The study of metaphor as part of critical discourse analysis

Andreas Musolff

School of Language and Communication Studies, University of East Anglia, Norwich, NR4 7TJ, UK


To cite this article: Andreas Musolff (2012): The study of metaphor as part of critical discourse analysis, Critical Discourse Studies, 9:3, 301-310

To link to this article: http://dx.doi.org/10.1080/17405904.2012.688300

PLEASE SCROLL DOWN FOR ARTICLE

Full terms and conditions of use: http://www.tandfonline.com/page/terms-and-conditions

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae, and drug doses should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand, or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.
This article discusses how the study of metaphoric and more generally, figurative language use contributes to critical discourse analysis (CDA). It shows how cognitive linguists’ recognition of metaphor as a fundamental means of concept- and argument-building can add to CDA’s account of meaning constitution in the social context. It then discusses discrepancies between the early model of conceptual metaphor theory and empirical data and argues that discursive-pragmatic factors as well as sociolinguistic variation have to be taken into account in order to make cognitive analyses more empirically and socially relevant. In conclusion, we sketch a modified cognitive approach informed by Relevance Theory within CDA.

Keywords: discourse; metaphor; cognitive linguistics; conceptual metaphor analysis; critical discourse analysis; racism

Introduction: how can metaphor analysis help to unmask racist ideology in discourse?

In 2008, Dominic Lüthard, leader of the far right-wing ‘Party of nationally oriented Swiss’ attacked the then newly elected ‘Miss Switzerland’, Whitney Toyloy, and her runner-up, Rekha Datta, as personifying the ‘brown tumour that was eating up’ free Switzerland (Die Welt-Online, 15 October 2008) on account of their dark skin colour. Whilst a local judge initially imposed a fine of 500 Swiss Franks on Lüthard, the district court acquitted him a few months later because his attack against Toyloy and Datta did not in their view constitute ‘racial discrimination’ (Tages-Anzeiger, 3 April 2009). The verdict was celebrated by Lüthard and his party as a ‘victory for free speech’ but from a ‘critical linguistics’ viewpoint clearly demonstrates an uncritical understanding of the use of metaphors in public discourse: they were considered to be just ‘colourful’ rhetorical ornaments that may be emotionally loaded and perhaps even ethically reprehensible but have no bearing on the core information of a statement and its implications, for which the speaker can be held legally responsible. In 2011, Lüthard used the same trick to denounce the new ‘Miss Switzerland’, Alina Buschschacher, on account of her Caribbean family background, as being part to the ‘multicultural decomposition’ of Switzerland. Again, as in 2009, commentators doubted that he could be successfully persecuted for his racist remarks because he avoided making ‘factually incorrect’ statements and only used ‘subjective’ imagery (Blick, 28 September 2011).

The investigation and exposure of racist metaphor have always been part of the critically oriented approach to language study, whether in the sense of early critical linguistics that built its research agenda on the ‘Critical Theory’ of the Frankfurt School or the more recent strands of critical discourse analysis (CDA) and the closely related discourse-historical Approach (Fairclough, 1995; Reisigl & Wodak, 2009; Wodak, 2009; Wodak & Chilton,
The propensity of racists to dehumanize their victims both verbally and practically has in fact generated a whole research tradition in its own right, which has highlighted a systematic conceptual framework of the ‘Great Chain of Being’ (Lovejoy, 1936) that allows racists to denigrate their respective targets by ‘demoting’ them from humankind’s central position in the Chain down to the ‘lower’ ranks of animals, plants, disease-engendering organisms or inorganic material (Bosmajian, 1983; Chilton, 2005; Hawkins, 2001; Musolff, 2010; Rash, 2006; Richardson & Wodak, 2009; Sontag, 1978).

In order to be able to evaluate the explanatory power of cognitive metaphor analysis, we need to first compare it briefly with traditional theories, then discuss its claims to provide an innovative and wider-reaching account of metaphor in discourse, and assess its capability of dealing with empirical data. In conclusion, we argue that cognitive metaphor analysis needs to be complemented by a pragmatic, specifically relevance-oriented approach to be fruitful for CDA.

Metaphor, rhetoric and cognition

Critical interest in metaphor investigation has not been confined to its use in hate speech and stigmatizing discourse: due to its prominence in public texts and discourses of all kinds, metaphor has been recognized as one of the most important rhetorical devices ever since Aristotle (1991) treated it in his *Art of rhetoric*. From antiquity onwards through the twentieth century, metaphorical speech has been at the centre of rhetorical training and was regarded as a socially powerful but also dangerous ‘trope’ or figure of speech that required special attention and critique (Johnson, 1981; Stutterheim, 1941, pp. 60–162). Insofar as this rhetorical tradition became fossilized in educational contexts as well as in its references to Aristotelian or other ‘classical’ definitions, it became the object of critique and dismissive treatment in modern semantics and analytical philosophy, to the point where a *New rhetoric* or *Philosophy of rhetoric* attempted to put it on new theoretical foundations by linking it with phenomenologically oriented new theories of analogy and practical, i.e. non-formal argumentation (Black, 1962; Perelman & Olbrechts-Tyteca, 1969; Richards, 1936; Ricoeur, 1975; Weinrich, 1967). In mainstream semantics and pragmatics, however, metaphor and other figurative uses of speech were still treated as ‘indirect’ or derivative meaning aspects which required special lexical rules (Leech, 1981, pp. 214–219; Lyons, 1977, pp. 103–104) or several steps to recover the sense of an utterance from a seeming violation of a lexical convention or a conversational maxim (Grice, 1989, p. 34; for a detailed critique see Leezenberg, 2001, pp. 69–124; Searle, 1993, pp. 102–111).

Against the trend of classifying metaphor and figurative speech as a semantically and/or pragmatically ‘extraordinary’ phenomenon, George Lakoff and Mark Johnson published their famous, programmatically entitled book *Metaphors we live by* in 1980, which became the foundation text for a new, ‘cognitively’ oriented theory of meaning. Metaphor was no longer seen as ephemeral to a theory of meaning but as being ‘among our principal vehicles for understanding’ our physical, social and inner world (Lakoff & Johnson, 1980, p. 159) by ‘mapping’ conceptual structures from a relatively familiar, experientially grounded ‘source domain’ onto a more abstract or less well-known ‘target domain’ (Lakoff, 1993, pp. 208–209; Lakoff & Johnson, 1980, pp. 156–160). Far from merely adding rhetorical flourish to pieces of information, metaphors are viewed as being ‘conceptual in nature’ and essential for the creation of social realities: ‘A metaphor may thus be a guide for future action. Such actions will, of course, fit the metaphor. This will, in turn, reinforce the power of the metaphor to make experience coherent. In this sense metaphors can be self-fulfilling prophecies’ (Lakoff & Johnson, 1980, p. 156). It is evident that such a perspective on metaphor as a conceptually significant, even central, cognitive mechanism matches the research interests of CDA to a large extent. As a consequence, a continuous stream of cognitively orientated CDA analyses of metaphor has been published over the past decades,
which includes several analyses of US political discourse by Lakoff himself (Lakoff, 1992, 1996, 2003, 2004) and shows little sign of abatement.\(^2\)

In order to get a sense of the explanatory potential and limits of this early cognitive approach to political metaphor analysis called ‘Conceptual Metaphor Theory’ (abbreviated as CMT), let us consider the following examples, all taken from a research corpus of current-day public discourse in Britain containing body- and illness-related source concepts.\(^3\)

(1) So long as there has been a body politic to host them, parasites have feasted on its blood. (The Independent, 7 December 2011; from an article about lobbyists’ alleged influence on British government policy; italics here and in other examples supplied by the author to indicate relevant metaphorical expressions).

(2) Paul Kagame, the only leader Rwanda has known since the end of the genocide, has said his country is not ready for the ‘medicine’ of democracy ahead of elections in August. (The Independent, 25 June 2010).

(3) Killing off the cancerous spread of the BNP [= right-wing extremist ‘British National Party’] is within our grasp (quotation from a statement by the then Labour Party minister, John Denham, in The Daily Telegraph, 25 June 2010).

On the basis of these examples and on Lüthard’s racist attacks cited above, we can posit a conceptual metaphor **A NATION STATE IS A HUMAN BODY**, which has the following implications (in CMT, the latter are called ‘entailments’):

- a nation state can be **healthy** or **fall ill**;
- when it is **ill**, it suffers from specific **diseases** (e.g. ‘cancer’, ‘tumour’) and needs **therapy** (e.g. ‘medicine of democracy’);
- the **illness** may be the effect of **disease-carrying and -spreading agents**, e.g. ‘parasites’ that live off the state’s **body** (‘feast on its blood’) until it is destroyed and ‘decomposes’.

What is relevant in this analysis from a CDA viewpoint is the argumentative advantage that the metaphor gives its users when they want to (dis-)qualify political developments, social groups or even individuals as threatening the identity or continued existence of a nation state. Instead of laboriously having to demonstrate and back up their claims with facts, which could be critically tested and challenged, the speaker/writer invites the hearer/reader to access knowledge about the undesirability of illness and the necessity for therapy by referring to generally known illnesses and agents of disease. The respective conceptual items (**cancer, parasites, decomposition**) also carry social, emotional and aesthetic values that influence the interpretation of the utterance. This conceptual complex forms a ‘source domain’ from which, by way of analogy, both its elements and their relations are mapped on the ‘target domain’ of political entities. The hearer/reader can thus work out the implications in a seemingly straightforward way: just as it is imperative for a successful medical therapy to eliminate all agents of disease in case of a serious illness, so any socio-political elements of the nation that threaten its existence have to be eliminated. If these inferences were acknowledged as valid conclusions in a legal system, the judicial prosecution of racists such as Lüthard would obviously be much more plausible than under the still prevailing assumption that metaphors have no logical and therefore no practical consequences that could be taken seriously. However, the dominant nonchalant attitude to the meaning value of metaphors allows speakers to express and insinuate even the most extreme views under the guise of ‘subjectively’ coloured figurative speech. This opportunity is of course not restricted to racist extremism – even though it has had some of its greatest and most devastating impact in that field (as the historical record shows) – but it pertains to all fields of public, especially political discourse. Being a competent political speaker/writer implies the expert use of metaphors to promote potentially problematic political concepts.
without incurring the risk of being held legally or socially responsible. It is obvious that the application of CMT to political discourse, or as Charteris-Black has felicitously dubbed it, CMA (Critical Metaphor Analysis), can provide “particular insight into why the rhetoric of political leaders is successful” (Charteris-Black 2005, p. 197). We shall return to this general point of the social impact of metaphor in the last section.

So far we have assumed a straightforward relationship between source and target domains, in the sense that the mapped conceptual relations and implications appear to be congruent. For more complex, incongruent cases, Lakoff (1993, p. 215) formulated a so-called ‘invariance principle’ which stipulated that metaphorical mappings ‘preserve the cognitive topology (that is, the image-schema structure) of the source domain, in a way consistent with the target domain’. At first sight, this principle seems to reflect only the reasonable assumption that any source image schema is preserved only as long as it does not impede the understanding of the target meaning; however, some empirically observed examples of metaphorical discourse indicate that the relationship is more complex. Consider, for instance, the following quotations, which have also been taken from the body-related metaphor corpus:

(4) The Tory leader’s ambition, on current evidence, is to make Britain the ingrowing toenail of Europe (The Daily Telegraph, 26 October 2009).

(5) [Boris Johnson (Conservative British politician, Mayor of London)] said, ‘as a mere Mayor of London, as a mere toenail in the body politic, it may be difficult to have a referendum [on the EU Lisbon Treaty]’ (BBC Newsnight, 5 October 2009).

(6) There is a large part of me that does not want to read another sentence about this lately exploded pustule on the posterior of the British body politic [intended referent: Damian McBride, adviser to Labour Prime Minister Gordon Brown] (The Daily Telegraph, 13 April 2009, author: Boris Johnson).

Images of a toenail or pustule on the body politic are grotesque applications of body source concepts in political discourse, which serve polemical purposes (see examples 4 and 6) or achieve an ironic effect (example 5), where Johnson’s seeming self-deprecation (‘mere toenail’) is contradicted by the juxtaposed self-qualification as a Mayor of London (which is, of course, a highly influential and prominent political position in the UK). For anyone with sufficient background knowledge about British politics in 2009, these metaphors were all perfectly transparent, i.e. they fit with the ‘cognitive topology of the target domain’ in Lakoff’s sense. Viewed from the source domain, however, they are rather problematic. If Britain were to become an ingrowing toenail of Europe, as pictured in (4), it would certainly be uncomfortable for the rest of the (implied) body of the European Union (metonymically referred to as ‘Europe’) but of course in the first place also for itself. How could anyone, let alone a patriotic conservative politician, make it their ambition to achieve such a status for their own nation? In (5), Boris Johnson refers to himself as a lowly toenail in the British body politic, which leaves the remaining source domain underdetermined: if he is the toenail, who or what is supposed to be the toe? Furthermore, the overall meaning is evidently to be understood ironically, i.e. implicitly negated. So, if he is not the toenail of the British nation, what is he then? Johnson’s earlier disqualification of an adversary as a pustule on the body politic in (6) is transparent enough as a crass insult but the assertion that the pustule has ‘lately exploded’ would seem, at source level, to mean that this bodily affliction is near its end, because the underlying infection will normally subside. However, Johnson was in fact referring to an alleged smear-campaign by the Labour adviser against the Tories, which had just ‘exploded’ onto the British media world. The seemingly coherent image of the exploding pustule is arguably more of a clever word-play than an analogically stringent mapping of congruent domain aspects.
Such incongruence between source and target domains can be dealt with by CMT as manifestations of the ‘invariance principle’, insofar as source domain aspects that are irrelevant for the target domain are cancelled out. However, the question then arises how a hearer/reader proceeds to work out which implications to allow and which ones not. Clearly, any successful understanding of the respective metaphors in the above cited examples depends largely on the hearer/reader’s knowledge of topical British politics – but that knowledge is not, strictly speaking, the target domain. The latter is, rather, the field of politics in general, not a particular political configuration or situation. In other contexts, it might be conceivable to speak of X as an ingrowing toenail that is being operated upon or removed or X as a toe being superior to Y as the toenail or of X as an exploding pustule giving relief to the whole body, i.e. with wholly different implications. Thus, we can see that the source domain’s ‘cognitive topology’ is open for many other mappings and can hardly act as a constraint for the choice of target domain elements or relations as input into the metaphor, as demanded by the invariance principle. In short, it is not so much the knowledge domains but the immediate and wider context that ‘constrains’ the sense in which a metaphorical utterance is understood. Depending on the contexts of use, the source domain content can vary almost infinitely, and such variation has indeed been observed and described in numerous empirical metaphor studies (Charteris-Black, 2004, 2005; Kövecses, 2009; Musolff, 2004, 2010; Semino, 2008; Steen, 2007), and it even increases when cross-linguistic and -cultural data are considered (Kövecses, 2005, 2006; Yu, 2008a, 2008b). On the other hand, one fundamental tenet of CMT, as well as of its further development in ‘Conceptual Integration theory’ has been the insistence on the creative power of metaphor, i.e. its capacity to make accessible new, unfamiliar or only vaguely known target domain elements and counterfactual scenarios (Fauconnier & Turner, 2002; Lakoff & Johnson, 1980, pp. 147–155). However, this creates a further dilemma for any strict application of the invariance principle: if the target domain’s cognitive topology is still to some extent unknown, how can it possibly constrain the source input into mappings? The cognitive ‘constraining’ power of source and target domains thus cannot be regarded as pre-established; otherwise, the ‘invariance principle’ becomes circular. Rather than ‘underlying’ discourse, the mapping process is the product of discourse.

The discursive significance of metaphor

In view of these and other difficulties of CMT in dealing with empirical discourse data, several new cognitively oriented approaches have emerged that aim to preserve and develop further the groundbreaking insights into the conceptual significance (and with it, the social accountability) of metaphor without denying or ‘arguing away’ variation phenomena and the problems of assuming pre-discursively established source–target mappings. Such approaches have focussed on the complex relationship between metaphor and metonymy insofar as the latter seems to provide much of the ‘emergent’ conceptual material for the former in real life discourse (Barcelona, 2000; Dirven & Pörings, 2003; Panther & Radden, 1999; Radden, 2000), the nature of argument-relations in figurative speech (Gentner & Bowdle, 2008), the ‘deliberateness’ of salient metaphor uses in public and literary discourses that compel the hearer/reader to attend to the otherness of source concepts by way of a comparison (Steen, 2008, 2011), and the dialogic function of metaphor in actual and scripted conversation (Cameron, 2007, 2011; Musolff, 2011). Some of these approaches have been developed independent of CDA but are by no means incompatible with it. Nor are they incompatible with the cognitive approach; in fact they can be seen as transcending the latter’s tendency to focus on conceptual and categorical structures by accounting for argumentative, inferential and interactional dimensions of metaphor and metonymy. In doing so, they presuppose – tacitly or explicitly – a wider theory of communication that would serve as a framework in which to formulate sub-theories for specific types of metaphor uses.
This general question of an integration of cognitive and communicative aspects in metaphor theory has recently become the subject of intensive theoretical and methodological discussions which focus on the relationship between CMT and specifically Relevance-theoretically (RT) oriented analyses (Carston & Wearing, 2011; Gibbs & Tendahl, 2006, 2011; Sperber & Wilson, 1995, 2008; Tendahl, 2009; Tendahl & Gibbs, 2008; Wilson, 2011; Wilson & Carston, 2006). This discussion can serve as a platform to sketch future perspectives in which metaphor research can contribute to CDA. The most obvious overlap between CMT and RT approaches to metaphor is that neither of them assumes ‘that metaphors must be analyzed literally before they can be interpreted metaphorically’ (Gibbs & Tendahl, 2006, p. 380).

However, whilst ‘classical’ CMT derives this conclusion from a conviction that ‘most of our conceptual system is metaphorically structured’ (Lakoff & Johnson, 1980, p. 56), i.e. on the assumption that a sophisticated metaphor theory is needed to explain cognition in a general sense, Relevance Theory aims to give a ‘deflationary account of metaphor’ (Sperber & Wilson, 2008) by grouping it in a range of ‘loose uses’ of language, which covers many of the rhetorical tropes, all of which are explained in similar ways by the principles of ‘cognitive’ and ‘communicative relevance’ that underlie all ostensive communication (Sperber & Wilson, 1995, pp. 231–237; 2008, p. 84). A first, generally applicable RT explanation of metaphorical understanding focuses on the category of ‘ad hoc’ concepts that ‘are adjusted to the precise circumstances of their use and are therefore unlikely to be paraphrasable by an ordinary language expression’ (Sperber & Wilson, 2008, p. 102).

Instead of analysing, for instance, the rejection of unwanted physical contact, in the utterance, ‘Keep your paws off me!’ as a cognitive ‘mapping’ operation across animal and human extremities, Sperber and Wilson (2008, p. 102) interpret it as the ad hoc construction of a concept ‘PAW*’ (≠ the lexically recorded concept ‘PAW’) as ‘the most easily constructed concept whose extension includes the hearer’s hands, and which carries the weak contextual implications generally true of prototypical paws: that they are used clumsily, grossly and so on’. This pragmatic explanation has the advantage of being economical and at the same time psychologically plausible: such cases of transparent metaphor use in conversation and public discourse require neither a huge conceptual architecture nor, as in older pragmatic explanations, a deductive procedure to work out that a primary literal meaning is not accessible and therefore a special figurative meaning should be sought.

On the other hand, ‘loose uses’ can only lead to ‘loose interpretations’ – this point is theoretically covered in RT by the assumption of only ‘weak contextual implications’; however, such an analysis is not sufficient for the often strongly suggestive and communicative force of polemical and argumentative language use that CDA is interested in. However, RT also allows for strongly ‘implicated’, intended inferences, e.g. in dialogic uses (Sperber & Wilson, 2008, pp. 98–99) and for a second type of metaphor understanding (typically, extended or literary metaphors), ‘in which the literal meaning of metaphorically used language is maintained, framed or metarepresented, and subjected to slower, more reflective interpretive inferences’ (Carston & Wearing, 2011, p. 310, see also Carston, 2010, pp. 304–310). The following quotation may provide a fitting example of political body imagery, for which this second type of metaphor understanding is needed:

(7) The German question never dies. Instead, like a flu virus, it mutates. On the eve of unification, some European leaders worried that it would resume killer form. ‘We’ve beaten the Germans twice and now they’re back’, said Margaret Thatcher, Britain’s prime minister. Such fears now look comical. But even today’s mild strain causes aches and pains, which afflict different regions in different ways. America’s symptoms are mild. Central Europe seems to have acquired immunity. After unification 85% of Poles looked upon Germany as
a threat [...]. Now just a fifth do. It is among Germany’s long-standing west and south European partners that the German question feels debilitating, and where a dangerous flare-up still seems a possibility. Germany’s answer to the question matters not only to them. It will shape Europe, and therefore the world (The Economist, 21 October 2010).

This passage is replete with lexical items evoking body imagery with regard to a supra-national target referent. Within the body politic of the world, Germany is depicted as a potential disease-carrier, a virus, that causes all kinds of symptoms and further physical reactions but that also has the chance to ‘answer’ its own ‘question’. It would be implausible to interpret this text, in classic CMT-style, as a non-deliberate, ‘automatic’ use of conceptual elements from one source domain, or just as their fanciful ‘extension’, or as a series of five successive ad hoc concept constructions, as in RT’s ‘loose uses’ perspective. Instead, the metaphor is used to put forward and develop a specific argument in which the various possibilities of the literal source meanings are explicitly referred to in order to discuss the complexities of Germany’s relation with other nations. The literal meanings of the respective medical/virological concepts should be viewed as ‘lingering’ (Carston, 2010, p. 305) in the text and its interpretation, in order to sustain the readers’ attention and understanding of the complex argument right up to the last part of the ‘agentivizing’ of Germany (into a self-conscious subject whose ‘answer to its own question’ is still to come), which evidently transcends any coherent bodily/medical source domain, i.e. we would not speak in a coherent, source domain-determined biological/virological sense of a virus that consciously considers its ‘answers’ to the ‘question’ it puts to the host body. Evidently, this latter utterance content has got nothing to do with the source domain but equally evidently it represents the crucial ‘point’ the writer tries to reach as the conclusion of her metaphorically grounded argument. To argue that she did not intend the relevant inferences and cannot be held responsible for them would be patently absurd.

This reasoning should also hold in other cases where a metaphoric statement is similarly explicit, if not that extended, in its argumentative conclusiveness, e.g. the racist statements quoted earlier. In fact, metaphor users have sometimes been held responsible for the implicatures of their discourse – albeit usually from a safe geo-political or historical distance. Thus, the Iranian president, Mahmoud Ahmadinejad’s, repeated denunciations of Israel as a ‘tumour’ that needed to be ‘eliminated’ were criticized by Western governments and cited among the reasons to isolate the Iranian regime internationally (The Times, 9 December 2005; Die Süddeutsche, 25 August 2011, Die Welt 26 August 2011). With the benefit of historical hindsight, the extreme dehumanization of Jews by the Nazis as well as of other victim groups of genocidal racism, which was dismissed as mere ‘wild rhetoric’ by contemporaries, has also been exposed as providing the crucial framework in which the ensuing murderous policies could be pseudo-legitimized (Bosmajian, 1983; Hawkins, 2001; Musolff, 2007; Rash, 2006). We can therefore conclude that a ‘critically’ oriented, cognitive metaphor analysis has at least a potential impact in communication ethics if and when it takes its own methodological and theoretical premises seriously, i.e. when it transcends mere commenting of ‘rhetorical’ aspects of political and public discourse and instead engages instead with its cognitive import by way of providing a pragmatically and psychologically plausible analysis of intended utterance meaning that speakers can be held accountable for.

Acknowledgements
I am grateful to Saskia Daalder, Dalia Gavriely-Nuri, John Richardson and Ruth Wodak for helpful critical comments on earlier versions of this article. The remaining shortcomings are mine, all mine!
Notes on contributor

Andreas Musolff is Professor of Intercultural Communication at the University of East Anglia in Norwich (UK). His monographs include *Metaphor, Nation and the Holocaust: The Concept of the Body Politic* (2010), *Metaphor and Political Discourse* (2004). He has co-edited further volumes and published numerous articles on political discourse in Europe, metaphor theory and the history of functional linguistics.

Notes

1. Aristotle 1991, especially Book III (Chapters 3, 4 and 10–11). For the often-neglected distinction between Aristotle’s treatment of metaphor in the *Art of rhetoric* as opposed to his *Poetics*, see Mahon (1999).
3. The research corpus consists of over 200 texts from British media in the period 1991–2001, which total 59,003 words, it includes more than 40 distinct body-related concepts as source domain input. For details of the corpus see Musolff (forthcoming).

References


