

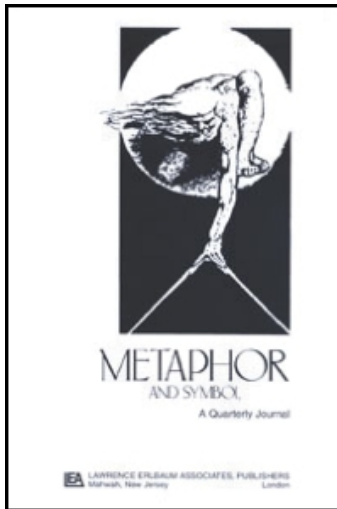
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The Paradox of Metaphor: Why We Need a Three-Dimensional Model of Metaphor

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Current research findings on metaphor in language and thought may be interpreted as producing a paradox of metaphor; that is, most metaphor is *not* processed metaphorically by a cross-domain mapping involving some form of comparison. This paradox can be resolved by attending to one crucial aspect of metaphor in communication: the question whether metaphor is used as deliberately metaphorical or not. It is likely that most deliberate metaphor *is* processed metaphorically (by comparison), as opposed to most nondeliberate metaphor, which may be assumed to be typically not processed metaphorically (that is, by categorization). This resolves the paradox of metaphor because it suggests that all “metaphor in communication” (all deliberate metaphor) is processed metaphorically. Detailed comments are offered on the notion of metaphor deliberateness and on the nature of a three-dimensional model of metaphor in discourse involving metaphor in language, thought, and communication.

Most contemporary metaphor theorists hold that the typical function of metaphor, simile, and related figures of speech is to map correspondences across two concepts (categories, spaces, or domains). Metaphors in language invite people to understand one thing in terms of another, and this involves various forms of analogy, similarity, and comparison in thought (for a broad-ranging review, see Steen, 2007). Examples include seeing “*Juliet as the sun*,” “*atoms as mini-solar systems*,” “*debates as war*,” “*time as money*,” “*religion as the opium of the people*,” and so on. Such linguistic invitations to conceptualize one thing in terms of another can be expressed in various ways (metaphor, simile, analogy, extended

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comparison, allegory, and so on). They also can occur for diverging communicative purposes in all domains of discourse: for instance, metaphor may be divertive in literature and conversation, informative in news and science, persuasive in advertising, politics, and science, and instructive in education. Thus, metaphor may be regarded as an essential tool in language, thought, and communication.

Contemporary metaphor theory and research appear to have focused on the nature and function of metaphor in language and thought, at the expense of metaphor in communication. The reason why people use metaphor in diverging ways within and between various domains of discourse has only recently been placed on the agenda, and most of these discourse-analytical studies of metaphor (in education, politics, religion, and so on) try to account for communicative aspects of metaphor in terms of their conceptual and/or linguistic properties. A well-developed, explicitly three-dimensional framework for the interaction of language, thought, and communication in metaphor is currently not available.

It is the aim of this paper to show that such a three-dimensional model is needed and how it can be developed on the basis of our current knowledge of metaphor in language and thought. Research findings on metaphor in language and thought may be interpreted as producing a paradox of metaphor, suggesting that it is likely that most metaphor in language is not processed metaphorically, that is, by a cross-domain mapping involving some form of comparison. This unacceptable contradiction can be resolved by paying attention to one crucial aspect of metaphor in communication: the question whether metaphor is produced or received as deliberately metaphorical or not. It is argued here that it is likely that most deliberate metaphor *is* processed metaphorically (by comparison), as opposed to most nondeliberate metaphor, which is assumed to be typically not processed metaphorically (that is, by categorization). This yields a solution to the paradox of metaphor, because it suggests that all “metaphor in communication” (all deliberate metaphor) is processed metaphorically. More detailed comments then will be offered on the notion of metaphor deliberateness and on the nature of a three-dimensional model of metaphor in discourse involving metaphor in language, thought, and communication. The relations with some alternative accounts will be discussed by way of evaluation.

A PSYCHOLINGUISTIC CRACK IN THE COGNITIVE-LINGUISTIC MIRROR: SOME METAPHOR IS NOT PROCESSED METAPHORICALLY

One basic tenet of contemporary metaphor research is that metaphor in language and thought is not typically deviant, novel, and erratic, but rather natural, conventional, and systematic (Gibbs, 1994). This claim was most vociferously propounded by

Lakoff and Johnson (1980; cf. 1999), who presented an analysis of the ubiquity of metaphor in language and thought which triggered a revolution in metaphor studies. Their most important theoretical claim is that metaphor in language is based on conventional mappings between conceptual domains in thought, such as “love” and “journey,” or “time” and “money,” which can account for numerous conventionally metaphorical linguistic expressions such as *I have lost an hour searching for my keys* (cf. Kövecses, 2002, for a broad-ranging introduction). What is more, Lakoff and Johnson and other cognitive linguists also hold that these cross-domain mappings are in fact cognitively realized during metaphor processing by individual language users. The cognitive-linguistic account is not limited to the symbolic or semiotic structure of metaphor in language and thought, but also aims to serve as a model for behavioral accounts of metaphor in people’s individual cognitive processing.

Psycholinguistic evidence to support the cognitive-linguistic view of metaphor was positively reviewed by for instance Gibbs (1994), but psycholinguist Sam Glucksberg (2001) and his colleagues took a more skeptical view. Their recent work concludes that some metaphors are not processed as cross-domain mappings (by comparison) but as forms of categorization. An example here would be a sentence such as *my lawyer is a shark*, in which *shark* is analyzed as referring to a superordinate category that encompasses both lawyers and sharks as entities that are vicious, aggressive, merciless, and so on (Glucksberg & Haught, 2006: 362). This is a recent position and a self-acknowledged, less extreme view than Glucksberg’s original claim, which was diametrically opposed to Lakoff and Johnson, and held that all metaphor is not processed by comparison but by categorization (Glucksberg & Haught, 2006: 363). Having adopted a more moderate position, Glucksberg and Haught (2006: 363) presently aver that “The issue now is, when and under what circumstances are metaphors processed as categorizations, and when as comparisons?”

The theory that has been most ambitious in addressing this question is the Career of Metaphor Theory advanced by Gentner and Bowdle (2001; Bowdle & Gentner, 2005). Details of this theory are under attack in Glucksberg and Haught (2006), but the Career of Metaphor Theory does follow up on many of the research findings on processing by categorization produced by Glucksberg and others. The Career of Metaphor Theory has specifically suggested that there is one crucial property of metaphor that affects whether it is processed by comparison or categorization: its degree of conventionality. In particular, conventional metaphors may be processed by categorization or comparison, whereas novel metaphors are processed by comparison alone (Gentner & Bowdle, 2001). As a result, conceptual mappings across domains do not always have to be realized as such in cognitive processing by means of comparison. This view also goes against the initial audacious hypothesis of Lakoff and Johnson (1980) that all metaphor is based on live cross-domain mappings (cf. Lakoff & Johnson, 1999).

Psycholinguistic research in two different schools of thought has hence produced a first crack in the mirror so boldly erected in cognitive linguistics, which displayed all metaphor as processed by cross-domain mapping.

Gentner and Bowdle assert that many conventional metaphors are processed not by comparison but by categorization, along comparable lines as the ones suggested by Glucksberg, in which addressees activate a conventional superordinate conceptual category that encompasses the source and the target of a metaphor, or they even directly activate the conventional target category of the metaphorically used vocabulary in question. One of Gentner and Bowdle's examples is *encyclopedias are gold mines*, in which people may immediately access the conventionally associated category "a source of something valuable" without paying attention to the original category belonging to the word *gold mine*. This shift in processing from novel to conventional eventually may lead to the death of metaphors, with every link between conventionally related target and source getting lost in people's minds. The change in processing operations from comparison to categorization as a result of metaphor conventionalization has been called the career of metaphor (Gentner & Bowdle, 2001; Bowdle & Gentner, 2005).

The Career of Metaphor Theory posits that metaphor processing by either comparison or categorization is not only determined by metaphor conventionalization, but also by metaphor form. Thus, when the conventional metaphor of seeing faith as an anchor is presented in the form of a simile, *faith is like an anchor*, it is processed by comparison not categorization (Gentner & Bowdle, 2001: 233). And when a novel metaphor is not presented as a simile (e.g., *A mind is like a kitchen*) but rather as a regular metaphor (*A mind is a kitchen*), people are garden-pathed into attempting a categorization process using the linguistic form of the metaphorical thought, trying to put the concept of mind into the category of kitchens before they backtrack and set up a comparison to resolve the meaning of the utterance. The two factors of linguistic form (simile versus metaphor) and conceptual structure (conventional versus novel) have been shown to interact in predictable ways when looking at processing.

The relation between the factors of linguistic form and conceptual structure in the Career of Metaphor Theory offers an attractive two-dimensional model of metaphor that affords examination of the interaction between metaphor in language and thought. It can account for some of the most important predictions and insights about metaphor processing of Conceptual Metaphor Theory (Lakoff & Johnson, 1980, 1999) and Class-Inclusion Theory (Glucksberg, 2001; Glucksberg & Keysar, 1990, 1993). For instance, the question of whether metaphors operate at the level of individual concepts or entire conceptual domains is claimed to depend both on their degree of conventionality and on their linguistic form (Bowdle & Gentner, 2005). And experimental work on *TIME AS SPACE* has provided converging evidence that people use spatial conceptual metaphors in temporal reasoning (Gentner, Imai, & Boroditsky, 2002), although the authors

suggest that it may be possible that this is a special case among metaphorical systems (or conceptual metaphors). The Career of Metaphor Theory thus has a lot going for it in terms of theoretical sophistication and empirical support.

This is not to say that all details have been resolved or that all participants in the debate even agree as to which details are most problematic and relevant. However, for the present purposes, two conclusions may be drawn for now:

1. There is a considerable amount of evidence that suggests that not all metaphor is processed by comparison, raising a question about the conditions in which metaphor is processed by comparison or categorization;
2. There is at least one line of research on metaphor, the Career of Metaphor Theory, which can offer a plausible framework for addressing this issue by drawing attention to the role of the conventionalization of metaphorical meaning in linguistic form and conceptual structure—conventionalization being an issue that has been central in contemporary metaphor research since the early '80s.

These conclusions form a serious problem for the cognitive-linguistic account of all metaphor “in language” as processed by cross-domain mapping “in thought.”

Another advantage of the Career of Metaphor Theory is its compatibility with the distinction between analyzing metaphor as symbolic structure, on the one hand, or as cognitive processes and their products, cognitive representations, on the other (Steen, 2007). This distinction is important to preserve a unified picture of the field of metaphor research in which cognitive linguists and psycholinguists have to bring together their findings. If this is not done, Glucksberg and his colleagues have a point in raising the question of whether some of the metaphors discussed in cognitive linguistics are genuine metaphors, simply because they can be seen as forms of polysemy that can be handled by lexical disambiguation processes (e.g., Keysar, Shen, Glucksberg, & Horton, 2000; McGlone, 2007). If symbolic and behavioral approaches to metaphor are placed within one framework, however, it can be shown that this is a processing argument that does not undermine the (essentially symbolic) evidence for large-scale and systematic semantic relations in the language system that need an explanation in terms of metaphor. It would seem to be preferable to keep these linguistic items on board as potentially metaphorical in order to examine the way they are processed in cognition as one particular class of metaphor, whether this turns out to be by comparison, categorization, or even lexical disambiguation (cf. Giora, 2003).

Honoring the distinction between symbolic and behavioral research within an encompassing framework of metaphor research also facilitates objecting to Glucksberg and Haught's (2006) dismissal of the attempt to demarcate metaphor in the symbolic structure of language itself on the grounds that it would be “a hopeless task” and merely “a convenient fiction” (p. 377). As has been shown by the Pragglejaz Group (2007), if metaphor identification in language is

approached with the appropriate set of assumptions and tools, it yields results that are reliable as well as valid for contemporary metaphor research. These findings are even expressly intended to be useful for psycholinguistic research into metaphor of the kind favored by Glucksberg himself, “discovering the processes that people use to understand language use in context” (Glucksberg & Haight, 2006: 377). This type of project presupposes valid and reliable analyses of the language itself that is involved in “language use in context.”

In sum, the Career of Metaphor Theory offers an approach in which conventional metaphors are metaphorical expressions indeed, even if they need not always be processed metaphorically, that is, by comparison. This is partly because it is possible to relate conventional metaphors in language to metaphorical conceptual structures in thought (Lakoff and Johnson’s conceptual metaphors). The description of the linguistic forms and conceptual structures as cross-domain mappings of these metaphors typically has been a matter of symbolic analysis, which eventually aims to capture the long-standing idea that metaphors set up nonliteral comparisons between distinct ideas (Steen, 2007). But this symbolic description does not force researchers to conclude that all of these structures necessarily have to be actualized in cognitive processing by each and every individual. Nor can it be concluded that they *therefore* are not metaphorical if these structures do not trigger cross-domain mappings in processing. What we have instead is a wide array of different types of metaphors in language and thought (analyzed as symbolic structure), and what we wish to find out is how these metaphors in language and thought are realized in processing (Steen, 2007). As has been repeatedly emphasized by Gibbs (e.g., 1999), there are various interpretations of the relation between these symbolic and behavioral aspects of metaphor, and empirical research should treat these as competing accounts.

This is the context within which current psycholinguistic research can be interpreted. Glucksberg, Gentner, and their colleagues have shown that not all metaphors are necessarily processed by comparison, with Gentner and Bowdle holding that conventional metaphors expressed as metaphors (not similes) may be typically processed by categorization. In other words, not all metaphors are necessarily processed metaphorically (that is, by setting up a cross-domain mapping). This psycholinguistic crack in the cognitive-linguistic mirror of metaphor is the basis of the paradox of metaphor. It will now be formulated in an even stronger form by including new findings from corpus-linguistic research on metaphor in discourse.

BREAKING THE COGNITIVE-LINGUISTIC MIRROR: IT IS LIKELY THAT MOST METAPHOR IS NOT PROCESSED METAPHORICALLY

The cognitive-scientific foundations of the previous and comparable models lie in their shared interest in the complex interactions between the linguistic forms

of metaphor in language and the conceptual structures of metaphor in thought (Steen, 2007). They all reflect an important fact about metaphor in cognitive science: the cognitive turn in metaphor studies, initiated three decades ago by Ortony (1979/1993) and Honeck and Hoffman (1980) in psycholinguistics, and by Lakoff and Johnson (1980) in cognitive linguistics, is here to stay. Metaphor has been changed from a figure of speech to a figure of thought (Lakoff, 1986a). The distinction, but also the connection, between the linguistic forms and the conceptual structures of metaphor evidently has offered a productive map of the field, generating new questions and insights that have refreshed and improved our view of the nature and function of metaphor in language and thought.

Yet there is one crucial question that has not been extensively addressed by any of these two-dimensional models of metaphor. This concerns the reason why people use one of the various classes of metaphor as distinct from another. Another way of looking at this question is to ask when conventional or novel metaphors—in which linguistic forms, metaphor, or simile—are used for which communicative purpose. It is this question that reveals a paradox about metaphor that has not been noted in this way, and which will be formulated in this section. The paradox suggests that the two-dimensional map of metaphor in language and thought, productive as it may have been, yields an incomplete and eventually misleading model for metaphor, and that a three-dimensional framework is preferable.

Which linguistic forms related to which metaphorical conceptual structures are used for which communicative purposes in which contexts of discourse? Two research programs at VU University Amsterdam are collecting data from two corpora that were specially designed for answering this question. The corpora consist of 200,000 words of British English sampled from the BNC-Baby and 100,000 words of Dutch discourse. They include 50,000 word samples of conversation, news, fiction, and academic writing for English, and of conversation and news for Dutch. They were hand-tagged by two teams of researchers on a word-by-word basis, according to a method that is a further development and refinement of the technique published by the Pragglejaz Group called MIP (Pragglejaz Group, 2007; Steen, Biernacka, et al., in press).

MIP aims to identify all metaphorically used words in natural discourse on the basis of an explicit set of instructions that are meant to capture the main findings of cognitive-scientific metaphor research in language and thought as described previously. MIP has been developed and tested by a group of ten metaphor researchers to provide a reliable tool for metaphor analysis. One statistical test of the reliability of MIP on two small texts of almost 700 words each yielded average Cohen's Kappas of 0.70. The extension of the Pragglejaz method in the VU University project is called MIPVU and roughly aims to do the same thing as MIP, with a number of small alterations as well as details added. MIPVU is based on a small manual explaining the large number of decisions that have to be

taken by analysts when they judge a stretch of discourse as metaphorical. MIPVU has better reliability coefficients than MIP: average Cohen's Kappas between pairs of analysts in a series of tests covering larger amounts of materials over the entire period of annotation are more than 0.80 before discussion. These averages hold between four independent analysts for the English language project, and between three independent analysts for the Dutch language project.¹ Fleiss's Kappa, measuring agreement between the complete groups of analysts at once, is equally high. Within each of the two sets of analysts there is unanimous agreement of more than 90% before discussion, and by far the greater part of all cases of disagreement is resolved by discussion.

More interesting for the present purpose are the preliminary results of these corpus-linguistic investigations. First of all, even though MIP and MIPVU have been conceived to capture as much metaphor in discourse as possible, only 13.5% of all lexical units in our corpus can be classified as related to metaphor. It is certainly not true that adopting a cognitive-linguistic perspective on metaphor turns everything metaphorical. But what is most important, the results show an overwhelming predominance of conventional (as opposed to novel) cross-domain mappings expressed as metaphor (as opposed to simile): 99% of all metaphor in academic discourse, news discourse, fiction, and conversation is of this type. For English, this evaluation is based on the occurrence of the relevant metaphorical sense of the lexical units in a user dictionary of English (Rundell, 2002). When people communicate by metaphor, they massively prefer conventional metaphor to novel metaphor, and hardly ever use simile to express those metaphorical intentions.

The psycholinguistic findings of the Career of Metaphor Theory suggest that conventional metaphors expressed as metaphors, not similes, are often or even typically processed by categorization instead of comparison. Since our corpus-linguistic observations show that the bulk of metaphor in discourse is of this type, it is likely many or most metaphors in authentic language use are processed by categorization, not comparison. To rephrase, many or most cross-domain mappings "in language" (if defined as corpus data) may not be processed as cross-domain mappings "in thought" (if defined as on-line processing). This is the paradox of metaphor: a lot of metaphor may not be processed metaphorically, that is, with language users activating two comparable or parallel domains and retrieving or (re)constructing a mapping between them. What is metaphorical to the linguist threatens to be not metaphorical to the psycholinguist. The psycholinguistic

¹The English language project originally set out with Ewa Biernacka, Lettie Dorst, Anna Kaal, and Irene Lopéz-Rodríguez, and then finished with Lettie Dorst, Berenike Herrmann, Anna Kaal, and Tina Krennmayr, with no reliability differences between the two teams. The research for the Dutch-language project is carried out by Tryntje Pasma, who was joined by Lettie Dorst and Anna Kaal for the reliability tests.

crack now threatens to break the cognitive-linguistic mirror. The contradiction between the claims from the two disciplines poses a grave threat to the credibility of all metaphor research.²

RESOLVING THE PARADOX

The paradox of metaphor, I hope to demonstrate, is a strange and surprising consequence of the cognitive-scientific focus on the interaction between metaphor in language and thought. The paradox can be resolved by situating metaphor's linguistic forms (metaphor and simile) and conceptual structures (novel versus conventional) in a three-dimensional theoretical framework that also includes communication. This framework is not cognitive-linguistic or psycholinguistic, but rather discourse-analytical. When metaphor is studied as part of actual language use, or events of discourse, it does not only manifest a linguistic form and a conceptual structure, but also a communicative function.

There are many different aspects to the communicative dimension of metaphor in discourse, as there are to its conceptual and linguistic dimensions (e.g., Cameron, 2003, 2007; Cameron & Deignan, 2003; Cameron & Low, 1999; Charteris-Black, 2004; Charteris-Black & Musolff, 2003; Cienki & Müller, in press; Eubanks, 2000; Goatly, 1997; Müller, in press; Musolff, 2004; Ritchie, 2006; cf. Steen, 1994, 1999a, 1999b, 2004, 2006, 2007). What we need for metaphor, in my opinion, is a multidimensional/multifeature model that is structurally comparable to Douglas Biber's work on registers (e.g. Biber, 2000; cf. Steen, 1999b). Quite a few of these publications have pointed to the need for cognitive scientists to pay more attention to the communicative aspects of metaphor if they want to make a connection with the use of metaphor in discourse. Yet none of these publications has led to the identification of the paradox of metaphor as formulated here, nor to the kind of three-dimensional model that I am proposing here by way of solution. They may eventually turn out to be compatible, but that is a matter for future discussion.

The particular issue I am drawing attention to here is that there is one crucial communicative aspect of metaphor that has been unduly neglected in most metaphor research, some exceptions apart (Cameron, 2003; Charteris-Black, 2004; Goddard, 2004). This communicative aspect has to do with the deliberate versus nondeliberate use of metaphor by language users in production and reception in

²There is one objection to this argument that may be based on work done by Gibbs (e.g., 1994, 2006) and others, concluding that many conventional metaphors expressed as metaphors are in fact processed by cross-domain mapping (that is, some form of comparison), not by categorization. If this evidence is accepted, then it remains an open question whether most metaphor in discourse is likely to be processed by categorization. This looks like a serious objection to my account, but it can only be defused when I have presented my solution to the paradox of metaphor. I aim to throw a different light on this type of evidence, developing an alternative interpretation of the data.

particular ways that are related to the encompassing event of discourse they are involved in. I hope to show that this neglect has distorted our view of the nature and function of metaphor in language and thought. Metaphors have linguistic, conceptual, and communicative properties, and the latter have been ignored or interpreted in conceptual or linguistic terms instead of their own. I will now first discuss how metaphor deliberateness may resolve the paradox of metaphor, then continue with a theoretical account of why metaphor deliberateness belongs to the separate dimension of communication, and finally evaluate the resulting three-dimensional discourse-analytical model of metaphor with respect to related and alternative proposals.

Deliberate Metaphor

I propose that a metaphor is used deliberately when it is expressly meant to change the addressee's perspective on the referent or topic that is the target of the metaphor, by making the addressee look at it from a different conceptual domain or space, which functions as a conceptual source. In cases such as *Juliet is the sun*, this is precisely what is being asked of the addressee. The utterance expresses a blatant falsehood, while drawing attention to the new information presented at the end of the sentence that causes the falsehood, *sun*. It cannot be anything but a deliberate invitation for the addressee to adopt a different perspective of Juliet from a truly alien domain that is consciously introduced as a source for re-viewing the target. As such, it may be expected to induce comparative processing along the lines of the account proposed by the Career of Metaphor Theory.

However, when somebody utters *we have come a long way* to talk about a relationship, it is quite dubious whether the addressee is in fact being asked to actually change their perspective on the topic of the sentence (the speaker's relationship), or whether the speaker wishes to change the perspective. Current cognitive-linguistic analysis of the language and the conceptual structures would suggest that such a perspective change might have to go from the domain of relationships to the domain of journeys. Yet most language users might find this an odd and probably distracting suggestion. It might take a short course in cognitive linguistics to explain to them what might be intended by the suggestion to re-view love as a journey, and they might wonder why on earth they would have to go to all this trouble. Note that this would probably not be the case for *Juliet is the sun*. As a result, this type of nondeliberate metaphor may be expected to trigger processing by categorization along the lines demonstrated by both Glucksberg and Gentner.

The psycholinguistic evidence that people do appear to interpret at least some aspects of conventional metaphor as cross-domain mappings, or in terms of existing patterns of conceptual metaphor, should now be addressed. The important theoretical point to make here is that conventional metaphor is not identical with

nondeliberate metaphor. It is quite possible for people to use conventional metaphor very deliberately, “use” being a cover term for both production and reception. Examples of such usage can be found on the sports page of any newspaper, where deliberate metaphor use is signaled by word play and other added rhetorical devices.

Some or many of the findings that conventional metaphors are processed by comparison may therefore be alternatively explained as due to their processing as relatively deliberate cross-domain mappings. This may be due to either the materials of the experiment (for instance, when stimuli employ more words from the same source domain, a metaphor may be more easily experienced as deliberate), or to the nature of the task (for instance, interpretations of metaphors that follow the click of comprehension may become relatively conscious, deliberate explorations of metaphors *as* metaphors). Processing by comparison (or cross-domain mapping in cognitive-linguistic terminology) is precisely what I propose should be expected when conventional metaphors are used deliberately.

Thus, that conventional metaphor may be processed by comparison is not denied here: when they are deliberate, they are probably processed in this way. However, that this type of processing is representative of what happens as a rule is radically questioned, simply because metaphor in general is not deemed to be deliberately used very frequently. A meta-analysis of the evidence in favor of metaphor processing by cross-domain mapping from the perspective of deliberate versus nondeliberate metaphor use is hence clearly in order. The present article hopes to be a first contribution to developing such a theoretical perspective.

In addition, the validity of the evidence for metaphorical thought has been radically questioned by another set of perspectives by Greg Murphy (1996, 1997). He concludes that “much of the problem is that the notion of metaphoric representation is too vague at this point to be empirically confirmed or disconfirmed” (p. 99). This evaluation recently has been endorsed and enhanced by McGlone (2007). My position here is that care should be exercised when claims are made that there is substantial evidence for the cognitive-linguistic view of metaphoric thought, and that it is interesting to develop the present alternative account as long as it can, in principle, accommodate the findings reported so far—as I have attempted to do just now.

Deliberate metaphors are those cross-domain mappings that involve the express use, in production and/or reception, of another domain as a source domain for re-viewing the target domain. Deliberate metaphor is a relatively conscious discourse strategy that aims to elicit particular rhetorical effects. This is what distinguishes deliberate metaphor from all nondeliberate metaphor. Nondeliberate metaphor may still be called intentional, but this would be because all language use is intentional in some sense (Gibbs, 1999). From that perspective, all metaphor is part of intentional language use, and this is a notion that has been broadly used in linguistics as well as in psycholinguistics (e.g., Gibbs & Tendahl,

2006; Tendahl & Gibbs, in press). The conceptual effects of metaphor that are uncovered in cognitive linguistics and Relevance Theory alike are therefore intentional in that sense. But not all intentional metaphorical language use is metaphorically deliberate in the sense of consciously being selected to achieve a particular communicative, and especially rhetorical, effect by evoking a conscious change of perspective from the standpoint of another conceptual domain. This particular aspect of metaphor in communication (as contrasted with language and thought) has not been singled out for the special kind of attention that I am advocating here.

In production, deliberate metaphor use may be conceptualized as a distinct rhetorical strategy that senders utilize to achieve a specific discourse function by means of a metaphorical comparison. There are many such discourse functions that may be imagined (cf. Steen, 1999b), but this may most clearly have to do with the function of the discourse event in which language users are engaged. Thus, metaphor may be used deliberately for divertive purposes in literature, advertising, or journalism; or it may be used deliberately for persuasive purposes in advertising or in politics and government communication, and so on. A good case in this respect is the rhetorical exploitation of *the house of Europe* in European political discourse (Chilton, 1996).

A brilliant illustration of this communicative aspect of metaphor is afforded by a new commercial for a particular beer, which shows an Austrian rock band (Opus) in the studio struggling to find the right metaphor for their new song about *life*. They consider various options and continue to discard them, including *life is a rocky road* (“Viel zu superficial”), *life is a symphony*, *life is a cosmic symphony* (“Das rockt nicht, wir sind underground”), *life is a tunnel with black light at the end* (“Das ist zu dark. Life is a celebration”), and *life is like a fire* (“Eine sheiss metaphor”). Then the band members are given beers of the brand that the commercial promotes. The scene abruptly ends and cuts to a big stadium where the band is playing a show to a huge audience. The gap at the end of the troublesome sentence is now filled in *en masse* by the crowd because the song has become a major hit that everybody knows: *life is LIFE*. The commercial dramatizes that deliberate metaphor involves hard rhetorical work, which includes attention to all kinds of linguistic and conceptual, but also communicative, aspects of metaphor. Sometimes the search for the right metaphor may have to be abandoned in favor of another solution, such as the tautology *life is life* used in Opus’ hit song. All speech and textbook writers and other text designers will agree.

In reception, metaphors presumably would be experienced as deliberate when they are recognized as such a rhetorical device. It may be argued that this will happen when they ineluctably shift the perspective of the addressee from the local topic of a message to another conceptual domain from which that local topic is to be re-viewed. The clearest examples of such metaphors are overt nonliteral

comparisons in the form of analogies and related figures, including similes, since these rhetorical forms introduce source domains as local discourse topics or referents in their own right. Shakespeare's Sonnet XVIII, "Shall I compare thee to a summer's day?" is one of the best-known exercises in asking addressees to carry out this type of deliberate metaphorical comparison between two topics; here it is not problematic to agree that the producer was aware of the introduction of the source domain to make the addressee reconsider a target domain from that perspective.

Extended comparison is not limited to poetry and also may be used for instructive purposes in education (e.g., Mayer, 1993), for persuasive purposes in politics (Charteris-Black, 2004), and so on. Extended metaphor is not the only evident expression form of deliberate metaphor, either: simple *A is B* metaphors and *A is like B* similes work in just the same way, as was suggested earlier. Examples from rock songs include *Love is blindness* (U2), *Love is the drug* (Roxy Music), and *Every junkie's like a setting sun* (Neil Young). These must all involve the conscious, deliberately metaphorical use of the source domain for rhetorical purposes.

There is a gradual cline between extended and restricted metaphor, as may be illustrated by the following two examples: *Time is a jet plane, it moves too fast* (Bob Dylan) and *You are like a hurricane, there's calm in your eye, and I'm getting blown away* (Neil Young). Even though extension may increase the degree of deliberateness, it is more important that in each of these cases, including the non-extended, *regular* metaphors and similes, the language inevitably shifts away from the target domain that is the local topic of the discourse to another domain that has to be set up in its own right by the recipient in order to afford some new perspective on the target. The prediction would be that this leads to processing by comparison.

This structural property of these deliberate metaphors may be seen as another manifestation of the *grammatical concordance* hypothesis forwarded by Bowdle and Gentner (2005), who claim that particular linguistic structures expressing underlying cross-domain mappings facilitate or elicit specific processing strategies, including comparison versus categorization. Which linguistic forms affect processing in which ways is not a matter that is limited to metaphor versus simile; symbolic analyses of metaphor in discourse may have a lot to contribute to broadening the scope of this type of research. For now, it is particularly important to emphasize that deliberate metaphor is not limited to extended comparison or simile, or even to straightforward *A is B* constructions, but that formally inconspicuous conventional metaphors of different construction types also may be used extremely deliberately, as in Martin Luther King's "I Have a Dream." The full formal range of linguistic and rhetorical construction types for deliberate metaphor is an urgent issue for further research.

We can now use these illustrations to build the contrast with nondeliberate metaphors. They do not draw addressees' conscious attention to other conceptual domains. Clear cases of nondeliberate metaphor include unmarked metaphorically used words that do not occur in *A is B* constructions and are not accompanied by related metaphorical words from the same source domain and which have a conventional figurative sense, especially one which has become the most salient and frequent of all of their senses. Examples can be found in the previous sentence and include the words *clear*, *include*, *accompanied*, *source*, and *have*. These cases are not meant to overtly evoke a live cross-domain mapping in the mind of the addressee to change their perspective on the respective referents. It is not the communicative function of *clear*, for instance, to change the perspective from the abstract topic of a quality of cases of metaphor to the concrete domain of vision in order to temporarily reconsider an abstract quality of those cases of metaphor from the angle of vision. If during processing readers immediately access the metaphorical sense of *clear*, *easy to understand*, for instance by lexical disambiguation, they do not miss the communicative point of the expression. If anything, the opposite is true: attending to the conceptual source domain of nondeliberate metaphors will frequently be irrelevant and even distracting. This is the reason why nondeliberate metaphor may be expected to trigger processing by categorization.

Note that these are metaphorical, if nondeliberate, senses all the same. Lexical disambiguation is needed to make a choice between two senses, one of which may be seen as metaphorically related to the other (Steen, 2007). The fact that words are polysemous is often used as an argument against their metaphorical status (cf. Murphy, 1996, 1997; McGlone, 2007), but this argument only works if the underlying model of polysemy excludes metaphorically motivated polysemy. In my opinion, this is where the linguistic evidence adduced by cognitive linguistics does have a superior position over alternative approaches, such as, for instance, Jackendoff's (2002) or Murphy's (1996).

It is true that this is a global and symbolic analysis of linguistic, conceptual, and communicative aspects of deliberate and nondeliberate metaphor in discourse; and several complications may be imagined that need further treatment. For instance, there is a disjunction between production and reception, and perhaps even an asymmetry, to the extent that what was deliberately coded as metaphorical in production does not always have to be taken up as such in reception, or that what is experienced as deliberately metaphorical in reception was not necessarily meant as such (cf. Goatly, 1997). Moreover, there may be an interaction between production and reception on the one hand, and their manifestation in speech versus writing on the other. Speech may be under such time pressure that misalignment between speaker and hearer can occur more frequently than in writing, where editing and reading may leave more time to allow for alignment. In fact, this is precisely where deliberate metaphor use may become an important feature for applied linguistics, where text design and communication advice may alert writers

and speakers to the communicative potential of conspicuous and inconspicuous metaphors. Symbolic analyses may be held to capture important aspects of deliberate metaphor for applied purposes, too.

It is an empirical question of some importance whether symbolic analyses of deliberate metaphor will exhibit complete agreement with behavioral analyses of reception that examine whether discourse structures like these are indeed processed as cross-domain mappings. Such behavioral studies can only profit from precise analytical work on the symbolic structures of discourse that pays attention to the various dimensions and variables involved. Thus, the fact that 99% of all metaphor in discourse appears to be conventional as opposed to novel (and therefore involves metaphorically motivated polysemy), and is metaphor as opposed to simile, are important empirical findings about conceptual and linguistic aspects of metaphor. These may give further direction to the modeling and experimental investigation of the communicative aspect of deliberate and nondeliberate metaphor. This conclusion is reinforced when it is added that of all of these conventional metaphors in discourse, less than one pro mille, is realized as an *A is B* construction, which has been the arena in which the fiercest battles about psycholinguistic models of metaphor are fought. Symbolic and behavioral analysis have a lot to offer to each other in the further exploration of the relation between metaphor in communication and our present knowledge of metaphor in thought and language (cf. Deignan, 2005).

Resolving the paradox: it *is* likely that most *deliberate* metaphor is processed metaphorically. We can now connect these details to the paradox of metaphor. I have argued that one essential communicative function of metaphor is a matter of deliberate or nondeliberate comparison, involving the presence or absence of an invitation for the addressee to change their perspective on a discourse referent or topic. If this is accepted, then an intelligible correspondence emerges between the symbolic analysis of metaphor and the predominant patterns in metaphor processing in the following way:

1. If metaphor is deliberate, its communicative function is to shift the addressee's attention to another domain and set up some cross-domain mapping (which can be revealed by symbolic analysis); its cognitive processing may be expected to elicit comparison by cross-domain mapping (which can be examined in behavioral, cognitive-psychological research).
2. If metaphor is not deliberate, its communicative function is not a matter of cross-domain mapping in symbolic structure or in cognitive processing and representation.
3. As a result, it is possible to say that most metaphor is indeed processed metaphorically, as long as it is understood that this refers to metaphors *in communication*; that is, as long as we are talking about metaphors that can be analyzed as deliberate invitations to construct cross-domain mappings

for the purpose of changing the addressee's perspective (for whatever local or encompassing communicative motive).

To be fully explicit, nondeliberate metaphor is one set of values of the communicative dimension of metaphor that is, in principle, independent of the conceptual and linguistic dimensions. Whether a metaphor is deliberate or not, it also displays conceptual properties (such as conventional versus novel) and linguistic properties (such as metaphor versus simile in *A is [like]B*, or in some other linguistic construction). It is a matter for future research to examine the relations between these values between dimensions in language data as well as their interaction in processing.

It may be argued that deliberate metaphor and its rhetorical effect is the most important manifestation of metaphor in communication and should be as such distinguished from metaphor in thought (for instance, conceptual metaphor) and metaphor in language (for instance, metaphorically motivated polysemy across lexical fields). This tentative identification of metaphor in communication with deliberate metaphor clearly would not include all of the metaphors we are said to live by (metaphors at the conceptual level but not necessarily the communicative one). But it would probably highlight the metaphors that most ordinary language users would recognize and accept as the metaphors by which we communicate. Metaphors in communication form one possible grouping for all metaphors in discourse, and this is a class that harks back to many traditional accounts of metaphor in rhetoric. We will now examine the reasons why this is *metaphor in communication* and not *in thought* or *in language*.

WHY DELIBERATE METAPHOR IS A MATTER OF 'METAPHOR IN COMMUNICATION'

Deliberate metaphor constitutes one important reason for making the threefold distinction between metaphor in language, thought, and communication: the same metaphorical expressions (*metaphor in language*) and metaphorical ideas (*metaphor in thought*) may function as either deliberately or nondeliberately metaphorical (parts of) utterances (*metaphor in communication*). This possibility is based on their very linguistic and conceptual potential for metaphorical mapping, which remains constant, whereas their variable communicative function as a rhetorical device is determined by the presence or absence of an awareness that they are used as metaphorical expressions. What changes, in those cases, is communicative function. Some metaphors (including their linguistic forms and conceptual structures) are deliberately used as a rhetorical device that is founded on asking the addressee to carry out some cross-domain mapping by adopting a different standpoint. But most are not. This is why deliberate metaphors should be

described with reference to the communicative dimension of metaphor in discourse next to the conceptual and linguistic dimensions of metaphor in discourse. In addition, they should be contrasted with all other metaphors, which are non-deliberate when it comes to their communicative function.

The relation between the linguistic, conceptual, and communicative dimensions of metaphor in discourse may be illustrated by the difference between the following made-up examples:

1. We hit Amsterdam in the early evening
2. We hit Amsterdam like a bulldozer

Number (2) instructs the addressee to set up a comparison between the action of a bulldozer hitting something and the target domain of the local discourse referent and topic, us *hitting* Amsterdam. By contrast, (1) does not instruct the addressee to set up such a comparison in any comparable way. Although it is possible for an addressee to set up a cross-domain mapping between actions of hitting and arriving, the sentence, and its crucial element *hit*, may also be adequately understood by a process of categorization or lexical disambiguation. This is impossible for sentence (2), which demands that the addressee sets up some comparison. A three-dimensional model including language, thought, and communication can address the question why the use of these linguistic expressions and related conceptual structures inevitably induces a change of perspective from arriving in a town to some bulldozer action in (2), but does not necessarily do so in (1).

The deliberate use of the concept of bulldozers for comparative purposes also may have an effect on the addressee's processing of *hit*. This depends on the way the addressee sets up the bulldozer comparison. It is possible (but not necessary) that the producer of (2) included the use of *hit* as part of the deliberate metaphor epitomized by *bulldozer*, depending on the producer's view of the scope of the comparison. The question is whether the addressee disambiguates the comparison in (2) as pertaining to the bulldozer only, or to the bulldozer hitting something. The point is that it is only possible to include the latter analysis as a distinct option if the linguistic and conceptual and communicative functions of metaphor are kept apart. In particular, the verb *hit* exhibits three distinct kinds of properties in (1) and (2):

1. It is a conventionally metaphorical linguistic expression in both (1) and (2) (*metaphor in language*);
2. It potentially participates in some conceptual metaphor in which motion is force in both (1) and (2) (*metaphor in thought*);
3. It is potentially deliberate in (2), provided it is connected with *like a bulldozer*, but *ceteris paribus* not in (1) (*metaphor in communication*).

The same linguistic and conceptual structures attached to the lexeme *hit* may be used in two ways in communication, as deliberately metaphorical or not. The interaction between these three dimensions may be conjectured to determine the cognitive processes that may be related to these symbolic structures and needs to be tested as such.

Deliberate versus nondeliberate metaphor use is a means to manipulate discourse perspective for communicative ends that may vary from one domain of discourse to another. But perspectivization is not the only aspect of the communicative dimension of metaphor. Other aspects include such functions as the creation of a common ground of reference when difficult or complex topics are to be dealt with between interlocutors—Cameron (2003) has offered extensive discussion of this communicative aspect of metaphor under the rubric of *alterity*. This aspect also may point to the use of metaphors as part of the specialized domain within which a particular usage event can be located, such as education or science. And it can lead us to the expression of the emotional attitude of the sender, for instance by means of metaphorical swearing, and the cultivation of intimacy with the audience by means of referring to source domains that are known to only one particular set of addressees (Goatly, 1997). Intended interpersonal effects of metaphor, such as praise, criticism, or humor, also are part of the communicative dimension of metaphor, just like intended genre effects of metaphor such as instruction, exhortation, persuasion, information, entertainment, and so on.

These are just a few examples of communicative aspects of metaphor (cf. Steen, 1994, 1999b, 2004, 2006). They need to be modeled with respect to each other, and the question needs to be asked when they co-occur with deliberate versus nondeliberate metaphor use. They also need to be systematically examined with respect to the conceptual and linguistic properties of the same metaphors. These are all tasks for future research.

METAPHOR IN LANGUAGE, THOUGHT, AND COMMUNICATION: NAMING, FRAMING, AND CHANGING

When it is accepted that metaphor deliberateness is one central aspect of the communicative dimension of metaphor in a three-dimensional approach to metaphor in discourse, a distinction emerges between three basic functions of metaphor, each of which is related to another dimension. These functions have all been distinguished in the literature over the past centuries if not millennia, and they were revived in the seventies in an often-quoted article by Andrew Ortony (1975), “Why metaphors are necessary and not just nice.” The basic functions of metaphor can now be elucidated in the light of their special relations to language, thought, and communication:

- The linguistic function of metaphor is to fill lexical (and other formal) gaps in the language system (*metaphor in language*); we may want to call this *naming*.
- The conceptual function of metaphor is to offer conceptual frameworks for concepts that require at least partial indirect understanding (*metaphor in thought*); we may want to call this *framing*.
- The communicative function of metaphor is to produce an alternative perspective on a particular referent or topic in a message (*metaphor in communication*); we may want to call this *perspective changing*, or simply *changing*.

Even though there are other authors who have proposed similar taxonomies, the point is that not all naming functions of metaphor correspond with framing and changing functions, nor do all framing functions of metaphor correspond with changing functions. If the first point has been widely acknowledged, the second point has not been sufficiently appreciated, with cognitive linguists and others often conflating framing and changing as a form of perspectivization (cf. Verhagen, 2007). A three-dimensional framework allows for discussing these relations more adequately than has sometimes happened.

The typical illustration of the linguistic function of metaphor, naming, is metaphorically motivated polysemy (the bulk of most metaphorical language in discourse). The function of naming plays a role in novel, conventional, and dead metaphors. It may, in fact, be the most important function for the category of dead metaphors, since the metaphorical *name* is all that is left of metaphorical expressions that once also had a framing and possibly even a changing function. The fact that dead metaphors can only be called metaphorical by looking at their polysemy in the history of the language does not make them less metaphorical to the metaphor researcher, even if it does to the metaphor researcher who is only interested in contemporary usage. But a general theory of metaphor cannot do without a category of metaphors that only seem to have a naming function left.

The typical illustration of the conceptual function of metaphor, framing, is metaphorically motivated conceptual systems. Examples are Andreas Musolf's discussion of Lakoff's *Moral politics* as a matter of worldviews (2004: 2), which is compatible with Lakoff's (1987) own insistence on conceptual metaphor, or metaphor in thought, as a matter of cognitive models. This is the way in which most discourse studies of metaphor look at the role of metaphor in thought, as may be illustrated for instance by Chilton (1996), Eubanks (2000), and Koller (2005).

Metaphorically motivated polysemy and conceptual systems are the natural consequences of the Career of Metaphor Theory over time for metaphor in language and metaphor in thought. Even though they may be conceptually active in the sense of productive, and psychologically activated during processing in some

way, this does not entail that they are the intended results of a conscious invitation by the sender to the addressee to compare one thing with something else across two domains within a specific stretch of ongoing discourse. The latter situation only pertains to when we can observe a deliberate change of perspective from the usually local topic domain to an alien source domain.

The experience of these three functions by language users also may be quite different. The naming function may only play a genuine role in people's processing when a metaphor is a novel coinage, whereas the effect of the framing function on processing has been the subject of extensive experimental research that has not come to a definitive picture yet. The changing function may now be added to this research program as another effect of metaphor that needs to be looked into. A three-dimensional model of metaphor, which pays attention to metaphor in language and thought as well as in communication, naturally accommodates these varying relations between the three basic metaphor functions of naming, framing, and changing.

DISCUSSION

How can this discourse-analytical account be related to other approaches to metaphor in discourse? Let me first make some general remarks about the role of terminology. I have modeled metaphor in discourse as a matter of usage events that require multiple mental representations by language users of aspects of language, thought, and communication. Researchers can investigate this model either with an emphasis on the symbolic structures of each of these phenomena (an approach that I have labeled *symbolic* or *semiotic*) or with an emphasis on the cognitive processes and products related to these phenomena (a *behavioral* approach). This leads to a set of distinctions that are not always made in the same way in other approaches (Steen, 2007).

For instance, this approach does not allow for the reduction of communication to either language or thought, whereas it is possible that many cognitive linguists see communication as an integral part of thought. Thus cognitive-linguistic approaches to metaphor in discourse look at its contribution to worldviews about, for instance, politics (Chilton, 1996; Musolff, 2004) or business (e.g., Eubanks, 2000; Koller, 2005) without paying systematic attention to independent communicative, including rhetorical aspects of, metaphor in these events of discourse. These analyses may be fine in their own right and capture substantial discourse aspects of metaphor in language and thought (and they may use the term *communication* for such discourse aspects, which in itself is also fine, of course, but different from my own practice here). However, they do miss an important aspect of metaphor in discourse; its communicative function as conceptualized in the present framework, with special reference to its deliberate versus nondeliberate

use as a rhetorical strategy to influence perspective. The differentiation between language, thought, and communication as three independent dimensions of discourse provides ample independent grounds for retaining the terminological and conceptual distinctions as presented here.

This three-dimensional discourse-analytical approach also differs from Relevance Theory (Wilson & Carston, 2006; cf. Gibbs & Tendahl, 2006; Tendahl & Gibbs, in press), which recently has been connected to Class-Inclusion Theory by Glucksberg and Haught (2006). The main issue here is that relevance theorists do not conceptualize metaphor as the linguistic expression of some conceptual mapping between two distinct domains. Instead, they regard metaphor as a form of loose talk, which does not involve distinct conceptual domains or mappings between them. On a related note, relevance theorists look at a limited range of manifestations of metaphor and do not consider the full formal gamut of possibilities for metaphor in discourse. They typically start out from relatively simple sentences that require further interpretation than what is propositionally expressed (*metaphor in language*).

By contrast, the present, discourse-analytical approach sets out from a conceptual definition of metaphor as a cross-domain mapping (*metaphor in thought*), which may be expressed in a wide range of linguistic forms and constructions (*metaphor in language*). What is added in the present approach is the possibility that language users may consciously exploit such conceptual mechanisms of cross-domain mapping for a range of communicative purposes. Since Relevance Theory does not define metaphor as a conceptual phenomenon in the form of some mapping across conceptual domains in the first place, this is where the two approaches must part ways. Indeed, it is quite hard to decide whether Relevance Theory even acknowledges metaphor in general as a separate linguistic category that can be distinguished from other forms of language use and empirically studied as a phenomenon on its own (see the continuity view in Wilson & Carston, 2006).

From the present perspective, treating metaphor as a form of loose talk addresses only a subset of the data. This consequently bases the analysis on too narrow a view of what metaphor is about, and misses the possible generalization that metaphor involves some form of cross-domain mapping in thought (even if only at the symbolic level of analysis). For instance, it will be interesting to see what relevance theorists have to say about those cross-domain mappings in conceptual structure that are expressed across sentences and in extended analogies, similes, or metaphors. Vice versa, if relevance theorists wish to compete with comparison accounts of *regular metaphor* in language such as the Career of Metaphor Theory, they need to provide explicit computational mechanisms by which the desired metaphorical inferences are derived from the linguistic, conceptual, and communicative structures attending to metaphor as loose talk (cf. Tendahl & Gibbs, in press). What is more, they need to do so to the same level of

computational refinement and operation as has been possible on the basis of structure mapping in the Career of Metaphor Theory (cf. Falkenhainer, Forbus, & Gentner, 1989; Forbus, Gentner, & Law, 1995). As long as these requirements have not been met, Relevance Theory cannot serve as a plausible alternative to the Career of Metaphor Theory and the present discourse-analytical extension of this type of work, simply because Relevance Theory is too fundamentally different in its orientation towards the phenomenon and the research.

Finally, my proposal also differs from the work done by two important discourse-analytical authors on deliberate metaphor, Jonathan Charteris-Black and Lynne Cameron. Charteris-Black and Musolff (2003) look at metaphor as semantically motivated versus pragmatically motivated in a way that looks highly similar to the present approach. But the question is whether their pragmatic definition of metaphor is intended to capture the same phenomena as my definition of deliberate metaphor:

Metaphor is a figure of speech in which a writer aims to achieve particular rhetorical goals, such as establishing a relationship with the reader and making judgment by selecting particular words and phrases to refer to important topics when these words or phrases usually refer to other topics. (2003: 158)

Examples of pragmatically motivated metaphors in Charteris-Black and Musolff's data include the following:

1. The euro was *undermined* against the dollar.
2. The currency *slumped* in spite of Friday's statement by euro-zone finance ministers.
3. The Group of Seven central banks intervened to *bolster* the euro on September 22.
4. Euro *slips* towards intervention zone.

The reason why these cases would be pragmatically motivated instead of, or on top of, semantically motivated is not discussed, except that the general criterion of emphasis or hyperbole is invoked. Even though exaggeration may be at play in most of these mappings, however, this does not make them necessarily deliberate in my sense of a conscious communicative invitation to change the perspective from finance to vertical movement. Instead, these examples seem to involve relatively encoded aspects of these lexical items, which would make them semantic or pragmatic indeed, but then as part of the dimension of language, not communication. They may perfectly well be treated as nondeliberate metaphors by most readers, and be processed by categorization, or even lexical disambiguation.

It is questionable whether deliberate versus nondeliberate metaphor is an issue that naturally falls within the scope of Charteris-Black and Musolff's notion of

pragmatically motivated metaphor. Indeed, Charteris-Black (2004) proposes that most metaphor, including his pragmatically motivated metaphor, is used subliminally (2004: 251). I would agree, but the small group that is not used subliminally is precisely the group that I am drawing attention to here. Charteris-Black's discourse model for metaphor does not seem to include a special area where these communicative issues of metaphor are handled *as* rhetorical issues, and this would accord with the present assessment that Charteris-Black's notion of pragmatically motivated metaphors is not identical with the present proposal for deliberate metaphors.

My discourse-analytical proposal to group deliberateness and other aspects of metaphor together under communication and oppose them to metaphor in thought and metaphor in language is theoretically supported by two general models of discourse psychology. The influential model of Van Dijk and Kintsch (1983; Graesser, Mills, & Zwaan, 1997; Kintsch, 1998; Weaver, Mannes, & Fletcher, 1995) makes a distinction between multiple representations of discourse that language users have to construct during discourse processing. One of these deals with the linguistic representation of discourse (the surface text), two deal with the conceptual representation of discourse (the text base and the situation model), and a fourth addresses the communicative representation of discourse (the context model). The context model may be taken as a mental representation of the communication situation, a kind of meta-representation in which the language user has constructed partial cognitive representations of the participants, their communicative goals, the discourse as a communicative tool, and the situation and domain within which the discourse event takes place. These elements of the context model afford theoretical links with the communicative aspects of metaphor discussed previously. Deliberate metaphor, in particular, could be one aspect of the representation of the message as a means for communication, in that it is a prominent rhetorical device that needs to be included in that representation. In a comparably multilevel approach, Clark (1996, 2002) has distinguished between essentially the same representation tasks for language users when they produce or comprehend language. It makes sense to see discourse events as displaying relatively independent dimensions of language, thought, and communication that cannot be reduced to each other and require partial mental models. Metaphors, like any other part of discourse, therefore have to be modeled and analyzed with regard to each of these dimensions (Steen, 2005). Empirical work on metaphor properties as well as processing operations inspired by these assumptions may be found in Steen (1994, 2004, 2006), and has shown that the dimensions can be distinguished in observable and sensible ways.

Cameron's (2003) study of metaphor in educational discourse sticks to a two-dimensional model containing language and thought in her introduction, but she is the most explicit modern author on the notion of deliberate metaphor. Her operationalization has to do with discourse context (100–1), but it is not quite clear what this is meant to do as a criterion for the identification of a metaphor as deliberate:

The deliberateness lies in the use of the linguistic metaphor in its discourse context for a particular purpose on a particular occasion. Conventionalized metaphors, on the other hand, are part of the participants' shared language resources for talking about the particular topic. (2003: 101)

Since neither discourse context, purpose, or occasion are further specified, this description could apply to any metaphor that is used in discourse for particular purposes on particular occasions. The distinction between all language use as intentional and geared towards contexts, purposes, and occasions, on the one hand, and some metaphor use as communicatively deliberate, on the other, is consequently blurred.

The opposition with conventionalized metaphor is subsequently operationalized in such a way that deliberate metaphors "had to occur on only one occasion in the discourse data" (2003: 101), where after they can be conventionalized by the participants in the developing discourse. This, to me, is not necessarily true of deliberate metaphors that are meant as conscious invitations to adopt a different perspective on a topic, as these may simply be repeated and stay deliberate if this is required by the rhetorical context. I have mentioned Martin Luther King's deliberate metaphor "I Have a Dream" before. It is therefore not quite clear whether Cameron's notion of deliberate metaphor is the same as the one that is being proposed here with reference to a separate communicative dimension of discourse that includes the rhetorical aspect of metaphor as effecting a deliberate change of perspective.

The discourse-analytical studies by Cameron (2003) and Charteris-Black (2004; Charteris-Black & Musolff, 2003) are two of the most explicit studies of aspects of deliberate metaphor that are currently available. It is unclear whether they have pinpointed the same phenomenon as the one that I have tried to capture with my present proposal for deliberate metaphor. This is partly due to a lack of correspondence between our models for discourse and the way it may be studied by semiotic and behavioral approaches. Charteris-Black seems to pursue a three-dimensional approach when he makes a distinction between semantics and pragmatics as broadly meant terms that might cover thought and communication, but he does not model semantics and pragmatics in the same way that thought and communication are modeled in the psychology of discourse. And Cameron sticks to a two-dimensional model in which discourse context and processing exert an external effect upon the analysis without explicitly allowing for a distinct dimension of communication within discourse looked at from a processing perspective. This lack of clarity is the reason why I advocate adopting an explicitly three-dimensional model for metaphor in discourse that derives from more general models of discourse processing in psychology. This type of discourse-analytical approach also can offer new perspectives for engaging with relevance-theoretical and cognitive-linguistic approaches to metaphor in discourse.

There is one more publication that needs to be mentioned in closing. Goddard (2004) has discussed what he calls *active metaphors* as a special phenomenon in the field of metaphor studies, and his main reason is their reliance on meta-lexical awareness. Active metaphors are those metaphors in which speakers use words differently than in plain talk for specific communicative purposes, and they are conscious of this practice. These words can be used metaphorically because there are conventional mappings, or because the mappings are novel.

Goddard's proposal is along identical lines as my own for deliberate metaphor, except that Goddard pitches his study at the level of vocabulary. The present proposal, by contrast, sets out from metaphor in thought as a cross-domain mapping that can be realized in various rhetorical and linguistic forms, and this allows for a broader view of what can be called deliberate metaphor, including, for instance, extended nonliteral comparisons in educational materials or in poems. Moreover, the term *active metaphor* may be misleading and suggest that deliberate metaphors are active or activated in the mind, whereas nondeliberate ones are not. Even if this case may be made for deliberate metaphors, it remains an open question whether nondeliberate metaphors are never *active*. This is where future research will have to employ a new three-dimensional model for empirical testing.

CONCLUSION

When it is agreed that comparable conceptual structures (cross-domain mappings) may have radically different communicative functions (changing people's perspectives or not), new correspondences between symbolic analysis and processing research are revealed. The upshot of including the third dimension of communication is that deliberate metaphor (*metaphor in communication*) may be expected to be processed by comparison, because it invites adopting a different perspective. By contrast, metaphor that is not deliberately metaphorical in communication may be expected to be processed by categorization, because it is meant to stay within the conceptual target domain. This offers a resolution to the paradox of metaphor that has been emerging in cognitive science: that it is unlikely that most metaphor is processed metaphorically.

A three-dimensional model of metaphor facilitates defining all metaphor as a cross-domain mapping at the level of conceptual structure, but does not mean that all metaphor is expressed in the same ways in linguistic form nor has the same function in communication. It has been the point of this article to argue that not all cross-domain mappings in conceptual structure are necessarily meant as express invitations to the addressee to change their perspective from the target domain to another domain to look at the topic of a metaphor afresh. This lack of a one-to-one correspondence between conceptual structure and

communicative function is not problematic, for it is comparable to a similar—and long-acknowledged—lack of complete correspondence between conceptual structure and linguistic form. Not all metaphors in conceptual structure are expressed by metaphorical language in the strict sense of the term either. Psycholinguistic research has demonstrated that it is the interaction between the dimensions of language and thought which determines whether metaphor is processed by comparison or categorization, but the present argument suggests that we have to look at a three-way interaction between metaphor in language, thought, and communication.

If the model of metaphor is reduced to a two-dimensional one, a paradox arises. In that case, most metaphor in discourse is probably not processed metaphorically. However, when the communicative dimension of metaphor is included, a more intelligible picture emerges. In that case, all metaphor that is experienced as deliberate is presumably processed metaphorically, that is, by comparison between domains, whereas all metaphor that is not deliberate is probably processed nonmetaphorically, that is, by categorization. The paradox of metaphor arises when researchers concentrate on metaphor's conceptual structure as a model for processing, but disappears when metaphor's communicative function is considered as a more eligible model for processing.

The opposition between deliberate versus nondeliberate metaphor is an important communicative variable of metaphor. It reflects that metaphors do not only have a distinct role in systems of language or systems of thought and their use, but also in the system of communication and its use. The latter may be conceptualized as purposeful interaction between people by means of language on the basis of thought. This separation of the three dimensions has the advantage that the autonomy of the dimensions of metaphor in language and thought is acknowledged, and where long-term effects of metaphor may be perceived in linguistic and conceptual systems and their use (cf. Gibbs, 1999). A separate communicative dimension also reinstates the traditional distinction between metaphor as a tool for rhetoric versus metaphor as a tool for more general concerns of language and thought, while simultaneously honoring what has been achieved on the latter fronts over the past thirty years.

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Dorst, Berenike Herrmann, Anna Kaal, Tina Krennmayr, and Tryntje Pasma. I hope that the present version provides better answers to some of their questions.

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