



Available online at www.sciencedirect.com

ScienceDirect

Journal of Pragmatics xxx (2015) xxx–xxx

journal of
PRAGMATICS

www.elsevier.com/locate/pragma

Discussion note

Developing, testing and interpreting Deliberate Metaphor Theory

Gerard Steen

University of Amsterdam, Faculty of Humanities, Amsterdam, Netherlands

The idea that there is a distinction between the deliberate and non-deliberate use of metaphor is controversial (e.g., [Gibbs, 2011](#); [Charteris-Black, 2012](#)). According to the dominant view of metaphor, metaphor works automatically and unconsciously (e.g., [Gibbs, 2008](#)). As a result, deliberate metaphor use sounds like an impossibility a ‘vacuous idea’ even ([Gibbs, 2011](#)), and is reminiscent of the traditional views of metaphor in poetics and rhetoric ([Gibbs, 2011](#)). To this predominantly theoretical debate, [Gibbs \(this volume\)](#) has now added an experimental study, which is presented as a failed test of deliberate metaphor theory.

I have been graciously offered an opportunity by the editor of this journal to offer a response to this study in order to advance research, theoretical and empirical, on deliberate metaphor theory. I will gratefully do so by briefly presenting my views of the ways in which deliberate metaphor theory (from now on: DMT) can be developed, tested and interpreted. My conclusion will be that Gibbs’ test fails because it is an inadequate conceptualization and operationalization of the predictions of DMT.

1. Developing DMT

Deliberate metaphor use is the intentional use of a metaphor as a metaphor. An example may be found in the following quotation from *Time Magazine* ([Steen, 2013: 182](#)):

Imagine your brain as a house filled with lights. Now imagine someone turning off the lights one by one. That’s what Alzheimer’s disease does. It turns off the lights so that the flow of ideas, emotions and memories from one room to the next slows and eventually ceases. And sadly – as anyone who has ever watched a parent, a sibling, a spouse succumb to the spreading darkness knows – there is no way to stop the lights from turning off, no way to switch them back on once they’ve grown dim. At least not yet.

The author explicitly asks the reader to set up a cross-domain mapping in the first sentence of this excerpt, “Imagine your brain as a house filled with lights”, and then develops aspects of the cross-domain mapping in a number of ways in subsequent utterances. Since linguists assume that all language use is intentional, including regular metaphorical language use, this explicit, express use of metaphor as metaphor is doubly intentional, which is why I have suggested we call this use ‘deliberate’ ([Steen, 2008, 2010, 2011a,b,c, 2013, 2015](#)). Deliberate metaphor use must be differentiated from all other metaphor use, which is non-deliberate: those metaphors are not presented as metaphors to the addressee, but are simply (but intentionally) used as the available language means to talk about a wide range of topics.

The validity of the distinction is reflected by the appropriateness of responses like “Why did you use that metaphor?” or “That is a nice image” to metaphors used deliberately, such as the one in our *Time Magazine* excerpt. By contrast, this type of response does not make sense when metaphors are used non-deliberately, the extreme case of which would be all temporal and abstract uses of prepositions, whose basic sense is typically spatial but whose metaphorical sense for time

E-mail address: g.j.steen@uva.nl.

<http://dx.doi.org/10.1016/j.pragma.2015.03.013>
0378-2166/© 2015 Elsevier B.V. All rights reserved.

Please cite this article in press as: Steen, G., Developing, testing and interpreting deliberate metaphor theory. Journal of Pragmatics (2015), <http://dx.doi.org/10.1016/j.pragma.2015.03.013>

and so on is typically non-deliberate in the way defined above. For instance, people can say that they are *in love*. This utterance will typically be analyzed as involving intentional language use comprising a cross-domain mapping from space to emotions or relations, but my proposal is that this would not count as the deliberate use of this metaphor as a metaphor and would not felicitously elicit responses like the above.

Deliberate metaphor use hence reveals a communicative dimension of metaphor, pertaining to the value of a metaphor as a specific means of communication *between* language users, which is a dimension that has been mostly left aside during the development of the contemporary theory of metaphor (Steen, 2011a). Metaphors are not only a matter of thought (with conceptual structures bridging conceptual domains or mental spaces) and a matter of language (with linguistic expressions in context indicating at least one aspect of such cross-domain mappings in thought), but also of communication, with linguistic expressions in context suggesting whether the metaphor has a specific value to the interlocutors as a distinct communicative (typically: rhetorical) device – or not. This is clearly the case for our *Time Magazine* excerpt above.

This suggests that language users can display metalinguistic attention, awareness and skills about the way language structures, in this case metaphors, are used. This is an observation that is generally accepted in linguistics but has been ignored in the contemporary theory of metaphor (but cf. Goddard, 2004). The point is: speakers and writers do occasionally ponder over their production process and can then choose to employ a device like a metaphor as a metaphor. This may be even more conspicuous in the deliberate use of metaphor in carefully designed multimodal messages (cf. Ng and Koller, 2013). It is true that addressees do not always verbally pick up on such intentions of deliberate metaphor use – but often they do, in face-to-face interaction (e.g., Tay, 2013) and in media use (e.g., Musolf, 2004; cf. Steen, 2013). In all, it is hard to imagine a plausible explanation of the above excerpt and the phenomenon it is meant to illustrate without including some form of deliberate metaphor use for both writer and reader.

Although the three dimensions of metaphor (language, thought, communication) are independent, rooted as they are in distinct components of any discourse situation (utterances, individual minds, interacting people), there are obvious associations between some of their values. Thus, as is illustrated by our *Time Magazine* excerpt, most novel metaphor (a conceptual property) and most extended metaphor (a linguistic property) also tends to be deliberate (a communicative property). This has led to our suggestion that there may be linguistic (extension and so on) and conceptual (novelty and so on) criteria for the identification of deliberate metaphor use (cf. Krennmayr, 2011); and this may also suggest that these potential linguistic and conceptual criteria trigger people's processing of a metaphor as a deliberately used device in communication. I have described a number of formal consequences for utterance analysis in Steen (2011b) and a number of processing consequences in Steen (2013), but the complete theoretical framework is still being elaborated. By way of aside, this is not to say that structural-functional analysis is comparable to processing research, a position Gibbs (this volume) seems to attribute to DMT; on the contrary, as I have made explicit in numerous places (especially in Steen, 2007, 2011a,b), linguistic analysis is fundamentally different from psychological research and the two offer complementary pictures of the phenomenon of metaphor use: linguistics a structural-functional one and psychology a process-product one. Behavioral work, whether experimental or observational, is therefore highly necessary to test what is predicted by DMT, which is why I appreciate the attempt made by Gibbs (this volume).

The central prediction of DMT is about attention (Steen, 2011c, 2013): a metaphor is used deliberately when its structure signals that the addressee has to move away their attention momentarily from the target domain of the utterance or even phrase to the source domain that is evoked by the metaphor-related expression. This hypothesis about attention to the source domain is highly specific: it focuses on the mandatory representation of the source domain as part of the situation model in utterance processing (Van Dijk and Kintsch, 1983). In pragmatic terms, a metaphor is used deliberately as a metaphor when its source domain concept requires setting up a source domain referent in the representation of the utterance. When this happens, the source domain referent is in our attention as an element of what the utterance is about.

It is my claim that setting up a source domain referent in the situation model happens when a metaphor displays specific linguistic or conceptual or communicative properties, such as extension or novelty. Our *Time Magazine* example thus predicts that readers will represent both the target domain of Alzheimer's disease as well as the source domain of a house filled with lights as part of the situation or world projected by the text. By contrast, consider the metaphorical use of *filled* in the first utterance, "Imagine your brain as a house filled with lights": I suggest that this metaphor is not deliberate and hence predict that people's situation model for the first utterance does not display an additional representation of the concrete action of filling that is to be attached as a distinct referent to the encompassing metaphor of Alzheimer's disease as a house. Following the differentiation between mental models for utterance representation made in the psychology of discourse (Macnamara and Magliano, 2009), it is quite likely that activation of the verb *fill* triggers both concrete and abstract senses and concepts in the stages of surface text building and text base construction (cf. Giora, 2008, for experimental evidence), but this does not entail that the concrete, non-metaphorical senses and concepts project a metaphorical referent in the situation model, since lexical (and conceptual) disambiguation can finish the job of utterance processing much more efficiently. (This is one way in which DMT does not ignore Conceptual Metaphor Theory, as is suggested by Gibbs (this volume), but offers an alternative and more limited interpretation to some of the findings.)

What follows from this central prediction is that addressees pay attention to a referent that is ‘alien’ in the situation model – as is demanded by the structure of an utterance like “Imagine your brain as a house filled with lights” (but not by “I have fallen in love”). This requires accommodation of the alien source domain referent by the addressee in order to maintain coherence. I suggest that this typically happens as a form of external perspective from which the target domain referents are viewed, as happens with the house filled with lights and Alzheimer’s disease. I also suggest that this function of perspective requires comparison between the two domains to resolve the distant relation between the two sets of referents. It should be noted that, even though attention and comparison are here intentional in that they construct an appropriate meaning for the utterance, this does not imply that attention and comparison are conscious. It does not imply that they require deliberation either, for cross-domain mappings processed by comparison are extremely fast and unconscious, as has precisely been shown by a lot of contemporary metaphor research and fits in with more general psychological research on fast and slow thinking (Kahneman, 2012) – deliberate metaphor is not the same as deliberative metaphor (Gibbs’ phrase). At the same time, the fact that the source domain is attended to and requires cross-domain comparison to be integrated into the target domain of the utterance can afford further post-comprehension processes such as recognition, interpretation and appreciation (Steen, 2013) – but these are optional and not necessarily conscious either.

Comparison is a process that takes place fast and automatically in limited conditions, as is the central tenet of the Career of Metaphor Theory (Bowdle and Gentner, 2005). The conditions they mention as candidates for triggering such processes of comparison can all be analyzed as involving deliberate metaphor use. It is possible that most other types of metaphor are not processed by comparison but by lexical disambiguation (cf. Giora, 2008), the source domain concept not making it to the stage of distinct referent in the situation model. This produces a paradox of metaphor: most metaphor would then not require cross-domain mapping but can be resolved by lexical disambiguation (Steen, 2008). This is a hypothesis in need of further research; it goes against some of the strongest claims of Conceptual Metaphor Theory and formulates alternative explanations of some of its findings, but does not ignore it. Apart from this, one allegedly failed test of DMT does not imply that, as a result, the objections it raises to CMT are invalid. This leads us on to a closer examination of Gibbs’ study.

2. Testing DMT

The case against DMT presented by Gibbs is based on an experiment in which one specific linguistic expression, “come a long way”, is taken as a conventional metaphorical expression of an underlying conceptual metaphor, ROMANTIC RELATIONSHIPS ARE PHYSICAL JOURNEYS. The expression is offered after a brief text presenting a conversational exchange between two men about relationships, and its presentation is manipulated by adding a range of different linguistic expressions that are taken as pragmatic signals for the deliberate use of the metaphor. A control condition used the same manipulation but with a non-metaphorical final sentence. The prediction is that metaphor understanding is changed into deliberate metaphor processing, measured in a number of distinct ways, by the presence of the pragmatic signal, an effect which should not be observable for the control condition. Overall the findings do not exhibit the effects predicted by Gibbs.

My first comments have to do with the main prediction and the way it is operationalized in the study. According to Gibbs, DMT should claim that the conventional metaphor “We really have come a long way since the wedding” is turned into a deliberately used metaphor when it is preceded by the addition of the following pragmatic signals “Well”, “Literally”, “It is like”, “One might say”, calling attention to “There is a perfect phrase for this”, and calling attention to possible deliberation “I can say the following”. However, in Gibbs’ stimuli “Well” does not draw attention to the production of the source domain but of the entire utterance, as does “It is like”, “One might say”, and “I can say the following”. I believe that Gibbs has miscalculated the scope of these pragmatic signals, and that their use in these materials allows for an alternative interpretation that has nothing to do with metaphor signaling. DMT would therefore not predict that these signals in these constructions require the addressee to pay attention to the source domain as an essential part of the referential meaning.

The signal “literally” on the surface does seem to do this, but its first interpretation is that of an intensifier: “used for showing that what you are saying is really true and not just an impressive way of describing something” (Rundell, 2002). A similar interpretation may be suggested for the final pragmatic signal, “There is a perfect phrase for this”, which might draw people’s attention to the literal meaning of the expression, but only in the appropriate circumstances: the question is whether “We have come a long way” is so apt and perfect that it affords or encourages such a specifically meta-linguistic interpretation, or whether, instead, people will take this as a kind of intensifier as well. In all then, I doubt whether the study in fact tests a prediction about specific linguistic structures in text that would be defended by DMT. A more precise linguistic account of how signals are supposed to interact with metaphors at utterance level processing is needed before these stimuli can be accepted as valid materials – one reason why we are carrying out corpus work in this area in the Metaphor Lab Amsterdam.

The remaining signal is the one of extended metaphor, which is not a pragmatic signal but a distinct linguistic form of metaphor (Steen, 2007). This changes the game. An extended metaphor is one where a cross-domain mapping is

deliberately developed as a series of metaphorical utterances presenting a coherent cross-domain mapping, much along the lines of the *Time* excerpt above. Consider Gibbs' materials from this perspective:

Extended Metaphor In Discourse Added ("Extended")

Mark and Larry were old friends who had not seen each other for several years.

Mark was telling Larry about his marriage.

Mark said, "We ran into many obstacles early on after we got married."

"My wife and I never could get past even the smallest disagreements."

Larry replied, "This must have been difficult for both of you."

"Have things improved over time?"

Mark replied,

"We really have come a long way since the wedding."

If this text is to work as an extended metaphor, it assumes three things: (a) the first utterances by Mark give rise to a representation of 'journey' referents 'run into' and 'obstacles' in the situation model of the first utterance and 'get past' in the second utterance; (b) these partial source domain representations in the situation model must survive two utterances by Larry where no source domain elements are used, and then affect the interpretation of the expression "come a long way"; and (c) there is a discourse point to developing such an extended cross-domain mapping, as they are typically quite unusual and serve a purpose.

I find assumption (a) problematic for precisely the same reason as I have indicated above, namely that it is quite likely that the metaphorical expressions "ran into many obstacles" and "get past" are not processed via cross-domain mapping but via lexical disambiguation. We need independent evidence that these expressions set up these cross-domain mappings in this context. And even if it were true that Mark's first utterances do get processed by cross-domain mapping, then assumption (b) is problematic as the role of these prior cross-domain mappings is cut short in the next two utterances which do not deploy any cross-domain mapping but directly talk about the target domain of the marriage. It would be up to Gibbs to show that the presumed metaphorical effect of the first two utterances extends across these two non-metaphorical utterances to the final sentence; our own experiments having texts with extended metaphorical support for a deliberate metaphor were unable to show such an effect (Steen et al., 2014). When one adopts an utterance processing view of discourse, it is unlikely that cross-domain mappings that are not very strongly signaled can survive this long – unless they have some sort of recognizable discourse purpose, which in this case seems a moot point (assumption c).

My second set of comments has to do with the dependent variables of the study, presumably measuring the effect of deliberate versus non-deliberate metaphor use on understanding. Almost each of these measures is problematic. The first question taps whether Mark was exactly sure of what he wanted to say, but I do not think that certainty of the speaker is an indication of deliberate metaphor use. For some deliberate metaphor use the certainty of the speaker may be affected; yet if deliberate metaphor use is about the intentional use of a cross-domain comparison for communicative purposes, then this clearly does not necessarily have to be a matter of doubt, certainly not for conventional cross-domain comparisons.

Asking people's judgments about statements 2 ("Mark's statement implied that his marriage was now making more progress than earlier") and 3 ("Mark's statement implied that his marriage was now built on a strong foundation") begs the question: these are two prompts that are supposed to activate underlying cross-domain mappings in the participants' representations, but this is an assumption that according to DMT may not be correct and was not independently established for this study. Apart from this, there is a problem with the compatibility between "have come a long way" (meaning: we are better now than we used to be) and "was now making more progress than earlier" (meaning: we are still improving, which here is not necessarily the case). For Statement 3, Gibbs argues that having a deliberately constructed cross-domain mapping ROMANTIC RELATIONSHIPS ARE PHYSICAL JOURNEYS builds resistance to accepting the validity of ROMANTIC RELATIONSHIPS ARE PHYSICAL BUILDINGS. Firstly, this may be true during on line processing but does not have to affect off line judgments, where people are asked for a more calculated inference. And secondly, there is a problem with the compatibility, again, between the target sentence and the sentence in the statement: the fact that a marriage is better now than it used to be before does not imply that it is built on a strong foundation, which can explain the overall resistance to the implied statement on logical, not metaphorical grounds.

Statement 4 suggests that DMT claims that deliberate metaphors should be experienced as more creative or more poetic. I cannot think of a reason why DMT would be committed to such a prediction and do not endorse it as a general hypothesis. Statement 7 suggests that DMT claims that deliberate metaphors are used to make addressees consciously think hard. I have argued against this implication in Steen (2011b, 2013).

This leaves statements 5 and 6 as the only two valid prompts in the study for testing the effect of deliberate metaphor processing. Given that all textual manipulations to trigger deliberate metaphor processing can at least be given an alternative reading than the ones intended by Gibbs, as discussed above, there is little point in checking the behavior of these two variables separately. This is all the more so because the study suffers from poor execution in terms of numbers

of participants: means are based on averages across only 12 participants per condition, which is highly unreliable (e.g., Simmons et al., 2011). The comparisons between the means is also too simple to be meaningful: there is no two-way analysis between the signals factor and the metaphor factor, which is essential for testing the difference between conventional metaphor and non-metaphorical language use if conventional metaphor is not processed metaphorically, as I would claim for most of the signaling conditions. And the way information is provided about the data precludes more precise interpretation: no standard deviations are reported. I hence do not accept that his study offers a failed test of DMT.

3. Interpreting DMT

My interpretation of the study by Gibbs is that it is a failed manipulation of deliberate metaphor versus non-deliberate metaphor because of a number of assumptions attributed to DMT that are incorrect and because of the lack of reliability of the findings. This offers an alternative explanation of why participant judgments across conditions do not systematically differ from each other. Gibbs concludes that the lack of a difference between signaled versus non-signaled metaphors is “consistent with the experimental literature demonstrating that people ordinarily recruit cross-domain mappings (i.e., conceptual metaphors) as part of their fast-acting understanding of metaphorical language, even when those metaphors are conventional”. First of all, this ignores the evidence that the signal *like*, used as a preposition in an A is B simile, does have an effect (Krennmayr et al., 2014). And vice versa, it is still possible in Gibbs’ own study that no cross-domain mappings are recruited at all and that all metaphors in the metaphorical condition are processed by lexical disambiguation, none of the signals acting as a trigger to turn these conventional metaphors into deliberately used ones.

It should also be recalled that the entire study is based on just one linguistic expression that is combined in problematic ways with a number of specific alleged metaphor signals. It is well known that distinct linguistic expressions display distinct types of behavior with their context, and that one case cannot be representative of the entire phenomenon of conventional metaphor (e.g., Deignan, 2005). Moreover, the revitalization of a conventional metaphor as a metaphor by means of a single lexical item, a pragmatic signal, constitutes one of the hardest cases for DMT, one which may display more variation between cases than stronger cases, including better manipulated versions of extended metaphor, as we are currently undertaking in the Metaphor Lab Amsterdam (Reijnierse et al., in press). Gibbs’ first effort may act as a prompt for other researchers to follow suit.

Where do we go from here? DMT needs to be interpreted as an extension of CMT, raising the question when metaphor is processed by comparison or cross-domain mapping and what this means (cf. Steen, 2011b and elsewhere). DMT does not ignore CMT nor does it go wholesale against it. Instead, DMT asks precise questions about the role of metaphorical language in utterance processing at various levels of mental model construction and maintenance. It is true that DMT questions the alleged power of unconscious metaphor use and instead highlights the potential power of deliberate (and potentially conscious) metaphor use, but these are intended as corrections to and developments of the current picture. That we need to reinterpret current evidence for Conceptual Metaphor Theory from this perspective is clear and is on our lab’s agenda.

References

- Bowdle, B.F., Gentner, D., 2005. The career of metaphor. *Psychol. Rev.* 112, 193–216.
- Charteris-Black, J., 2012. Forensic deliberations on purposeful metaphor. *Metaphor Soc. World* 2, 1–21.
- Deignan, A., 2005. *Metaphor and Corpus Linguistics*. John Benjamins, Amsterdam.
- Gibbs, Jr., R.W. (Ed.), 2008. *The Cambridge Handbook of Metaphor and Thought*. Cambridge University Press, Cambridge, UK.
- Gibbs Jr., R.W., 2011. Are deliberate metaphors really deliberate? A question of human consciousness and action. *Metaphor Soc. World* 1, 26–52.
- Gibbs Jr., R.W., 2015. Do pragmatic signals affect conventional metaphor understanding? A failed test of deliberate metaphor theory (this volume).
- Giora, R., 2008. Is metaphor unique? In: Gibbs, Jr., R.W. (Ed.), *The Cambridge Handbook of Metaphor and Thought*. Cambridge University Press, Cambridge, UK, pp. 143–160.
- Goddard, C., 2004. The ethnopragmatics and semantics of ‘active metaphors’. *J. Pragmat.* 36, 1211–1230.
- Kahneman, D., 2012. *Thinking, Fast and Slow*. Penguin, Harmondsworth.
- Krennmayr, T., 2011. *Metaphors in Newspapers*, LOT Dissertation Series, vol. 276, Utrecht.
- Krennmayr, T., Bowdle, B., Mulder, G., Steen, G.J., 2014. Economic competition is like auto racing: building metaphorical schemas when reading text. *Metaphor Soc. World* 4 (1), 65–89.
- Macnamara, D.S., Magliano, J., 2009. Toward a comprehensive model of comprehension. In: Ross, B. (Ed.), *The Psychology of Learning and Motivation*, vol. 51. Academic Press, Burlington, VT, USA, pp. 297–384.
- Musolf, A., 2004. *Metaphor and Political Discourse: Analogical Reasoning in Debates about Europe*. Palgrave Macmillan, Basingstoke, UK.
- Ng, C., Koller, V., 2013. Deliberate conventional metaphor in images: the case of corporate branding discourse. *Metaphor Symb.* 28, 131–147.
- Reijnierse, W.G., Burgers, C.F., Krennmayr, T., Steen, G.J., 2015. In search of a framing effect. *Metaphor Soc. World* special issue on ‘The political impact of metaphors’ (in press).
- Rundell, M., 2002. *Macmillan English Dictionary for Advanced Learners*. Macmillan, Oxford.

- Simmons, J.P., Nelson, L.D., Simonsohn, U., 2011. False-positive psychology: undisclosed flexibility in data collection and analysis allows presenting anything as significant. *Psychol. Sci.* 22, 1359–1366.
- Steen, G.J., 2007. Finding Metaphor in Grammar and Usage: A Methodological Analysis of Theory and Research. (Converging Evidence in Language and Communication Research), vol. 10. John Benjamins, Amsterdam/Philadelphia.
- Steen, G.J., 2008. The paradox of metaphor: why we need a three-dimensional model for metaphor. *Metaphor Symb.* 23 (4), 213–241.
- Steen, G.J., 2010. When is metaphor deliberate? In: Johannesson, N.-L., Alm-Arvius, C., Minugh, D.C. (Eds.), *Selected Papers from the Stockholm 2008 Metaphor Festival (Stockholm Studies in English)*. University of Stockholm, Stockholm, pp. 43–63.
- Steen, G.J., 2011a. The contemporary theory of metaphor – now new and improved! *Rev. Cogn. Linguist.* 9 (1), 26–64.
- Steen, G.J., 2011b. Metaphor, language, and discourse processes. *Discourse Process.* 48 (8), 585–591.
- Steen, G.J., 2011c. From three dimensions to five steps: the value of deliberate metaphor. *metaphorik.de* 21, 83–110.
- Steen, G.J., 2013. Deliberate metaphor affords conscious metaphorical cognition. *J. Cogn. Semiot.* 5 (1–2), 179–197.
- Steen, Gerard, 2015. Mixed metaphor is a question of metaphor deliberateness. In: Gibbs, Jr., R.W. (Ed.), *Mixing Metaphor*. John Benjamins, Amsterdam (in press).
- Steen, G.J., Burgers, C.F., Reijniere, W.G., 2014. When do natural language metaphors influence reasoning? A follow-up study to Thibodeau and Boroditsky (2013). *PLoS ONE*. <http://dx.doi.org/10.1371/journal.pone.0113536>
- Tay, Dennis, 2013. *Metaphor in Therapy*. John Benjamins, Amsterdam.
- Van Dijk, T.A., Kintsch, W., 1983. *Strategies of Discourse Comprehension*. Academic Press, New York.