



*The Value of Deliberate Metaphor*  
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## Summary

### *The value of deliberate metaphor*

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Over the past thirty years, metaphor has predominantly been studied within the theoretical framework of Conceptual Metaphor Theory (CMT). In this framework, metaphor is seen as a linguistic expression of underlying conceptual structures in thought. Recently, however, metaphor scholars from various subdisciplines in linguistics (including discourse analysis, pragmatics, and (discourse) dynamic approaches) have observed that this two-dimensional view of metaphor in language and thought does not (sufficiently) accommodate the role of metaphor in communication. They therefore argue for a rehabilitation of more rhetorically-oriented approaches to metaphor. As a result of these developments, the role of metaphor as metaphor in communication between language users is now back at centre stage in metaphor studies.

This thesis investigates the communicative dimension of metaphor within the developing theoretical framework of Deliberate Metaphor Theory (DMT). To accommodate the communicative function of metaphor, DMT extends the two-dimensional cognitive-linguistic model of metaphor in language and thought with a dimension of communication. In this third dimension, a distinction is made between 'deliberate' and 'non-deliberate' metaphors. The difference between these two types of metaphor hinges on the question whether the source domain meaning of a metaphor is part of the situation model of a metaphorical utterance (or not). Since DMT was first introduced, the framework has been controversial. On the one hand, it has been met with considerable criticism about what it means for a metaphor to be called 'deliberate'. On the other hand, empirical studies increasingly adopt DMT and investigate the manifestation of deliberate metaphor in language use. However, various aspects of DMT remain as yet underdeveloped, yielding varied interpretations and operationalisations of key concepts in the framework.

The main goal of this thesis is to contribute to the further development of the three-dimensional model of metaphor by addressing three key issues concerning the role of metaphor in communication that are currently in need of clarification. To realise this goal, three subgoals are formulated that each address one of the key issues that need to be resolved. The first subgoal is of a methodological nature, and establishes an operational definition and a reliable procedure for the identification of deliberate metaphor in language use. The second and third subgoals are of an empirical nature and relate to the description of the distribution and functions of deliberate metaphor in natural language use, and its effects on reasoning, respectively.

The methodological issue that underlies the first subgoal is concerned with the lack of a generally accepted operational definition and identification procedure for deliberate metaphor. Earlier studies typically use their own interpretation of the theoretical definition of deliberate metaphor when analysing data, without specifying when a metaphor counts as

deliberate and when not. In particular, because the theoretical definition of deliberate metaphor encompasses both semiotic and behavioural aspects of deliberate metaphor, studies applying this definition regularly conflate these two perspectives in their analyses. However, semiotic and behavioural approaches to deliberate metaphor investigate two distinct aspects of deliberate metaphor – the former is concerned with how deliberate metaphor can be analysed in texts and transcripts of talk, while the latter focuses on how individual language users process (in production, reception, or interaction) deliberate metaphor. It is therefore important to formulate a precise operational definition of deliberate metaphor that spells out how deliberate metaphor can be observed – either in texts or in processing. Closely connected to such formulation of an operational definition of deliberate metaphor is the formulation of concrete criteria that can be used to identify deliberate metaphor in language use. Because no reliable identification procedure for deliberate metaphor has been available, analyses of deliberate metaphor in language use remain rather idiosyncratic. This, in turn, makes it difficult to evaluate the validity of the analyses, and to assess in what way they contribute insights into the communicative dimension of metaphor.

To resolve this methodological issue, first a precise operational definition of deliberate metaphor is formulated that allows the semiotic analysis of deliberate metaphor. According to this operational definition, a metaphor is potentially deliberate when the source domain of the metaphor is part of the referential meaning of the utterance in which it is used. This definition is based on three important observations. First, because semiotic analyses do not investigate whether metaphors are processed as metaphors by individual language users, only potentially deliberate metaphors can be identified. Second, the presence of the source domain in the situation model of an utterance can be established by examining the referential meaning of the utterance. Third, the presence of source domain referents can be traced by looking for cues that indicate that the metaphor is used as metaphor.

As a second step in resolving the methodological issue regarding deliberate metaphor, the operational definition of deliberate metaphor is used to establish a transparent and reliable, identification procedure. The resulting Deliberate Metaphor Identification Procedure (DMIP) comprises a series of steps that analysts have to apply in order to identify potentially deliberate metaphors in language use. Because the various steps in the process of determining whether a metaphor counts as potentially deliberate are made explicit in this procedure, analysts have a base for discussion whenever they disagree about the potentially deliberate or non-deliberate status of any given metaphor. The establishment of an operational definition of deliberate metaphor and of a step-by-step identification procedure together allow for the reliable and systematic analysis of the communicative dimension of metaphor.

The empirical issue that underlies the second subgoal of this thesis is concerned with the diverging outcomes of studies investigating the manifestation of deliberate metaphor in language use. Due to the absence of a systematic procedure for the identification of potentially deliberate metaphor, the analysis of deliberate metaphor in language use has often been carried out by searching data for a set list of predetermined candidates for deliberate metaphor. Such top-down analyses may lead to the erroneous identification of certain

metaphors as potentially deliberate ('false positives'), and the other way around: top-down analyses may also overlook certain cases of potentially deliberate metaphor, erroneously identifying them as non-deliberate. As a consequence of the lack of a bottom-up identification procedure and the top-down approach being used instead, it is difficult to assess the value of empirical analyses investigating the use of deliberate metaphor in natural language.

This empirical issue is resolved by means of three studies that investigate the manifestation of potentially deliberate in language use. In the first study, DMIP is applied to all 24,762 metaphors in the VU Amsterdam Metaphor Corpus (VUAMC). The corpus contains texts and transcripts of talk from four different registers: academic texts, fiction, news texts, and face-to-face conversations. This quantitative cross-register, cross-word class comparison yields a first systematic, bottom-up, analysis of the frequency and distribution of deliberate metaphor in language use. Results demonstrate that only 4.36% of all words that can be identified as metaphors at the dimensions of language and thought also count as metaphorical at the dimension of communication. This relatively limited occurrence of potentially deliberate metaphor in language use, however, provides important insights into the distribution of potentially deliberate metaphors across register and word class. First, potentially deliberate metaphor is not distributed equally across registers. Fiction and news contain significantly more potentially deliberate metaphors than expected, while academic texts and face-to-face conversations contain significantly fewer cases. Second, potentially deliberate metaphor is also not equally distributed across word class. Metaphorical adjectives and nouns are significantly more frequently potentially deliberate (compared to non-deliberate), while adverbs, verbs, prepositions, and metaphors in a remainder category (including pronouns, conjunctions, and so on) are significantly less frequently potentially deliberate. In addition, there is a three-way interaction between potentially deliberate metaphor, register, and word class. This means that the distribution of potentially deliberate metaphor across register differs per word class. For instance, fiction contains fewer metaphor-related nouns than expected when examining the distribution of all metaphors, but when examining the distribution of potentially deliberate metaphors, potentially deliberate metaphorical nouns are more frequent than expected. In academic texts, the opposite picture is found: relatively more metaphor-related nouns than expected by chance when looking at the distribution of all metaphor-related words, but fewer potentially deliberate metaphors.

In the second empirical study, one specific metaphorical construction is analysed in order to investigate to what extent this construction counts as potentially deliberate by definition. Specifically, all metaphorical domain constructions (MDCs) from the VUAMC are analysed. MDCs consist of a metaphorical noun that is modified by a non-metaphorical adjective that points out the target domain of the noun (e.g., 'budgetary anorexia'). In the literature, this domain adjective is considered a metaphor signal, making the noun it modifies deliberate by definition. However, the analysis in this study demonstrates that only a limited number of domain adjectives function as signals at the communicative dimension of metaphor. In fact, in the majority of cases, metaphorical domain constructions do not count as potentially deliberate. That is, the domain adjectives in these MDCs point out the target domain of the

metaphorical noun they modify at the dimension of language and thought, but they do not serve as metaphor signals at the dimension of communication (e.g., 'economic growth'). In a similar way, the nouns in these MDCs can be identified as metaphors at the dimensions of language and thought, but they do not count as metaphorical at the dimension of communication. These results consequently point out the importance of bottom-up (versus top-down) analysis to avoid identifying 'false positives'.

In the third empirical study, a further qualitative analysis of deliberate metaphor use is carried out that also stresses the importance of bottom-up (versus top-down) analysis. In particular, this study demonstrates the importance of taking co-text into account when analysing deliberate metaphor use. By means of a series of in-depth analyses, the complexity of the analysis of the communicative dimension of metaphor is investigated. Results demonstrate that, in some cases, potentially deliberate metaphor can be identified (and further analysed) in relative isolation – i.e., at utterance level. Results also show, however, that in many other cases it is essential to take into account additional textual information (co-text) that goes beyond the utterance in which a metaphor is used in order to be able to identify and/or further analyse potentially deliberate metaphor use. For instance, a metaphor may only be identified as metaphorical at the dimension of communication when its metaphorical use is revitalised because of the presence of other potentially deliberate metaphors in the co-text that stretches beyond the utterance in which the metaphor is used. When analysed in (relative) isolation, such cases would only be identified as metaphors at the dimensions of language and thought, not communication. In this way, taking additional co-text into consideration thus illustrates how bottom-up analysis can prevent potentially deliberate metaphors from being overlooked.

The empirical issue that underlies the third subgoal of this thesis is concerned with the effects of deliberate metaphor on reasoning, and the fact that the limited number of studies that have thus far investigated this question yield mixed results. Further clarification is needed for this aspect because hypotheses about the effects of deliberate metaphor in reasoning are currently often based on idiosyncratic interpretations of the three-dimensional model of metaphor. Moreover, experimental materials are not (always) based on results of (extensive) semiotic analyses of deliberate metaphor in language use. These observations raise questions about the validity of the findings. As a result, experiments that claim to test DMT may in fact test hypotheses that DMT would not predict, yielding results that are difficult to evaluate.

To resolve this empirical issue, the final part of this thesis investigates the effects of deliberate metaphor on reasoning about a crime problem. Results from the semiotic analyses investigating the use of deliberate metaphor in natural language are used to formulate precise hypotheses about deliberate metaphor processing. Specifically, it is hypothesised that reading an increased number of sentences with metaphors that express the same mapping between the target domain of crime and the source domain of viruses (Experiment 1) or the source domain of beasts (Experiment 2) leads to increased ratings for the perceived effectiveness of policy measures that are in line with the metaphorical frame. Policy measures that are in line with the virus frame in Experiment 1 focus on reform, such as to create after school programs and to expand economic welfare programs. Policy measures that are in line with the beast

frame in Experiment 2 focus on enforcement, such as to increase street patrols and to punish criminals faster.

Results of both experiments yield limited support for this hypothesis. That is, overall, extending the metaphor does not result in increased perceived effectiveness ratings for solutions that are in line with the metaphor. Thus, reading more virus-related metaphors does not lead to higher scores for the perceived effectiveness of reform-oriented policy measures. In a similar way, reading more beast-related metaphors does not lead to higher scores for the perceived effectiveness of enforcement-oriented policy measures. When controlling for political affiliation, however, some trends are found. Reading more sentences with virus-metaphors leads to decreased perceived effectiveness of enforcement-oriented policy measures – i.e., measures that are not in line with the virus frame. Still no effect is found for frame-consistent reform-oriented measures. When controlling for political affiliation, reading more sentences with beast-metaphors leads to increased perceived effectiveness of enforcement-oriented policy measures – i.e., measures that are in line with the beast frame. These experiments demonstrate how precise hypotheses can be formulated on the basis of preceding semiotic analysis. At the same time, the fact that these hypotheses could not be confirmed suggests that additional research is needed to investigate deliberate metaphor processing.

This thesis contributes to the further development of the three-dimensional model of metaphor in language, thought, and communication by resolving three key issues related to this model that are in need of clarification. First, the identification of potentially deliberate metaphor in language use can now be carried out by means of a reliable identification procedure: DMIP. Second, more important details have been discovered regarding the use of deliberate metaphor in natural language. And third, a first set of experiments based on informed hypotheses about deliberate metaphor has provided insights into the effects of deliberate metaphor on reasoning. In all, the results of the studies carried out in this thesis demonstrate the value of metaphor as metaphor in communication.