical expressions are understood by accessing prestored conventional metaphoric mappings, but rather under which circumstances (if any) such mappings come into play. Conventional metaphorical mappings, as well as other types of conceptual schema, can be available yet not accessible in given contexts (cf. Higgins, Rholes, & Jones, 1977; Srull & Wyer, 1979). For example, the metaphoric expression *A lifetime is a day* may be interpreted as meaning either (a) life is short, or (b) the dawn of life is birth, high noon is maturity, and night is death. The knowledge schema that motivate each of these interpretations may be available in semantic memory, but only one (or neither) may be accessible in a given context. How and when conventional metaphors are accessed and used is thus a central issue. We first consider the claim that metaphors form the basis of everyday thought and then consider the role of metaphorical thought in the use of metaphorical language.

Metaphor in Thought and Language

Metaphor is an important part of our conceptual system. As we made clear in our earlier article, metaphors "are necessary

for conceptualizing abstract concepts in terms of the apprehendable, as people do, for example, when they extend spatial concepts and spatial terms to the realm of temporal concepts and temporal terms" (Glucksberg & Keysar, 1990, p. 15). Indeed, a universal of language, and presumably a universal of thought, is the systematic use of spatial terms to describe temporal concepts, such as *then* from the original *thence* and *now* from the original *nonce* (cf. Bierwisch, 1967; Clark, 1973; Traugott, 1978, 1985). Lakoff & Johnson (1980; see also Lakoff, in press) made essentially the same argument in their examination of the analogies (in their terms, *metaphorical mappings*) that people draw between perceptual domains and such abstract domains as time, love, or anger.

Gibbs (1992) points out that the systematicity of literal expressions is one reflection of how abstract domains may be metaphorically structured. Because some aspects of our concept of love may be likened to some aspects of journeys, we can have systematic correspondences between entities within the domains of journeys and love: Two travelers in a vehicle, traveling to common destinations, can correspond to two lovers in a relationship, pursuing common life goals (Lakoff, in press). But what does it mean to "have" such correspondences? It can mean that we can appreciate and understand the analogies between travelers and lovers when it is pointed out to us. It can also, but not necessarily, mean that these systematic mappings between travelers and lovers, vehicles and relationships, and destinations and goals are prestored in semantic memory—that is, they are available when appropriate occasions arise. It can, but again not necessarily, mean that such conventional mappings are accessible in any given context and thus can serve as the conceptual basis for understanding. The available data cannot distinguish among these alternatives.

Fortunately, Gibbs (1992) provides examples of expressions that do allow for differential predictions of the class-inclusion and conceptual metaphor views. Gibbs discusses three metaphorical expressions that share the surface property of referring to journeys: (a) *Our love is a bumpy roller coaster ride,* (b) *Our love is a voyage to the bottom of the sea,* and (c) *Our love is a dusty road traveled.* As Gibbs points out, if these metaphorical expressions reflect spontaneous metaphorical categorization, "then each expression should reflect different metaphorical mappings between different source and target domains" (p. 573). The love–roller coaster ride metaphor would attribute to *our love* the properties of the attributive–diagnostic category typified by roller coasters, whereas the others would attribute the properties of whatever categories that might be typified by the metaphor vehicles *voyage to the bottom of the sea* and *dusty road,* respectively. If people cannot generate any ad hoc category that is typified by a metaphor vehicle, then the metaphor will be difficult to interpret. As a result, people's interpretations should differ from one another's.

If, however, all three metaphorical expressions are motivated by one and the same metaphorical scheme—love as a journey—then they should "convey slightly different entailments about love" (Gibbs, 1992, p. 574). One test of Gibbs's hypothesis is to ask people for their interpretation of metaphors that share, on the surface, reference to love as a journey. If love–journey mappings are used in the comprehension process, then interpretations should include conventional journey-related properties.

If, on the other hand, each metaphor reflects the specific properties of the metaphor vehicle attributive category, then properties relevant to those specific categories should be evident (provided that such a category can be generated).

We asked college students to provide paraphrases of the three love–journey metaphors suggested by Gibbs (1992). Because *roller coaster* conventionally typifies events or situations that swing wildly up and down, we expected general agreement among subjects about the meaning of the love–roller coaster expression. However, we expected a variety of interpretations for the other two metaphors because neither *voyages to the bottom of the sea* nor *dusty roads traveled* typify anything in particular. In all three cases, we did not expect references to journey-related properties because there seem to be no journey-related properties of the metaphor vehicles that could be plausibly attributed to the metaphor topic, *our love.* The interpretations obtained from 12 subjects are shown in the Appendix. The first result to note is that the three sets of interpretations are quite different. They do not reflect "slightly different entailments about love." The second result of interest is that very few of these interpretations make use of any journey-related properties. Each metaphor elicited only one interpretation that seems journey-related (interpretations A6, B11, and C8). As expected, both the voyage and the dusty road metaphors elicited a variety of interpretations that do not cohere as single, identifiable attributive categories. This is because neither metaphor vehicle typifies such a category. In contrast, the roller coaster metaphor did elicit interpretations that converged on a specific category, but this category seems unrelated to journeys. Instead, the interpretations all reflect the notion of psychological ups and downs, where *up* is considered good, *down* bad. To this extent, a basic conceptual metaphor that maps up with positive and down with negative does seem to contribute to the interpretation of the roller coaster metaphor.

We obtained parallel results with a variety of metaphorical expressions, leading us to conclude that people need not access conventional metaphoric mappings when interpreting either novel or conventional metaphors (cf. McGlone, Glucksberg, & Brown, 1991). These results do not, in any way, cast doubt on the possibility that concepts in semantic memory may be organized by metaphor. What we do question is whether such metaphorical structures play a role in any given context. The development of more incisive, on-line measures of comprehension and production processes will ultimately shed more light on this issue of accessibility.

Accessing Conventional Metaphoric Mappings

According to Lakoff (in press), "the system of conventional conceptual metaphor is mostly unconscious, automatic and is used with no noticeable effort." What cues can such a system use to activate the appropriate metaphorical mappings for any given metaphorical expression? We have already seen that surface characteristics of a metaphor do not specify which conventional metaphor is relevant (if any). In our love–journey examples, even the presence of words such as *journey, road,* or *traveled* did not seem to activate journey-related concepts or properties, at least as evidenced in people's interpretations. This problem is not peculiar to metaphor; it pervades all

aspects of language comprehension. As Austin (1962) pointed out, even the presence of the words *I promise* in an utterance does not guarantee that the utterance is intended or understood as a promise. For example, the utterance "You do that again and I promise I'll smack you" is not a promise but a threat.

If the words of a metaphorical expression do not elicit or activate the relevant conceptual metaphor, then what does? One possibility is that the relevant conceptual metaphors can only be identified *after* the metaphor itself has been interpreted. If conceptual metaphors are used to interpret metaphorical expressions, then it would seem that they would have to be used in the context of an inference process that can evaluate the potential relevance of alternative metaphorical mappings before settling on the one that is most relevant in a given discourse context.

Conclusion

The class-inclusion view of metaphor understanding accounts for the specific differences in the meanings of metaphorical expressions that, on a purely conceptual metaphor view, should have essentially the same meanings. The conceptual metaphor view provides a coherent account of systematicities in conventional language use. Both views face the challenge of showing how speakers and hearers integrate linguistic, conceptual, and discourse knowledge to produce and comprehend metaphorical expressions.

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Appendix

Three Love–Journey Metaphors and Their Interpretations

(A) Our love is a bumpy roller coaster ride.

1. We have our good days and bad days.

2. Although we might have highs and lows in the relationship, we're having fun while it lasts.

3. Our love varies a great deal, from extremes of joy and happiness to extremes of pain and sadness.

4. We have some really troublesome times, but they are countered by some terrific times.

5. We have good times and bad times together.

6. We are in a mood elevator that won't let us out on any floor.

7. Our love is full of ups and downs.

8. Our love is exciting, but not very stable.

9. Our love is full of fights and bad times but accompanied with frequent high, exhilarating times.

10. There are good times and times [sic] in our relationship.

11. Our love has its ups and downs but is always exciting.

12. Our love determines whether life at the moment is up or down.

(B) Our love is a voyage to the bottom of the sea.

1. Our relationship is not going to work—it's going to kill us both.

2. Our love presents new and exciting opportunities for us to discover ourselves and each other.

3. Our love is constantly revealing the hidden delights of an uncharted, unpredictable world.

4. Through our love, our deepest emotional natures have been revealed and understood.

5. Our love is mysterious and dangerous.

6. We're drowning in each other's problems.

7. We share experiences together that we have never had before.

8. Our love is exciting and dangerous.

9. Our love is a series of discoveries of the unknown.

10. Our love is dangerous and disastrous for us both.

11. We don't know where our love is headed.

12. We don't talk enough. We are always silent when we're together.

(C) Our love is a dusty road traveled.

1. Our relationship is a mess—we have all kinds of problems that get in the way.

2. Our love is tried and true—it will always exist no matter what.

3. Our love has successfully seen us through uncomfortable and straining situations.

4. Our love has supported us through difficult times.

5. We have been through a lot together and still kept going.

6. We're "copycats" of relationships that have already been.

7. Our love is not easy. Some times are tough, but we don't give up.

8. Our love is a difficult journey.

9. Our love is familiar, comfortable, safe, secure, no surprises but not very exciting or changing.

10. We have shared many experiences and have spent a lot of time together.

11. Our love is something imperfect, but we've chosen to endure the difficulties.

12. Our love is like ones that we've experienced in the past, full of antidotes [sic] and good times as well as bad times.