Metaphor and Metonymy: A Multi-Dimensional Deconstruction

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Abstract

[[Dec07: REWORKED: aims/claims modified; NB it's nearly at the allowed limit of 200w]]
Differentiating the underlying natures of metaphor and metonymy has been difficult. Various suggestions have been made, from which we abstract several "constitutive dimensions" along which metaphor and metonymy may conceivably differ. These dimensions include the extent of similarity involved, the extent of contiguity involved, the extent to which source/target links are part of an utterance's message, and various others. We show that, of the dimensions discussed, none can be claimed individually to differentiate firmly between metaphor and metonymy. Further, even in conjunction they cannot be held to provide a firm differentiation, because metaphor and metonymy can coincide in the resulting multi-dimensional space. Rather, metaphor and metonymy form fuzzy, overlapping "clouds" in the space. One dimension that may possibly provide a clean distinction is that of the extent to which source items are cognitively identified with target items, but it is not yet clear whether cognitive identification always happens in metaphor. In discussing the various dimensions, the paper extends the detail of existing debates (e.g., about the interaction of metaphor and metonymy with domains) while also making distinctly new contributions (e.g., on ways in which similarity and contiguity are not as different as normally assumed).

Keywords:

metaphor, metonymy, metaphor/metonymy distinction, contiguity, similarity, part/whole metonymy, representational metonymy, resemblance metaphors

1 Introduction

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Specifying the nature of metaphor and metonymy has long been a thorny and contentious problem (Cameron, 1999a,b; Dirven & Pörings, 2002; Fass, 1997; etc.). A particular subproblem has been that of specifying convincing grounds for differentiating them from each other. Recently, Dirven & Pörings (2002) collected together various works aimed at elucidating the nature of metaphor and metonymy and investigating their differences and other relationships. A wide variety of opinion is revealed. See also (CHECK) Fass REF for a review of different views of how metaphor and metonymy are related.

In this paper we examine prominent ways that have been suggested for making a distinction between what metaphor and metonymy are, at bottom. (The paper does not address the issue of how to how the mind or an automated language processor can categorize an utterance as metaphorical or metonymic.) From these candidate ways of differentiating the two tropes we abstract several "constitutive dimensions" along

which metaphor and metonymy potentially differ. These dimensions include the extent of source/target similarity involved, the extent of source/target contiguity, the extent to which source/target links are part of an utterance's message, the extent to which metaphor and metonymy stay within or cross between domains, and various others. In the case of some dimensions, notably those concerned with domains, similarity and contiguity, the paper adds to the scepticism already expressed by other researchers as to the possibility of using them to differentiate metaphor from metonymy. We will make some apparently new, sceptical, observations on these and the other dimensions. Nevertheless, this is not to deny that there are often *tendencies* for metaphor and metonymy to lie on different parts of the dimension (e.g., the dimension concerned with the extent to which source items are merely hypothetical).

It is not only that, of the dimensions discussed, none can be claimed to be able by itself to differentiate between metaphor and metonymy in any firm way. Rather, even in conjunction with each other the dimensions cannot be held to provide a firm differentiation, because there are cases of metaphor and cases of metonymy that lie at the same place in the resulting multi-dimensional space. Metaphor and metonymy form fuzzy, overlapping "clouds" in the space as a whole as well as occupying fuzzy, overlapping stretches along individual dimensions.

However, there is a possible exception to the scepticism about the differentiating power of the individual dimensions. One of the dimensions is that of *Cognitive Identification*, which is about the extent to which understanders of a metaphorical utterance regard source items *as if* they were target items (or used to do so in the course of development of the metaphor in history), in the strong sense counterfactually *equating* them (not just setting them in, say, some similarity relationship with each other). This equation is for the purpose of having some effect on the target subject matter, such as highlighting aspects of it or transferring information about the source subject matter in some way to it. Notice that we are not talking here about the mere fact that the particular A-is-B surface form that some metaphorical utterances take looks like an identification: rather, we mean an actual identification in the mind of the understander (although of course the understander does not actually believe in the equation). Versions of this arise in blending theory (Turner & Fauconnier 1995), some AI approaches (e.g., that of Barnden *et al.*, 2004, and one part of Hobbs's REF approach) and other accounts of metaphor that take to be thinking/communicating about something "as if" were something else (e.g., Warren 2002) or as setting up a counterfactual world (Levin 1988, 1993). However, there are competing theories of metaphor that do not involve identification, notably the categorization theory (REFS), whereby even an A-is-B metaphor involves putting A and B in a common category rather than identifying them. Although the present author leans towards cognitive-identification accounts, it must be admitted that it is not yet clear to what extent such theories or their competitors account for metaphorical phenomena in general. Thus, we do not propose in this paper that Cognitive Identification serves as a firm differentiating ground between metaphor and metonymy. (To our knowledge no-one has claimed metonymy to involve identification, so the only question is the extent to which metaphor does so.)

Our particular new observations about the other dimensions include: additional evidence about the way in which the two subject-matters in metaphor can overlap; a strong focus on the fact that the subject-matters can be arbitrarily close to each other (even though most discussions of metaphor concentrate on cases where the subject matters are intuitively very different, such as time and money); an argument that source/target links in metaphor are often metonymically traversed and could count as forms of contiguity; going in the converse direction, an argument to the effect that metonymic part/whole links often actually involve important similarity as well as or as part of the contiguity; and arguments that source/target links can be part of the message of a metaphorical utterance, not just of a metonymic utterance as has been proposed by some authors.

It has been suggested that metaphor and metonymy fall on some kind of continuum or spectrum, with straightforward (or prototypical, or pure) versions of metaphor and metonymy at either end, so that there are possibilities in between. Radden (2002) makes one such proposal, and Croft & Cruse (2004:p.220) give examples that suggest intermediacy between metaphor and metonymy, while also mentioning the issue that what may appear like intermediacy may be the result of combination of distinctly different processes. Dirven (2002) discusses a phenomenon of "post-metonymy," intermediate between metaphor and metonymy, with

the "post" deriving from claimed historical changes, although Riemer (2002) argues that (his version of) post-metonymy need not lead in the direction of metaphor. We regard such spectrum views as broadly being on the right track, but push the idea much further. We claim that instead of a one-dimensional spectrum of variation, there is the multi-dimensional space defined by the spectra or dimensions we address (and possibly others we have neglected). We will suggest that there may be intermediacy both in the space as a whole and on at least some individual dimensions. We will also be careful to distinguish the notion that metaphor and metonymy can *overlap* from the notion that there can be *intermediate* possibilities between metaphor and metonymy. Overlap happens when a clear case of metaphor and a clear case of metonymy can both lie at the same place, whereas intermediacy is to do with a case of language use that is neither clearly metaphorical nor clearly metonymic.

The dimensions we discuss are ones the paper judges at the outset to be potentially *constitutive* of metaphor and metonymy: that is, to do with their fundamental nature as regards semantic or mental structures and processes involved. There are also dimensions on which metaphor or metonymy can vary but that we do not regard as constitutive. For example, as Ritchie (2006: 156) NEWREF says, in referring mainly to metaphor, "figurative use of language may itself constitute a field of meaning, with dimensions such as conceptuality, opaqueness, literalness, triteness, formality, folkishness among others." With the probable exception of literalness, the dimensions on this list arguably do not affect *whether* metaphor (or metonymy, etc.) is involved. We could also augment Ritchie's list with many other dimensions that have been important in the literature, such as aptness, vividness, imageability, evaluativeness, persuasiveness, literariness, social divisiveness/cohesiveness, and cultural specificity. However, if the paper's judgments of (non-)constitutiveness of dimensions turned out to be wrong then the set of dimensions concerned would need ultimately to be adjusted in further developments of the work in this paper.

In this way and others we do not claim to have completed the multi-dimensional journey: there may be additional dimensions worth adding, and individual dimensions proposed in this paper are themselves open to deconstruction into sets of more specialized dimensions. Some such additions and further deconstructions could potentially be inspired by the work of researchers who have provided dimensions for metaphor only or for metonymy only. For instance, Peirsman & Geeraerts (2006) have deconstructed metonymic contiguity into three dimensions.

The multi-[constitutive-]dimensional view leads us to the additional suggestion that "metaphor" and "metonymy" are nothing more than heuristic labels for the mentioned clouds in the multi-dimensional space, so that it may be a mistake to try define and differentiate these terms precisely. Just because we have the labels does not mean that they name useful concepts for linguistics or other disciplines. Rather, what may be more fundamental and valuable, both theoretically and in practice, is the dimensions themselves. However, the present paper does not press a hard case for this rather eliminativist view, preferring to concentrate on the relationship of metaphor and metonymy to the dimensions.

In association with these claims and suggestions, the author subscribes to an additional view that we do not have room to go into in the paper, namely that metaphoricity and metonymicity are deeply language-user-relative (see also REFS incl Ritchie): there is no objective fact of the matter about whether any given expression is metaphorical or metonymic, or precisely how it is so. Rather, even in the cases of prototypical metaphor and metonymy, the matter rests on such things as the particular lexicon, encyclopaedic knowledge, and interconceptual relationships held by a particular language user (whether utterer or understander). Thus, in principle, an expression can at best be metaphorical or metonymic *for* a particular language user, though of course in practice many expressions may be metaphorical/metonymic for the vast majority of native users of a language. Relativity has also been claimed in various forms and extents by a number of other authors (Cameron 1999b, Dirven 2002, Geeraerts 2002, Pragglejaz Group 2007, Radden 2002, Radman 1997, Riemer 2002, Ritchie 2006 NEWREF, Ruiz de Mendoza Ibez 1999). The purpose of mentioning the issue here is mainly to distinguish it from the issue of the differentiation of metaphor and metonymy. In principle, user-relativity does not imply that, for a given user, metaphor and metonymy cannot be cleanly differentiated; and, conversely, a lack of a clean differentiation does not of itself imply user-relativity. However, user-relativity complicates both the task of analysing metaphor and metonymy in general and the task

of analysing a specific utterance for metaphoricity and metonymicity.

Note also that, in this paper, the possibility of overlap of metaphor and metonymy is distinctly different from the possibility of combination, i.e. potentially independent acts of metaphor and metonymy being combined in a single expression (Fass 1997, Goossens 1990, Ruiz de Mendoza Ibáñez 1999). In the case of combination, the metaphor and metonymy could each in principle be clear-cut. We briefly discuss combination towards the end of the article.

Because of the very nature of this paper it does not put forward or rest upon any particular definition of metaphor or metonymy, relying instead partly on judgments of whether particular examples would generally be judged in the field as being metaphor or metonymy, and partly on arguments that certain phenomena should, to be consistent with those judgments, be regarded as metaphorical or metonymical as appropriate. The paper does nevertheless embody a cognitive assumption, in the sense of viewing metaphor and metonymy as at least in large measure to do with cognitive representation and processing issues as opposed to the surface form of utterances. In the case of lexicalized metaphor we allow the representation and processing to have occurred in the past, and thus merely be part of etymological motivation, rather than in the minds of present-day understanders.

For simplicity we do not address metaphor in media other than spoken/written language, even though metaphor is widely recognized to exist in sign language, gesture, graphical expression, music, dance, etc. Bringing these other media into the discussion is a further complication in attempts to define and differentiate between metaphor and metonymy, as they must then work harder to adopt medium-neutral terminology and argumentation.

The mentions of "[proto]typical" metaphor and metonymy in the paper largely reflect the author's impression either of what other authors regard as typical or of what types of metaphor and metonymy are typically discussed in the literature, rather than reflecting occurrence frequencies or attested judgments by other ordinary language users. In any case, our typically attributions will merely be tentative.

The paper does take it to be necessary in metonymy for there to be the following of some type of link from a source item to a target item (a metonymic "mapping link"). There does not appear to be any metonymy theorist who has departed from this, although what constitutes a "link" varies. We also take it to be typical (but not necessary) for the source item in such link-following to be a direct sense or referent of some *surface expression* (of any grammatical type) in the utterance, rather than to be more indirectly connected to the utterance. We call such link-following *Surface-Based Link-Following* (and this is the name of one of our dimensions). The paper wishes, however, to allow such phenomena as chained metonymy and metaphor-metonymy chaining, where the source item S in a metonymic link could be the target item in a metaphorical or metonymic link. In such a case S is not itself a direct sense or referent of a surface expression. Thus, Surface-Based Link-Following is not *necessary* for metonymy. Nor do we wish to assume that it is *sufficient* for metonymy: it may for instance be that there should be some restriction on the type of link followed.

As well as not resting on particular definitions of metaphor and metonymy, we attempt not to assume any particular theory of how metaphor works within the mind, within communication, etc. Although we will often mention mapping links (or "mappings" for brevity), we attempt to do this in a theory-neutral way. Thus, for example, even though "My job is a jail" is analyzed by (REF) in terms of a category of constraining entities that includes both the job and physical jails, we will still describe it as involving a "mapping link" between the job and a physical jail (or possibly the general category or concept of physical jails) even if no direct link is established in the understander's mind. This way of talking is just in the service of having a uniform way of describing the fact that, in metaphor, at least one target item is explicitly or implicitly, and directly or highly indirectly, associated with at least one source item. ((CHECK that I really stay as neutral as this))

The main structure of the paper's remainder is as follows. In section 2, we discuss various possible constitutive differences between metaphor and metonymy that have arisen (explicitly or implicitly) in the

literature, although not all of them have been claimed to be enough by themselves to differentiate metaphor and metonymy from each other. We give our own arguments why each difference is not enough by itself, often showing that the difference is less marked or more dubious than commonly realized. In section 3 we abstract our various dimensions of variation from the differences. Mostly, each mode of difference in section 2 becomes a dimension, but there are some complications. In sections 3 and 4 we go beyond the differences in isolation to argue that the differences are not enough even in combination to serve to differentiate metaphor and metonymy from each other: there is still significant overlap between these figures. At best, (some) *typical* forms of metaphor may be clearly differentiable from (some) *typical* forms of metonymy, either on some of the differences individually or in the overall space mapped out by the differences. Section 3 also briefly discusses the general possibility of intermediacy between metaphor and metonymy. Section 4 addresses some additional issues and Section 5 concludes.

The paper makes considerable use of Beatrice Warren's work on metonymy and metaphor (Warren 2002, 2006), because it provides and categorizes many examples, it brings together many types of metonymy and general considerations concerning metonymy, and the present paper finds some, though not all, of her claims to be plausible, as will become apparent below.

2 Some Possible Constitutive Differences between Metaphor and Metonymy

In this section, where we march through an array of possible constitutive differences between metaphor and metonymy, we first consider the amounts of qualitative difference (conceptual distance) that there may be between source and target in metaphor and metonymy. This leads naturally into a consideration of whether the existence of conceptual divisions such as domains can serve to differentiate between metaphor and metonymy. We present new arguments in this rather than rehearsing the considerable amount that has already been written in debates on it. After that we consider whether a distinction between metaphor and metonymy can be found in a distinction between similarity and contiguity. We argue that these two notions are more difficult to distinguish than is assumed. We then look at the extent to which source/target linkages are themselves part of the message conveyed by a metaphorical or metonymic utterance. The next two differences considered are the extent to which the source item is a real thing or not, and the degree to which the postulated linkages between source and target involve cognitive identification and copunterfactuality. Finally, we consider the extent to which metaphor and metonymy map or transfer structure from source to target.

[[Dec07: THE STRUCTURING INTO SUBSECTIONS HAS CHANGED SOMEWHAT]]

2.1 Source/Target Qualitative Difference (Conceptual Distance)

[[Dec07: MOVED OUT OF DISCUSSION OF DIVISIONS; proper-name metaphor discussion strengthened with examples from Linol Wee's paper]]

Much of the discussion of metaphor in the vein of conceptual metaphor theory deals with cases where, intuitively, source and target items are qualitatively very different, such as LOVE and JOURNEY, or TIME and MONEY, or STATES and LOCATIONS, or ANGER and HEAT. Indeed, a major feature of the theory is the idea of abstract concepts being understood in terms of less abstract ones, although many authors have quarrelled with this or qualified this view (e.g., Ritchie 2006 REF). A difference in abstractness clearly implies significant qualitative difference. In contrast, the source and target items in examples of metonymy in the literature are much more often at the same level of abstractness (though often still being very qualitatively different), such as a CONTAINER source and its LIQUID contents, or in most cases when the metonymy is between a WHOLE and a PART of the whole (in either direction), or in the famous case of the source being a person and the target being a ham sandwich (REF).

Dirven (2002) has used the degree of "conceptual distance" between source and target to rate different types of metonymy on a scale, and also to claim that in metaphor the conceptual distance is greater than in metonymy. An unfortunate complication in Dirven's account is that, while in some comments about conceptual distance he is clearly thinking about we might call qualitative difference (e.g., between a head and mental activities, or between a crown and a monarch) at another point ((PAGEREF)) he appears to say that the conceptual closeness is achieved by the two items being linked in our minds, as e.g. a crown to a monarch. This makes his notion of distance a mix of qualitative categorization and perceived connection.

In any case, qualitative difference by itself is clearly not able to distinguish metonymy from metaphor. This is because, even we accepted that metaphor generally exhibited great qualitative difference between source and target, and we take into account that metonymy *often* exhibit less of a qualitative difference, it is also clear that many commonly illustrated types of metonymy do exhibit great qualitative difference. A bottle and the beer it contains are qualitatively different. In particular, metonymy often goes between different levels of abstractness, e.g., from a person to his/her ideas or work, as in one interpretation of "I am examining Plato" or of "Mike likes Plato", or in using a place to refer to an event, e.g., "Vietnam" to stand for the US/Vietnam war.

However, we pursue the matter of qualitative difference because it bears upon the topic of the next subsection, namely domains and similar notions, and also because a point needs to be made stressed about the amount of qualitative difference between source and target in metaphor. This point is that, even if it is accepted that the qualitative difference is *typically* large in metaphor, it remains the case that it is commonly very small—much smaller than it typically is in metonymy—and can indeed be indefinitely small. In short, metaphoricity in general has little constitutive connection to qualitative difference.

The point about smallness is especially clear in the common phenomenon of metaphorically used proper names (see, e.g., Wee, 2006). It is generally recognized that utterances such as "Mr. Carew and Miss Manning were our Adam and Eve" (cited by Goatly 1997: 204) are metaphorical, where distinct things of the same broad type (here, people) are metaphorically identified. Wee (2006) gives examples taken from a magazine article about judges in Singapore version of the U.S. television competition called *American Idol*. In particular, the article discusses the Singaporean judge Dick Lee and his possible similarity to U.S. judge Simon Callow:

"Dick Lee's a Simon."

Wee gives many similar examples, including some that are not purely copular:

"He's more a Randy."

"... Daniel Ong as the local version of Ryan Seacrest."

An example from elsewhere is

"Sebastian Foulkes is becoming Ian Fleming, as it were." [BBC Radio 4 *Today* programme, U.K., 11 July 2007]

Clearly, there are qualitative differences between, say, Dick Lee and Simon Callow, but the differences are not on the scale involved in the conceptual metaphor MIND AS CONTAINER, for instance. The phenomenon is not of course confined to proper names for people, and Wee gives examples such as:

"Making Singapore the Boston of the East."

"Can the National University of Singapore ... become the Harvard University ... of Asia[?]"

"Cambodia is Vietnam's Vietnam." [after Glucksberg & McGlone]

An example with more abstract subject matter is

"Yesterday was Christmas Day for all the editors of tabloid newspapers." [BBC Radio 4 *Today* programme, U.K., 4 November 2005]

This was spoken in a context where the yesterday mentioned was unrelated in reality to Christmas Day but featured a bonanza of goodies for the said editors. Thus there is a metaphorical linkage between one specific day in history, the yesterday, and another day or (more probably) the category of days with date 25 December in any year, called Christmas Day. Similarly (and more extremely):

"Tuesday is honorary Monday this week" [heard in conversation, in a case when Monday was a holiday].

We should mention that, at least when the source item is conventionally used as such to convey certain qualities, a possible competing view about such examples is that we have not metaphor but instead a metonymical step from the source entity, e.g. Simon Callow, to set of qualities conventionally associated with that entity. (Ritchie, 2006: 74, mentions this possibility in passing.) However, for simplicity we will put this side in view of the existence of the common view that examples like the above are metaphorical, and the fact that the metonymy-only analysis is hard to apply when the use of the source item is novel.

Although the source and target item must be different in *some* respect, there seem no limit to how close they could be. It would be possible for one father of a rebellious teenager, Susan, to say "Susan is our Jill" where Jill refers to the neighbour's rebellious teenage daughter. An even closer type of comparison, though less explicit and definite, arises in utterances that talk about two different phases of one person's life, as in "I'm a different person today" (when implying a comparison to the day before, say) where of course the point of the utterance is the mentioned difference, but nevertheless there is is still tremendous qualitative similarity between the two different phases of the person's life—or, we might say, between the person yesterday and the person today. If the point needs further underlining, there is the current trend of saying things like "Purple is the new black" and even (somewhat humorously) "Black is the new black."

The above examples have tended to involve specific entities as the source item—for instance, a specific person, day or colour—but this is not a necessary feature, ad we can have an overt category as source item. In the Singaporean judge case we can also say "Dick Lee is an *American Idol* judge" meaning only that he is like such a judge, and we can say "Yesterday was a red-letter day for tabloid editors" even if yesterday was not literally a red-letter day.

These considerations about qualitative difference lead naturally into the next section.

2.2 Domains and Other Divisions

[[Dec07: MUCH THE SAME AS BEFORE; tell me if the changes I've made still don't make it clear that the fact that some people use "domain" to mean styh like an ICM frame isn't a problem for the argument]]

A prominent strand in discussions metaphor and metonymy is that there is a way of dividing up the world or our knowledge or conceptualization of it into what we will call "divisions," such that one important difference between metaphor and metonymy is that metaphor involves crossing between two different divisions whereas metonymy follows connections between items within a division. A variety of types of division have been put forward in this context, most notably *domains*, *domain matrices* (as developed by Croft 2002 after Langacker 1987), *semantic fields* (Kittay REF), *idealized cognitive models* or ICMs (Lakoff 1987, Kövecses 2002 REF). Thus, a metaphorical expression casting a commercial company as an animal ("gobbling' up other companies, for example) might be said to cross between a biological division of some sort and a business division; whereas a metonymy in which the name of a company is used to refer to its products (as in "a Ford") might be said to stay within the business division.

We use the term "division" to avoid continually having to use a disjunctive phrase such as "domain or ICM or ...", and also to circumvent the difficulty that terms such as "domain" have been used in many different ways by different authors, not always with a clear definition. In particular, some authors have used labels such as "domain" and "ICM" roughly interchangeably (e.g. Langlotz 2006, Panther 2006 REF, Paradis 2004) whereas in other parts of the literature they mean different things.

Many authors have raised difficulties concerning the notion of a domain or have otherwise thrown grave doubt on whether domains and other such constructs provide a secure basis for distinguishing metaphor and metonymy (e.g., Cameron 1999a, Kittay 1989, Barcelona 2002, Croft 2002, Croft & Cruse (2004:p.216), Riemer 2002, Warren 2002, Lemmens 2001, Peirsman & Geeraerts (2006); and P&G's NEWREFS incl Feyaerts 1999, and Taylor 2002). However, amongst these authors are some who criticize one notion of division but support another: e.g., Barcelona (2002) seeks to distinguish between metaphor and metonymy by appealing to folk ICMs and distinguishing between taxonomic and functional domains.

We will not rehearse all the previous discussion about domains, but will instead raise some points that may be new, deserve renewed emphasis or elaboration, or interact strongly by other considerations in the paper. Before getting to our main discussion, we need to make two preliminary observations.

The first is that there is a perfectly innocuous *post hoc* way in which we can talk about divisions in discussing metaphor and metonymy. Given any particular metaphorical utterance such as "My job is a jail" REF (via Wee), or any specific metaphorical or metonymic mapping schema that may be proposed—a specific conceptual metaphor such as ARGUMENT AS WAR, a specific primary metaphor such as PERSISTING AS REMAINING ERECT (Grady 1997), a metonymic schema such as PRODUCER FOR PRODUCT, and so on—we can harmlessly use the word "domains" or some other term to name the two subject matters linked by the metaphor or metonymy. One can do this just for the rhetorical convenience of having a verbal label for those subject matters, without necessarily having any clear view of the extent of those subject matters, how exactly they differ from each other other, or how they relate to subject matters adduced in the case of other cases of metaphor or metonymy. Indeed, in this way of talking, there's no particular reason to be consistent in what subject matters are proposed across different cases of metaphor or metonymy. In this *post hoc* use of domains or others sorts of division in talking about metaphor and metonymy, divisions need have no theoretical import at all, do not need to bear upon the question of what metaphor and metonymy are in themselves or how they differ from each other, and can be harmlessly proposed at will.

However, the opposite theoretical direction often seems implied in writings on metaphor or metonymy, where there is some claim that a particular set of divisions exist in the mind/world (although we may not know what the full set is yet), and metaphor and metonymy are constrained in their nature by that set. We will call this the *pre hoc* use of divisions: i.e., where the question of what divisions exist is theoretically *prior* to the question of what metaphor and metonymy are (although of course one can use metaphor and metonymy as symptoms for exploring what divisions exist). It would appear that this stance is the one taken in in such works as (REFS Lakoff, Kovecses, Langlotz, etc. etc.) and indeed in all work that seeks to use divisions as a tool for distinguishing metaphor and metonymy. Our discussion henceforth in this subsection will only be about this *pre hoc* use.

The second preliminary observation is about a complication that deserves fuller discussion but that is would take us too far afield in this paper, especially as it is a deep issue that is not adequately addressed in the field at large. It is the question of whether divisions contain only conceptual items (as is clearly the case with ICMs) or can also contain non-conceptual items (e.g., physical objects): roughly, is it the world itself that is being divided up, or the conceptual landscape, or both? A sub-complication here is of course that our concepts are themselves items in the world just as much as people, etc. are; and in any case the present author would tend to subscribe to the view that the important nature of the world, insofar as most questions of metaphor and metonymy are concerned, is its nature as viewed in common-sense – i.e. as deeply affected by our concepts anyway – rather than being independent of the mind. But in any case even if a division contains actual animals, say, we still wish to include "in" the division a piece of *knowledge* such as that birds eat worms. A more careful analysis might have it that such knowledge is *about* the division rather than being *in* it, but this distinction should, in the main, not affect our discussion below.

Going back to the main issue, the points in the previous subsection about qualitative difference raise great problems for claims, within a *pre hoc* stance on divisions, that metonymy stays within a division and metaphor crosses between divisions. The point about large qualitative differences in metonymy has to some extent been addressed by theorists who have tried to stick to some division-based distinction but who have introduced a more complex picture (e.g., Barcelona 2002, Croft 2002, Dirven 2002), and typically the responsibility for the distinction from metaphor is in any case now less on the division structure as such, and more (than it would otherwise would need to be anyway) on the type of semantic or pragmatic connection between the two sides of the metonymy (e.g., a functional connection in Barcelona's case).

However, it is not clear that even the complex division-based theories proposed are adequate. Perhaps no regimentation into divisions could in principle be adequate, because there are indications that metonymy can cross between *any* two items, as long as there's a salient link created or recalled between them in discourse (where, perhaps, the link needs to be restricted as to type). The "The ham sandwich wants his bill" example (REF) is one pointer towards this possibility, because perhaps anything of the form "The X wants his/her ..." could work in an appropriate context, where a person is related in some salient way to any object-type X, irrespective of whether this relationship is part of some pre-existing division.

But, in any case, the point about small qualitative differences often occurring in metaphor make it very difficult to save any notion that a constitutive quality of metaphor is that it crosses between two divisions: distinctions between divisions would have to allowed to be arbitrarily fine to cover the phenomena illustrated by examples above (yesterday/Christmas, person-today/person-yesterday, Mr. Carew/Adam, purple/black). For example, the "yesterday" day and Christmas day would have to be in different divisions from each other, as would Mr. Carew and Adam, and purple and black. But with such fine divisions allowed, it is hard not to allow *any* two different items to be in different divisions, making the claim that metaphor crosses between divisions true but vacuous.

We can also question some of the particular divisions that are commonly introduced, and indeed can question whether they are justifiable on grounds other than the very need to claim that metaphor maps between divisions. For instance, take one of the most discussed conceptual metaphors in conceptual metaphor theory, namely LOVE AS A JOURNEY (Lakoff 1993). Crucially, the partners in the love relationship are cast as *co-travellers* on a physical journey through space, and indeed there is often an implication of travelling within the same vehicle. But what is usually not mentioned is that such co-travellers would typically have some sort of relationship with each other in the source scenario, and this relationship would often be one of friendship or love. This compromises any claim that love relationships and physical journeys are in clearly separable divisions, especially when it is realized that actually the source domain is not that of *any* physical journeys but actually *physical journeys involving co-travel*.

Lakoff (1993) talks about the emotion of excitement involved in locutions such as "being on the fast lane of the freeway of love". So, emotion is both part of the source and part of the target. However, the deep consequences of such overlap between source and target have not been woven deeply enough into conceptual metaphor theory. For instance, they complicate the issue of whether metaphor serves to provide conceptual understanding of one division in terms of another or of basing more abstract thought on less abstract thought.

Again, a major concern within conceptual metaphor theory is metaphors for time (REF), and in particular spatial ones (as in "Christmas is on the horizon"). But why should time and space be thought of as constituting different domains? They are qualitatively different things, to be sure, but are nevertheless intimately and perhaps inseparably bound up in our common experience.[1] But since any two things, at least when they are not exact copies in all respects, are qualitatively different to some degree, qualitative difference *per se* is not enough to justify postulation of a useful domain distinction.

About the putative domains of TIME and SPACE, note also that the SPACE domain would itself have to

[1] And in saying this we make no appeal at all to considerations from modern physics, whereby time and space are much less distinguishable than in common-sense.

include not only physical objects, extents and relationships but also movements of objects for the domain to serve as the source in a TIME AS SPACE conceptual metaphor. Central to descriptions of such metaphors (NEWREFS) is the notion of a time or event (metaphorically cast as a physical object) moving towards an agent and/or of the agent moving along a time axis (metaphorically conceived a such a spatial axis) and/or relative to times/events (conceived of as physical objects). But, of course, movement brings in time, so actually the source domain should more transparently be called something like SPACE+TIME. Thus the putative TIME domain would have to strongly intersect, or even be contained in, the source domain, making suspect the idea that the metaphorical mappings can usefully be regarded as going between different domains. Of course, SPACE+TIME is different from just TIME, but the point is that some of the mappings constituting the conceptual metaphor would need to map *time-infused* aspects of SPACE+TIME such as movement to aspects of TIME. It is not clear how useful it is to think of such a mapping as crossing between two different domains.

Analogously, consider metaphorical talk about the mind as if made up of separate thinking/emoting entities, as in the multiple-selves metaphorical language discussed by Lakoff (1996) and the MIND PARTS AS PERSONS type of metaphor discussed by Barnden (2001), who emphasizes also that the person-like PARTS can interact via language. Examples include includes language such as "One part of me thought that ..." (NEWREF DATABASE). Notice that the mind "parts" are conceived of as persons that have their own thoughts and/or emotions. But the *target* division is itself that of thoughts and emotions. So, the target division is included within the source division, and indeed the particular target items are also source items: the fact that a mind-part has a thought or emotion X corresponds to the whole agent having that very same thought/emotion X, albeit in a weak or tentative way, or in possible conflict with the thoughts emotions that other mind parts have. So, actually it is in large measure the *target* aspects of the source that are mapped to the target, making suspect any claim that division-crossing as such is an important feature of the metaphor.

Two further considerations complicate the issue whether divisions are important for the metaphor/metonymy distinction. First, there are many cases where exactly the same two types of entity can either be in a metonymical relationship to each other or a metaphorical one. For example, consider the IDEAS AS PERSONS OR OTHER ANIMATE BEINGS metaphor, as used in a sentence like "Her thoughts panicked and ran away" [attested example]. Here an idea is metaphorically cast as a sentient animal. But, as we saw in the example "Mike likes Plato", an idea can also be metonymically referred to via an animate being. Questions of division distinctions would seem to be at best subsidiary in trying to differentiate metaphor and metonymy in such cases.

Notice also that in uses of IDEAS AS PERSONS OR OTHER ANIMATE BEINGS the *mental/emotional states* of the persons standing for the ideas are themselves often important. This that is evident in the use of "panicked" in "Her thoughts panicked and ran away." Hence, the situation is somewhat similar to the one in MIND PARTS AS PERSONS, insofar as the target division is itself importantly part of the source division.

Secondly, anything that could be categorized as a GENERIC IS SPECIFIC metaphor (Lakoff & Turner 1989) involves, in division terms, mapping from a subdivision to the rest of a more generic division. In particular, we note that in Grady's decomposition of conceptual metaphors into more general-purpose, "primary" metaphors, the resulting primary metaphors are often ones where the source subject-matter is a special case of the target subject-matter (so that the metaphor could be labelled as a type of GENERIC IS SPECIFIC metaphor). An example of this is the primary metaphor of ORGANIZATION AS PHYSICAL STRUCTURE (Grady 1997). Here, physical structure is a special case of organization. Although in a particular use of the metaphor it is possible that the organization is abstract and therefore different from a physical structure, nevertheless the metaphorical linkage goes from a subdivision of a division to something in the remainder of the division rather than one that goes between two distinctly different divisions.

In addition, no *fixed* structure of divisions (in any particular mind) could serve to differentiate metaphor and metonymy. Apart from obvious considerations concerning changes in the outside world, learning through development, and becoming immersed in new cultures, there is the less obvious reason that unfamiliar and indeed possibly very unnatural concepts can be invented in fiction, especially fantasy fiction. As far as we know there is no bar to a conceptual division invented in a fantasy story providing the subject

matter on one side or other of a metaphor or metonymy. No doubt the unfamiliarity would would make for relatively difficult understanding.

Finally, we should stress what this section is not saying. It does not deny any of the following:

- That people actually categorize things in certain ways, and that there is a particular (perhaps culture-influenced) structure of divisions that is in the mind, together with, of course, an ability to construct new divisions (even on a fleeting, ad hoc basis, cf. Barsalou REF).
- That there are important conceptual metaphors, primary metaphors, metonymical schemata, etc. that are indeed consistent with particular divisions that have been proposed.
- That the ways in which metaphors happen to cross between divisions and in which metonymies happen to stay within divisions affects aptness, understandability, frequency, etc. of the metaphors or metonymies.
- The metaphor and/or metonymy may involve the following of mapping links between source items and target items.

On this last point, It is just that the mappings may need to be cast in a way that does not rest of the notion of divisions. For instance, a mapping can be envisaged between two wars without postulating that (knowledge of) those wars constitute particular divisions. Equally, a mapping can be envisaged between aspects of space-time to aspects of time without assigning particular, official divisions to those subject matters.

2.3 Similarity versus Contiguity?

[[Dec07: ADDED clarifn of "similarty"]]

A traditional view of the distinction between metaphor and metonymy is that the former is a matter of similarity between source and target and the latter of contiguity (Dirven 2002, Jakobson 2002 ((GIVE EARLIER REF too)), Lodge 1977). There is an enduring and reasonable intuition that in metonymy the source and target item are related to each other in some close, easily accessed, implicitly agreed way, and for which the metaphor of "contiguity" in the mind or the world itself is reasonable. (The implicit agreement is at least between the discourse participants, but is typically among typical native speakers of the language.) In this sense, a bottle is contiguous to its contents, a composer to his/her music, a geographical area to (some of) the people in it ("if the Milwaukee area wants to rebuild its freeways ..." [attested example]), a time period to an important event occupying it, etc.. And, of course, in such examples of contiguity there is no whiff of likeness or metaphorical identification.

Despite the emphasis on similarity and contiguity in some of the literature on metaphor and metonymy, many authors have noted the slipperiness of the notions (e.g., Chiappe, 1998; Cooper, 1986; Dirven, 2002; Riemer, 2002), making it difficult to use these notions as a basis for clearly defining metaphor and metonymy or differentiating between them. As an extra complication, some authors have explained how metaphor can create similarity rather than resting on pre-existing similarity (Black 1979, 1993, Indurkhya 1992). ((ADD EXAMPLE.)) Similarity-creation weakens the idea that metaphor *rests* on similarity, although one might still claim that similarity is still *involved* in metaphor whereas it is not involved in metonymy.

But apart from the problems with similarity and contiguity already noted in the literature, we offer two arguments showing that the tropes are not as distinct as is assumed, even by previous critics of similarity and contiguity as a basis for differentiation. The first argument suggests that similarity links between source and target in metaphor are often be viewed as contiguity links. The second argument suggests a converse: that certain familiar forms of contiguity involve similarity (which would therefore make it difficult to defeat

the first argument simply by legislating that contiguity links must not involve similarity). We treat these arguments in turn in the following two subsections.

Note first that in talking about similarity links the author means to include both of the following extremes and anything in between: the *intrinsic* case of a single link that could in itself be considered to be made up of similarity: the two items are similar by virtue of their own inner nature; and the *extrinsic* case of a link that takes part in a complex structured analogy which can overall be regarded as a similarity but where an individual link need not be one of (relevant) intrinsic similarity. Thus, in the context of metaphorically casting an organization as a solar system, the term "planets" could describe major employees even though there is no (relevant) intrinsic similarity between a planet and an employee. Relative to the overall similarity we will say that employees and planets are extrinsically similar.

2.3.1 Similarity as Contiguity

[[Dec07: REWORKED to argue directly that similarity links can be used as contiguity links, rather than that similarity links can be used metonymically; but the content is really the same]]

We argue here that similarity links can serve as contiguity links. The fact that similarity links in metaphor are not normally regarded as contiguity links is hardly a valid riposte, as there is no accepted definition of how broad the category of contiguity links is, and the term "contiguity" is in itself highly metaphorical.

In this subsection we will assume that source/target links in metaphor are indeed ones of similarity (intrinsic or extrinsic), at least typically. We talked above of source and target items in metonymy as being related in a "close," "easily-accessed" and "implicitly agreed" way. But in at many metaphors, the similarity links are surely just as easily accessed, embody just as much closeness, and are just as much agreed. For instance, given the strong tendency to talk of time as a spatial dimension, it seems difficult to claim that the mapping links involved are any less close or easily accessed or agreed than, say, the link between a country and its main football team.

And note that the contiguity in metonymy may be very short-lived, context-bound and private to the participants in a particular discourse. As is well-known, the contiguity relation in metonymy can be an *ad hoc* one, rather than one that is standardly used. For, instance, Angus & Korman (2002), in talking about therapy sessions with clients undergoing "client-centred" therapy, use the eyebrow-raising but economical phrase "client-centred clients." (This was a new usage to the present author, at least.) Here the label "client-centred," which directly denotes a property of therapies themselves, is referring metonymically to the personal property of *undergoing* client-centred therapy. This metonymy does not appear to follow a standard recognized pattern (see for example the information on metonymic patterns in Warren, 2006). Thus, some contiguity links can be no less *ad hoc* in nature even than the similarity links used in novel metaphors.

A slightly different point might be that metaphorical similarity links are more a matter of (possibly culture-wide) mental imposition than the contiguity links in generally recognized forms of metonymy are. However, it is difficult to sustain this. As Dirven (2002) says, contiguity is to some extent partly in the eye of the beholder.) We can observe that it is partly a mentally, socially and culturally constituted matter that, for instance, a particular group of people is the football team representing Finland, and yet "Finland" can metonymically refer to the group. A similar point apply to many other types of metonymy that involve the target item to play some sort of social or political role in the source item or vice versa (as in "*Bush* attacked Iraq."). The Representational metonymies discussed in the next subsection—where, say, a pictorial image in a painting is used to refer to the depicted object or vice versa—involve a mentally imposed representational link. Mental, social and cultural factors are of course hardly present if at all in contiguities such as physical CONTAINER/CONTENTS contiguity. But they are in, for instance, the celebrated example of "The ham sandwich has asked for his bill" where "the ham sandwich" refers metonymically to the person who

ordered the ham sandwich. The act of ordering something in a restaurant only makes sense given a suitably constituted socioeconomic culture and our culture-bound view of certain discourse acts as constituting ordering.

And metaphorical similarity relationships can often be said to really exist rather than to exist only in the whimsical minds of language users. This is clearest in the case of a metaphor resting on a complex structural analogy such as that between an army and a society of army ants (example from Goatley REF) or a commercial company and a solar system. One can precisely lay out the analogy, and there is a sense in which the partial isomorphism of structure really exists: it's a mathematical aspect of the world that exists just as much as the number 9 (as an abstract entity) exists, and just as much as the link between the date 9/11/2001 and certain terrorist events exists.

Thus, while similarity linkages in metaphor may have more of a tendency to be perceived as being mentally imposed than metonymic contiguities, this difference is at best a highly variable matter of degree, and does not provide a firm distinction between similarity and types of contiguity commonly regarded as contiguity.

[[Dec07: NEW SEGUE TO metonymy, via urface-Based Link Following:]]

Note also that in metaphor the similarity links are often used in acts of Surface-Based Link Following, which is something closely associated with metonymy. "Referential metaphor" occurs when a source domain aspect is used to refer in an utterance to a target domain aspect. A well-known example in the psycholinguistic literature on metaphor is "The creampuff didn't even show up" (Gibbs 1990), where a boxer is metaphorically viewed as a creampuff and referred to as such. Another, more mundane and conventional, example would be "They have reached the third milestone on the project" using "the milestone" indirectly to refer to a planned event in the project. And, although referential metaphor is usually taken to be about referring noun phrases, the same type of Surface-Based Link-Following can be discerned in many other types of metaphorically-used term, such as the verb "eat up" to refer to commercial taking-over in "Virgin tried to eat up Northern Rock."

Note, however, that many metaphorically-used terms arguably do not refer to anything at all in the target: in "he put the brake on the building project" there is no reason to suppose that there is any target item corresponding to the "brake" itself. see also Langlotz 2006.) Similarly, in "... until James Callaghan is washed up onto the pebbles of the Upper House" (Goatly 1997: 109, from *The Daily Telegraph* newspaper) there is no need to map the pebbles to anything in the target scenario. although the mention of pebbles is important for clarifying the source-domain meaning of "washed up": what is significant is only the connotations of this washing-up.

While Surface-Based Link-Following may not be sufficient for metonymy (see the Introduction), we at least are faced with the question of whether its frequent use in metaphor amounts to metonymy, and therefore indirectly the question of whether the similarity involved is being used as contiguity.

Even if the Surface-Based Link-Following in metaphor is metonymy, it does not follow that metaphor *is* metonymy or is reducible to metonymy. There is much more to metaphor than just this link-following, such as the detailed nature of the links themselves.

2.3.2 Contiguity as and with Similarity, 1: Representational Metonymy

[[Dec07: ADDED more careful argument about the extent to which the perceptual similarity is attended to in the metonymies]]

This subsection and the next act as the two halves of a partial converse to the claim in the previous subsection that similarity can be used as a type of contiguity. We will be arguing that two standard types of

contiguity can be viewed as involving similarity.

Representations and their representatees (the things they represent) are often used to stand for each other in metonymy. In one direction we have REPRESENTATEE FOR REPRESENTATION, and in the other we have REPRESENTATION FOR REPRESENTATEE. (These are both covered by Warren 2006, but with different names from ours, and we would differ on the analysis of some of her examples). Here REPRESENTATION means something that represents (a "representative", as Warren puts it) and not, say, an act of representation. We will use the term "Representational metonymy" to cover both REPRESENTATEE FOR REPRESENTATION and REPRESENTATION FOR REPRESENTATEE.

Warren's examples of what we call REPRESENTATEE FOR REPRESENTATION include

"Ari painted *a tanker*" [quoted by Warren from Fass 1997; metonymic source element italicized]

meaning that Ari painted a picture of a tanker, or perhaps a picture of various things including a tanker. Here the source REPRESENTATEE is the (possibly imaginary) tanker and the target REPRESENTATION is the picture as a whole or the image of the tanker in the picture. Other examples would be:

There's *a tanker* in the left hand side of the picture

Tony Blair is on the left hand side of the photo

King John walked onto the stage

which make it more explicit that a physical representation is being indirectly referred to. In the last of these examples, an actor in a play is being indirectly referred to, namely the actor playing the role of King John and thereby representing King John.

The REPRESENTATION need not be a visual representation of the REPRESENTATEE. For instance, it can be an acoustic representation, as in

In the third movement of the symphony, *dawn* slowly arrives and birds start singing.

((FIND AND ADD REAL EXAMPLE - e.g. blurb re Pastoral symph))

Furthermore, it need not be any type of *perceptual* representation, as it could be an idea in someone's mind:

Sally's behaviour was at the back of his mind all day long

where (if we assume that the sentence tests on the metaphors of MIND AS PHYSICAL SPACE and IDEAS AS PHYSICAL OBJECTS) "Sally's behaviour" metonymically refers to some IDEA OF Sally's behaviour. Of course that idea could potentially involve a visual image of the behaviour to that extent that it involves physical movement. However, it need not include such a image, and the behaviour in any case could be more abstract than something that could be straightforwardly visualized.

An example of the reverse pattern, REPRESENTATION FOR REPRESENTATEE, is

"In Goldfinger *Sean Connery* saves the world from a nuclear disaster." [Warren 2006: 48]

where of course it is the (fictional) person James Bond, played by actor Sean Connery, who saves the world.

Now, it is certainly true that even when the REPRESENTATION is itself a visual item or physical object (.e.g, an actor) and the REPRESENTATEE is a physical object, the REPRESENTATION need not bear any significant visual resemblance to the representatee. In "*The town* is on the left hand side of the map" the visual representation of the town could be just a small black dot, and thus with little resemblance to the actual appearance of the town. Analogous points apply to non-visual cases of representing. However, we are concerned henceforth with the prominent special case of Representational metonymies (in either

direction) where the representation is indeed based, at least in part, on some sort of perceptual similarity, and will take the visual-similarity subcase as particularly important and suggestive. Typically, in examples involving photos, pictures and the like the representation relationship will be based at least in part on visual similarity, though other factors such as convention and stipulation can also be present (cf. Goodman 1968).

Clearly, if we are to claim that metonymic links are contiguities, then in similarity-based Representational metonymies the contiguity between source and target happens to take the form (at least in part) of similarity. Moreover, the similarity is central to the metonymy, not some incidental feature of it. This point is so clear that it is puzzling that it has not been given weight in similarity-vs-contiguity based discussions of the metaphor/metonymy distinction. Perhaps it is because examples of Representational metonymy are rare in the metonymy literature, according to Warren (2006). This investigative rarity, however, does not justice to the prevalence of the phenomenon.

Warren (2006) herself seeks to distinguish the type of similarity involved in similarity-based Representational metonymies from the type of resemblance involved in metaphor. She says that the former simply involves "matching" the REPRESENTATION with the REPRESENTATEE whereas in ("many") metaphors the resemblance involves property selection and adaptation. We dispute this claim of Warren's. First, she does not explain what this "matching" in the metonymic case amounts to. Secondly, the visual similarity in the metonymic case will almost always involve significant property selection (except in the most photographic of depictions) and often some measure of adaptation (e.g., colours may be intensified, shapes simplified). Thirdly, she only says "many" metaphors. Finally, we cannot see any fundamental difference between the types of visual resemblance possible in the metonymies and those possible in image metaphors (Lakoff 1993, Lakoff & Turner 1989). In image metaphors (also called resemblance metaphors), two physical objects are put into a metaphorical relationship on the basis of their visual appearance (including the visual appearance of movements made), examples being "the road snaked through the desert" and (from Goatly 1997: 271) "The rock that saved him was lathered and fringed with leaping strings of foam."

It could be argued (and perhaps this is Warren's point) that in image metaphor one needs to understand just how the representation and the representatee are similar in order to understand the utterance, whereas in Representational metonymy one can simply assume that there is a representational connection of some sort. However, it appears that this difference is at most a matter of degree and particular circumstances, and does support any sharp distinction between Representational metonymy and image metaphor. In the case of "Tony Blair is on the left hand side of the photo" could we said to have properly understood the utterance without understanding that on the left hand side of the photo there is a representation that *looks somewhat like* Tony Blair, so that the understanding involves more than just realizing that the representation represents him *somehow*? Conversely, in the case of "The road snaked through the desert" we do not, for most purposes, need to have more than a vague idea of the bendiness of the road. It is not clear that the visual similarity considered by the understander here is more detailed than the visual similarity the understander needs to consider in the Blair photo case.

In response one might claim that in the Blair photo case, the act of metonymical understanding is a very "bare" one, consisting simply in assuming that there is some representation of Blair in the photo; but there is an *additional* pragmatic inference that that representation is probably a shape that looks like Blair. However, we could counter this with the claim that in a sentence like "The road snaked across the desert", the act of metaphorical understanding is a very bare one, consisting simply in assuming that there is some similarity of some sort between the road and a snake; and there is an additional pragmatic inference that that similarity is probably one of physical shape similarity. Ultimately, the point we are making is that in both Representational and image metaphor we have a relationship of similarity; the degree to which that similarity is apprehended by the understander is a matter of how rich an understanding the understander comes to, whether we have a case of metonymy or a case of metaphor.

A case of metonymy that would seem to require at least some appreciation of the actual visual similarity is the following one from Warren (2006: 14), taken from Lawrence Durrell's novel *Bitter Lemons*:

> Three thoughts belong to Venice at dawn, seen from the deck of a ship ... ; *a Venice* wobbling in a thousand fresh-water reflections, ...

Warren classes "a Venice" as a metonymic reference to the reflection image of Venice in the water, and hence as being (in our terms) a case of REPRESENTATEE FOR REPRESENTATION metonymy. This presumably involves viewing the wobbling as being a feature of the image, especially given the mention of the thousand reflections. The wobbling hardly makes sense without an appreciation of the visual similarity of the image to Venice itself. Indeed, notice that it is not stated explicitly that there is a reflection of Venice; this is itself an inference from the situation of being on a boat, the mention of reflections, and the phrase "a Venice." This phrase suggests something different from Venice itself but related to it. Thus, the metonymy is processually posterior to the prior appreciation of the existence of a reflection image.

In sum, not only can contiguity in metonymy be similarity, it can be the same similarity as is used in some metaphor. The details of the actual similarity may be more attended to in metaphor generally, but this does not provide a firm differentiation between metaphor and metonymy.

2.3.3 Contiguity as and with Similarity, 2

[[Dec07: REWORKED: hopefully-simpler solar system example used; PUT the part-for-whole case first (with new examples), so can avoid the tangle with zone activation until end of the subsection; deleted coffee-break example]]

We now turn to a very different type of metonymy, namely WHOLE FOR PART and PART FOR WHOLE metonymy. We will use the term Partive metonymy to cover both directions. We will see another way in which similarity arises from contiguity.

First, there is the very general observation that there is a sense in which *whenever* something P is a part of something W, P is automatically similar to W in *one* way: namely, in that both P and W consist at least partially of P! Although it might seem odd to think of a part of something as similar to the whole thing, notice that anything is (maximally) similar to itself. W being similar to W is the limiting case of parts P of W being similar to W, if we think of a succession of Ps covering more an more of W.

The sense of oddness can also be combatted by considering some entity P′ that is similar to P but entirely separate from it. If P′ is accepted as being similar to W, then surely the more so should P itself be.

It helps to consider a specific example. Let W be our solar system, and P be the part consisting of the solar system without Mercury. Suppose there is a remote solar system, let's call it P′, that is very similar to P: P′ has a sun very like ours, and it has planets (etc.) very to ours, except that it lacks a correspondent for Mercury. Surely P′ would count for many purposes as being very similar to W, our *whole* solar system. Surely, then, P itself is similar to W. In fact, P is compositionally even more similar to W than P′ is.

The point is of course not confined to physical objects. For example, a part of a plan of action is similar to the whole plan. If someone's intelligence is considered to be part of them, then the intelligence is part of the person. [2]

Clearly, the automatic similarity of a PART to the WHOLE is a matter of degree: the "bigger" that the the PART is relative to the WHOLE, the stronger the similarity. Also, the more that the the remainder of the

[2] We may need to exclude some types of part/whole relationship that have been proposed. For example, Warren (2006) takes the possession/possessor to be a part/whole relationship, but we would not want to say that a possession is thereby similar to the possessor. But this is not a failing in our argument, but a failing in the idea that a possession is part of the possessor. What *would* work, and yield our automatic similarity, is saying that the possession P is part of the complex W consisting of possession plus possessor.

WHOLE is similar to PART P, the stronger the similarity of P to the WHOLE. So, the less that Mercury (the remainder in our example) is considered similar to the other planets in our solar system, the less similar the whole solar system should be considered to P.

Also, the question of how "big" the PART is relative to the WHOLE may not be a simple matter of number of parts or (in the case of physical objects) spatial extent. The bigness can reside in the extent to which the PART contributes to some property of the WHOLE other than its spatial extent. For example, the heaviness of a lamp that stands on the floor could be largely the result of having a very heavy base. Then the automatic similarity of base to whole lamp is boosted by the similarity of base and lamp as regards heaviness, even if the base is spatially small compared to the lamp and even though it is only one of the various parts of the lamp.

Given these points about automatic similarity, and given that PART-WHOLE is treated by many researchers as an important type of metonymy, and assuming that PART-WHOLE relationships are to be viewed as a type of contiguity, a distinction of metonymy from metaphor on the basis of a distinction between contiguity and similarity is even more questionable than it already was.

It might be argued that the automatic type of PART-WHOLE similarity we are pointing out is in general irrelevant: it exists, but is generally not important to the meaning of the containing utterance. For instance, in using "the hands" to refer to the sailors on a ship (NEWREF) in a sentence such as "All hands were summoned to the deck," the automatic similarity of sailors' hands to sailors is irrelevant to understanding the sentence. But, in fact, a highly relevant sort of similarity can arise between PART and WHOLE: namely, that the WHOLE and the PART approximately share particular features that are indeed important for the utterance meaning and that indeed it is this sharing (hence similarity) that motivates the metonymy in the first place. In such cases we will say that the part/whole relationship is a *relevantly whole-similar* part/whole relationship.

We will give examples where the features are ones of appearance, function or ability, but the point could apply much more widely. The point will be that matters of appearance, function or ability will be what the utterance is getting at, and the PART will be similar to the WHOLE precisely in appearance or function respectively. We will also see in the examples that the WHOLE has the appearance or function it has largely *because of* the PART having it: thus, the part-ness provides the similarity in respect of appearance or function, rather than the similarity arising for some separate reason. This is analogous to the case above of the heavy lamp, where the heaviness of the lamp largely *results from* having a heavy base. Of course, the extent to which a property of a part contributes to the whole having that property depends on circumstances, and in particular on how much of the whole the part accounts for. And some properties are less extensible to the whole than others. For example, lightness (lack of heaviness) extends less easily than heaviness does.

It is common for one important contribution, or even the main contribution, to the appearance of something to come from a certain type of part of the thing, notably the outer surface of the whole thing, or the outer surface of an especially salient part of the thing. Warren (2006: 42) mentions the metonymic, PART-FOR-WHOLE use of "palefaces" to refer to white people. So consider a sentence such as "We will shoot all palefaces we see," uttered perhaps in a 1950s cowboy film. The PART (the face of any one white person) is similar to the WHOLE (the white person) in the *automatic* way illustrated by the solar-system example. But more than that we note that the person's face is *relevantly* similar, in appearance, to the person as a whole (or more precisely to their skin as a whole): you can tell someone is a white person by looking just at their face, and the fact that someone is white is highly relevant to the understanding of the sentence. Also, the very motivation for the particular type of metonymy in question is precisely the similarity of appearance of face to whole skin and then to the whole person. (Notice that in speaking of people's colour we talk of skin-colour, not face-colour: people's being white, black etc. is not just a matter of their faces, even though faces are especially salient.)

A somewhat similar example, from Warren (2006: 43, credited to Frisson and Pickering) is:

"The *wings* took off from the runway." [referring to one or more aeroplanes]

Clearly, much of the appearance of an aeroplane is accounted for by its wings (if you didn't see them you might not realize an aeroplane was there), and the appearance of the aeroplanes is part of what is relevant to understanding the sentence if it is a comment from the point of view of someone watching aeroplanes taking off.[3]

Turning to similarity of function rather than appearance, consider the following example (Warren 2006: 43, credited to Fass, but of course an example of a common way of speaking):

"Everyone who wants *a roof* should have one."

Although this could be referring literally just to roofs, it is more likely to be metonymically referring to roofed dwellings. Part of the function of a dwelling is to shelter the occupants, and an important aspect of that function is *provided by* the roof. Assuming the sheltering function is relevant to the understanding of the sentence in context, we see that roofs are relevantly whole-similar to dwellings, not just automatically similar as parts.

The wings example could also have a functional or ability element analogous to that of the roof example, an not just be a matter of appearance. The ability of an aeroplane to rise in the air, or its function to do so, arises from that ability/function of the wings, and this ability/function is relevant to the scenario described by the sentence.

The palefaces, wings, and roof examples are all PART-FOR-WHOLE, but the pont works for WHOLE-FOR-PART as well. Consider the following example, from Warren (2006: 44, credited to Barcelona):

"She has a good *head*."

This is stated by Warren to be referring to the person's intelligence, although it could also refer, in suitable contexts, to her lack of vertigo in high locations, or her ability to cope with alcoholic drinks. Sticking to the intelligence interpretation, the sentence would be likely to be uttered in a context where the function of exercising intelligent thought was salient. Clearly, that function, thought of as a property of a head, comes directly from the PART in this case. An alternative analysis, which the present author finds more plausible, is that "head" refers metonymically to "brain," and the ability to think extends from brain to head.

One view of what is going on in our examples, both the Partive ones in this subsection and the Representational ones in the previous one, is that the partive or representational relationship is merely *accompanied* by a similarity relationship, rather than also *being* a similarity relationship. If this stance is taken, it is still the case that the similarity is central to the metonymy: without it, use of the metonymy would have much less point. Also, it still leaves open the possibility that the contiguity consists of both relationships taken together, not just one of them. Whatever choice is taken on these matters, we can say that the overall issue at hand is that of the extent to which similarity is "involved in " Partive or Representational relationships.

As regards WHOLE FOR PART cases it might be objected that what is happening is zone activation (see, e.g., Croft & Cruse 2004, following Langacker) rather than metonymy. So, in the good-head example, the brain is one of the zones in the meaning of "head" and in the example the understander simply focusses on that zone. Paradis (2004) considers amongst others the example of a "slow car", intended to mean a car that goes along slowly. She says that there is activation of a functional aspect of the car (which we can paraphrase here as the function of travelling along), and it is to this aspect that slowness is attributed. She argues that there is no metonymy here, presumably meaning there's no metonymical step from the car to the functional aspect in question. (She casts the function as a PART of the car or at least of the concept of the car, it seems). It's just a question of focussing on a particular aspect or zone.

[3] One could even conjecture that the fact that a (partly) appearance-based metonymy is used in the sentence could suggest to the understander that the sentence is to be interpreted from the point of view of an onlooker, even without any contextual clues to this effect.

It would be beyond the scope of this paper to discuss the relationship of zone activation to WHOLE FOR PART metonymy fully, but even if we accepted Paradis's own examples and arguments about them, there are the following two points to consider. First, as Warren (2006: 46) indicates, there could be a cline of metonymicity (cf. Barcelona 2002), and cases of zone activation could simply be a weak form of WHOLE FOR PART metonymy, rather than a distinctly different phenomenon. Secondly, our argument involves not just WHOLE FOR PART but also PART FOR WHOLE cases, as in the paleface, wing and roof examples above. Even if the step from a particular whole to a particular part is not metonymic, the reverse step may be.

Further on the second point, the step from part to whole is often contingent (e.g., a roof does not necessarily form part of a dwelling, nor need a dwelling have a roof, for that matter; and even a wing need not be part of an aeroplane; though of course a face needs to be part of a person). Contingency is a feature that Paradis associates with metonymy (following Panther & Thornburg REF) but not zone activation, so it would presumably not be in order for her to claim that we have some inverse of zone activation rather than PART FOR WHOLE metonymy. She gives an example even of WHOLE FOR PART that she says is metonymy, not zone activation, because the relationship is contingent.

In any case, there is room for doubt that metonymic links need to be contingent. The contingency thesis would force a wedge between "Mike likes listening to *Bach*," generally agreed to be metonymic and indeed using a contingent link to music, and "Mike likes listening to *German composers*," which should also surely be regarded as metonymic in the same way but where the link to music is now part of the definition of being a [musical] composer and is therefore non-contingent.

2.3.4 Conclusion on Similarity and Contiguity

[[Dec07: REWORKED & EXTENDED]]

In conclusion, the considerations in this section have further emphasized the slipperiness of the notions of, and of the distinction between, similarity and contiguity, making them even more inadequate than they already were as a general basis for defining and differentiating metaphor and metonymy. Rather, both metaphor and metonymy potentially involve both contiguity and similarity. Similarity links in metaphor can be viewed as contiguity links, and indeed are often used in Surface-Based Link-Following just as standard contiguity links in metonymy are. And certain types of standard metonymic link (Representational and Partive) that can naturally be viewed as contiguity also involve relevant similarity.

Notice that we should not infer from the fact that a particular sort of contiguity link (whether Representational, Partive or of some other type) involves similarity that therefore its use in a metonymical utterance also constitutes metaphor or that it could be used for metaphor in other utterances. If contiguity links that involved relevant similarity turned out not to be usable as metaphoric links, metaphor would be restricted in the type of similarity it could involve.

Nevertheless, it may possibly be reasonable to take similarity-based Representational metonymy to be at the same time a form of metaphor (see section 3.2 for more discussion). Partive metonymy may imply metaphor less readily even when relevant similarity is involved, but given the great liberality with which the notion of a part is treated in the literature (cf. the various types mentioned by Warren 2006 and Paradis REF), it is possible that some types of relevant-similarity-involving Partive metonymy are also forms of metaphor. A case in point might be GENERIC AS SPECIFIC metaphor, where, in essence, a subcategory is used to stand for the whole category. To the extent that a subcategory of a category C can be viewed as a *part* of C (as in Peirsman & Geeraerts ((CHECK)) and POSSIBLY Warren 2006 ((CHECK))), the metaphor may simultaneously be a type of Partive metonymy involving relevant similarity in the form of the similarity of elements of the subcategory to elements of the whole category.

2.4 Source/Target Linkage as Part of the Message

[[Dec07: not much change, but Lake Windermere example deleted]]

Dirven (2002) and Warren (2002, 2006) have essentially claimed that, in a metonymy, part of the message is the source/target linkage itself (see also Croft 2006 and Panther 2006 for similar views). For example, "*Mike's shoes* are neatly tied" (cf. Warren) is, roughly speaking, to be taken as conveying the information that *Parts of Mike's shoes, namely the laces, are neatly tied*, rather than merely *[Such-and-such laces] are neatly tied* where *[such-and-such laces]* is some description or name for the laces that does not bring in the relationship to the shoes. That is, the role that target item plays in source terms is an important part of the message, not just a processing route to determining the message. This claim is appealing, though it remains to be seen how broadly it really applies in metonymy. It is probably be true to say that if we tell someone we like Sibelius then we want them to absorb that it is music *of Sibelius* that we like, not just that we like such-and-such pieces defined in some other way; and if we tell them that "Finland lost" the match we want them to know not just that a particular group of people lost the match but that they did so *as the Finland team*.

On the other hand, inclusion of the linkage within the message supposedly does not happen in metaphor. Dirven (2002) claims this, in effect. Warren (2006) even says the source items are "annihilated." However, in our view many uses of metaphor do appear to incorporate the linkage into the message (see also Croft 2006). Part of the point of a work of poetry and or other literary forms is the way in which information is expressed, and in particular the metaphors used. For example, in Shakespeare's play *As You Like It* the character Jaques says "All the world's a stage ..." and then lengthily elaborates this idea. Part of the message is the comparison of world to theatre (especially in view of the dramatic irony that Jaques's real world is already theatre for us), not just the information about the world in itself that we may get as a result of comparing world to theatre, and then forgetting about the link to the theatre.

At a more mundane level, many names for things have a metaphorical quality, and it is plausible that use of the names involves remembering the links to the source domains. An example is "army ant." The reason army ants are so-called is a rich similarity between their behavior and that of soldiers and other army units (see the popular science exposition quoted in Goatly 1997:p.163), and at least for someone first learning about them it is difficult to believe that reference back to the behavior of real army units is not active in the mind as an important part of the conception of the ants.

Stern (2000) also claims that at least sometimes the source/target linkage is an important part of metaphor as uttered in ordinary conversation. He gives (p.259) an example of an anoerexic girl Marie being forbidden by her mother to see her boyfriend. Marie says to her mother, "I won't swallow that," meaning primarily that she does not accept the prohibition, but Stern claims that the refusal can be interpreted as intentionally likened to Marie's unwillingness to swallow food. (This is an example of Stern's notion of "knowledge by metaphorical character" ((CHECK)).)

We can make the following stronger claim. Aspects of the metaphor target may, in practice, *only be identifiable at all* by use of source-target links. Consider someone using "the camel" to refer to a cloud that looks like a camel, and saying "The camel has broken its neck" to describe the cloud coming apart at the place of its "neck." Now, Indurkhya (1992) uses the case of a similarity between a camel and the cloud as an example of how structure from a source (the camel) can be imposed on a target (the cloud), rather than residing intrinsically in the target. Thus, the identification of some part of the cloud as corresponding to the neck may be entirely dependent on the comparison to the camel, and indeed the head and the rest of the body may only be vaguely related to the subshapes in the cloud, so that we cannot necessarily just regard the neck part as the place where the head part joins the rest-of-body part. Under these conditions, consider what the understander's representation of the sequence of events has been. How is the place of the breakage to be internally represented? We have to assume that either that he/she has kept a detailed spatial representation of the original cloud and has rather arbitrarily picked out a subregion of it as the referent of "its neck," and remembers this spatial characterization as the internal representation of where the breakage

was, or that he/she refers to it mentally (whether consciously or not) by some representation that could be glossed as "the cloud part, whatever it is, corresponding to the camel's neck."

We have therefore seen various ways in which it is plausible that a meaning representation for a metaphor can include the metaphoric linkage. This can support, at least, a rich understanding of similarity as in the Shakespeare world/stage example and army ant examples, or a practical way of referring to aspects of the target as in the cloud/camel example.

On the other hand, there is no particular reason to insist that, with unreflective use of unremarkable metaphorical phraseology in everyday discourse, we should take the source/target linkage be part of the message. For example, consider the sentence "Private finance is central in Labour's health policy." It may be perfectly adequate for the understander to interpret "central" directly as meaning "one of the most important features", without keeping any link to a notion of physical centrality. And, even granted that links to the source are part of the message of some metaphor, it is possible that it is normally less crucially so than in metonymy. Our Sibelius, Finland and shoe-laces examples of metonymy would hardly lead to much useful understanding at all by the hearer of the link to the source were *not* part of the message. By contrast, with "All the world's a stage" the information gained about the world in its own terms could still, in principle, be useful even if the comparison to a stage were immediately forgotten after gaining that information.

Thus, involvement of the linkage in the message may usually or always be crucial for metonymy, but may typically only be an extra enrichment in metaphor, and is plausibly absent in much mundane metaphor.

2.5 Reality of Source Items

[[Dec07: not much change]]

If a metonymic linkage is part of the message, and the target item is a real entity, does that mean that the source item has to be? Riemer (2002) has claimed that the source item in a metonymy must be an actually existing item in the situation being described (whereas of course this is not true of metaphor). Similar suggestions for a possible contrast have been made by Lodge (1977) and Warren (2002).

Certainly, many common examples of metonymy have the claimed quality. Thus, in saying that John drank the bottle, the bottle and not just the beer it contains actually exists in the situation. The claim needs to be made more complex to account for possibilities such as that the real situation described is fictional or otherwise counterfactual. In a story about some fictional beer, we would not expect any mentioned bottle to be real. The question is whether or not source items in metonymy are "as real as" their corresponding target items, rather real in an absolute sense. However, for simplicity we will continue to consider only target situations that are real.

Against claims such as Riemer's, we point out that metonymical source items can easily be imaginary one-off things (e.g., Father Christmas), members of imaginary categories (e.g., the category of dragons) and hypothetical members of non-imaginary categories (e.g., a hypothetical tiger). We will use the following examples. Examples 1–4 are natural metonymic utterances in a library or bookstore, in a context where the location of books about specified topics is salient. We imagine that a customer has asked the librarian about books on Bach, composers, Father Christmas, or dragons.

1 Bach is on the top shelf.

2 Composers are on the top shelf.

3 Father Christmas is on the top shelf.

4 Dragons are on the top shelf.

Also, the following are natural uses of REPRESENTATEE FOR REPRESENTATION metonymy:

5 There's a tanker in the middle of Ari's painting

6 There's a dragon in the middle of Ari's painting.

Examples 3 and 4 work because the aboutness relationship for a book does not imply that what a book is about is itself real. Examples 5 and 6 work because, similarly, a real painting need not be about a real thing. It can be an unreal thing in the strong sense of a member of an imaginary category, as in 6, or in the weaker sense of a hypothetical member of a non-imaginary category, as in (one plausible interpretation of) 5.

An additional complication is that in the cases of generic plurals and imaginary items, we perhaps should take the metonymical link to be between a book and a *category* or *concept*—e.g., of composers, dragons or Father Christmas, and deem the category/concept itself to be a real item even if none of its instances are. But unless this approach is also extended to example 1, so that the link is to some *concept* of Bach or to a category containing just him, it gets into trouble with mixed real/imaginary examples like "Merlin [fictional magician] and Houdini [real-life magician] are on the top shelf."

As for metaphor, clearly the source can involve unreal singular items such as Father Christmas and Death (as unreal persons) and imaginary categories such as dragons. Also, it is reasonable to say that, even when non-imaginary categories are involved, it is typical for hypothetical instances of them to be used. For instance, in "The idea is lurking in his mind", taken as an example of IDEAS AS ANIMATE BEINGS, there is no real, individual animate being to which the idea is likened or with which it is identified. But we still have examples such as "Thatcher was the Reagan of the UK", where the source item is a real entity. In summary, although it is possible that use of imaginary entities and hypothetical members of imaginary categories is more typical of metaphor than metonymy, the issue does not provide any basis for clear distinction between metaphor and metonymy.

While on the issue of degrees/types of unreality, it is worth noting that even when the general categories used in the source domain in a metaphor are themselves non-imaginary, metaphor still often uses impossible or at least highly implausible instances of a source-domain category. Musolff (2004) gives examples of the (numerous) nations in the EU being in a marriage with each other, and of France and Germany both being "fathers" of the rest of the EU. Such implausible or impossible instances of non-imaginary categories provides a middle ground between entities/situations that are (necessarily hypothetical) instances of imaginary categories and entities/situations that are hypothetical but plausible instances of non-imaginary categories.

2.6 Counterfactuality of Source-Target Linkages

[[Dec07: CHANGED QUITE A LOT; identification and couterfactuality teased apart; identification stated as a possible differentiator]]

Warren (2006) says that linkages in metaphor are "hypothetical" in a way that linkages in metonymy are not. This is because, she holds, metaphor involves an "element of hypothesis;" for example, "Life is thought of "*as if it were* a journey" [Warren's emphasis]. On the other hand, in the metonymic case of "The kettle is boiling" Warren says we have a purely factual statement. We interpret her underlying point here as being not so much the factuality of the boiling but the factuality of the containment connection between the kettle and the water. And it is clear that by "hypothesis" in the case of metaphor Warren is getting at the special case of a *counterfactual* proposition (whereas a hypothesis in general could be a proposition whose truth value is unknown but that could turn out to be true). In sum, according to Warren's suggestion, a linkage between source item and target item that is used in metonymy is factual, but in metaphor there is an imposed, counterfactual linkage: a counterfactual identification of source item and target item. (A similar idea is inherent in the blending-theory approach to metaphor and various other approaches mentioned in the Introduction.)

We must be careful to appreciate the distinction between this imposed identification and a looser linkage that might be present between source item and target item, and that might serve as the ground of the metaphor–the reason for imposing the identification. For example, suppose a metaphor of commercial corporation as solar system was used on the basis of a structured analogy. This analogy, taken by itself, is not an identification, but merely a structured set of correspondences between aspects of a corporation and aspects of a solar system (e.g., a correspondence between the boss and the sun). But the use of the metaphor in communication involves the extra act of counterfactually identifying the boss and the sun, etc., in Warren's claim. The distinction is important, because while it is clear that this identification is counterfactual, it is more difficult to claim that correspondence links in analogies are counterfactual. One could with some justification claim that the boss *really does* correspond to a sun; and the more that an analogy is uncritically accepted in language (like the analogy between life and a journey) the easier it is to claim that the correspondences are factual, or at any rate as factual as many of the links used in metonymy. Metonymic links often ultimately involve ways we choose to view the world: cf. Riemer REF 's claim that contiguity relations are in the eye of the beholder. This subjectivity of metonymic linkages is especially evident in the links used in Representational metonymy: any similarity between representation and representatee is ultimately in the eye of a beholder; and the representation relationship may also involve a lot of stipulation and/or convention. But the point also applies to many other types of metonymic link, such as the relationship between a controller and controllee (REF Warren FIND).

We are not saying in all this that analogical or other metaphor-grounding linkages should be regarded as factual, but merely that they can have varying degrees of factuality and that many metonymic links are themselves no more factual than ordinary metaphoric links.

We also need to note that the implication in section 2.3.1 that metaphoric links may be used metonymically, if true, does not prove that metonymy is using counterfactual identification in such cases, because the metaphorical links so used could be the non-identification links that ground the identifications rather than the identifications themselves.

These preliminaries aside, Warren's view has considerable appeal. Of course, many metaphor theorists would disagree with it. For example, in a categorization-theory account of "My job is a jail" there is actually a distancing of the job from a literal jail in that the connection is claimed to be indirect, via a common subsuming category. Also, although the present author has himself proposed a counterfactual-identification account of metaphor [[references to be included in final paper]], the account has a certain amount of difficulty with metaphorical similes. It would be beneficial to have a theory that gracefully accommodated both "Mike is a lion" and "Mike is like a lion," which we regard as both being equally metaphorical but with different surface forms (which is not to say that the particular surface form does not have important effects, such as an impression of vividness). Given that language users actually slip fluidly between simile form and non-simile form of one and the same metaphor in real discourse (Novotny REF), we need to ensure that the processing of the simile form and the non-simile form either uses two variants of the same underlying mechanism or use different underlying mechanisms that can be flipped between easily and without causing inconsistent results. Perhaps it is enough for the understander to maintain both a counterfactual identification and, say, non-identificatory analogical correspondences available during understanding, using whichever is more appropriate at any given moment. The need to accommodate both simile and non-simile form of one and the same metaphor, especially when mixed together in discourse with no apparent difference in meaning, is a challenge for theories of metaphor and simile in general, not just counterfactual-identification ones.

But even granting that counterfactual identification is the correct account for at least some metaphor, and assuming that identification does not happen in metonymy, we should not that it is not the *counterfactuality* that is actually providing a differentiation. Metonymy van be just as counterfactual, though for different reasons. Consider the following example, in two variants:

"John couldn't boil the kettle. It was empty, and the water supply at the tap was cut off."

"As the kettle was empty and the water supply at the tap was cut off, John couldn't boil the kettle."

Even though there was actually no water in the kettle, we can still use CONTAINER FOR CONTENTS metonymy, and the second variant shows that understander can even know about the the emptiness of the kettle before processing the metonymy. So we have a case of metonymy where the link is counterfactual.

Perhaps the relevant difference between metaphor and metonymy is that in metonymy the relationship, even when counterfactual, is only "weakly" counterfactual whereas the identification in metaphor is "strongly" counterfactual. By a weakly counterfactual situation we mean one that *could* have been true under other *real-world* circumstances (i.e., other circumstances that still obey the world actually works, even though happening not to hold); and by a strongly counterfactual situation we mean one that could not have been true under any other circumstances without violating the way the world actually works. In this is sense, there are no alternative real-world circumstances under which life could actually be a journey.

But this would certainly still leave the distinction between metonymy and metaphor less clear-cut than Warren claims. We would probably have to accept that there is a cline of strength of counterfactuality rather than a strict binary division between strong and weak. In any case, it is not clear that such a division would be enough to cover all cases. Recalling the "Dick Lee's a Simon [Callow]" example from section 2.1, one could claim that, had the history of world been different (but still following familiar physical laws), the people who are in fact Dick Lee and Simon Callow could have been one and the same person.[4]

We are therefore left with the conclusion that cognitive *identification* of some target item and some source item *may* be a clear distinguishing feature of, provided that the identification is for the purpose of opening up the possibility of transferring aspects of the source items or scenario to become aspects of the target items or scenario, or at least putting source aspects in correspondence with target aspects (e.g., for the purpose of highlighting those aspects). The transferred/mapped properties can be matters of internal structure of source items, or relationships between different source items. The identification happens to be counterfactual, because the source item and the target item are not actually the same thing, but that is not the key point.

2.7 Mapping of Internal and External Structure

[[Dec07: not much change, but made a distcintion between two types of structure more explicit]]

Typically, metonymy maps a single source item to a single target item, where each item may have complex internal structure but, for the purpose of the metonymy, is treated as an unanalysed whole (cf. Warren 2006: 16 on metonymy not involving property selection, in contrast to metaphor). Also, the source item may have external associations with other things, but no parallel relationships are implied or sought for the target item. Thus, in "Mike drank the bottle" there is just a link from the bottle as a unit to the liquid as a unit. The internal structure or external associations of the bottle are not intended to be paralleled by the liquid. In the following we will use "structure" to cover both external associations and internal structure.

In some metonymy it is possible to see a multiplicity of target items. For instance, in "Mike likes Bach" perhaps the analysis should be there are links from Bach to all his separate pieces of music (rather than a single link to the mass of his music or to the mathematical set containing all his pieces), and in "if the Milwaukee area wants to rebuild its freeways ..." REF] a separate link from the area to each of various representative people. However, in such an analysis there is still no use of internal structure: for instance, there is no likening of the structure of the source item to the structure of the target items individually or target item group as a whole.

By contrast, in metaphor, especially as described in conceptual metaphor theory, it is often the case that several source items are linked to target items, and there is some mapping of internal structure of individual

[4]This would run up against the alleged "rigidity" of names across possible worlds [Kripke REF]) but the arguments on that issue are certainly not closed.

items and/or associations between items as well. In talking about "milestones" in a project, the project is itself likened to an itinerary or path, important project events to milestones on a path, the temporal order of events to the spatial sequence of milestones, etc. So, relationships between the milestones are carried over, though not the internal structure of milestones. In talking of someone metaphorically as a devil, negative qualities and activities of devils are in some way transferred to the person.

While there is often, and perhaps typically, a substantial difference between metaphor and metonymy in these respects, once again the matter is not clear-cut. Examples of metaphor such as "Richard is a lion" have often been discussed in the literature as involving just the transfer of one or small number of associated features, such as courage in this example, and with no transfer of complex structure (REFS). Thus, in principle, metaphor does not actually need more than a tiny amount of mapping of internal structure or external associations, even though frequently there is a lot of it. Conversely, as we now argue, some types of metonymy do involve some degree of structure mapping.

This structure-mapping is evident in Representational metonymies where the representation relationship involves some perceptual similarity (see also Warren 2006: 14). This similarity is likely to be partly a structural similarity between, say, a visual representation of a thing and the visual appearance of the thing: normally, the depiction of a snake in a painting will have a somewhat similar structure (head-part, tail-part, bends or loops, etc.) to the structure of the visual appearance of the snake itself. As we saw in section 2.3.2 this type of similarity is akin to that found in image metaphor.

A distinctly different type of metonymic structure-mapping arises in the proverb

The hand that rocks the cradle will rule the land. [5]

Notice that the point of the proverb is that *bringing up and therefore influencing the behavior of children* leads to (indirect) worldly power, because of the power the children may attain. Thus, we should not regard the one who rules the world as merely a *mother* without further decomposition of the latter notion. Rather, it is *a mother insofar as she is someone who has the primary role in bringing up some children*. (A particular mother may be unlucky enough not to bring up her children; so we are not merely and vacuously spelling out a *necessary* part of being a mother). Then, one possibility for analysing the proverb as that it takes a single metonymic step from "The hand that rocks the cradle" as a whole to "a mother insofar as she is someone who has the primary role in bringing up some children". If we analyse it this way, then we can discern a structural match between a hand rocking a cradle and a mother bringing up a child. But an alternative way of analysing the proverb is that it does three, parallel, metonymic steps, from hand to mother, from cradle to child, and from rocking to bringing-up. We can still say that these steps taken together implicitly amount to an act of mapping some structure: the three metonymic steps are tightly linked to each other as a package, by virtue of of the fact that relationships between the source items in the package map to the relationships between the target items.

Similar packages of metonymic steps occur in other examples given by Warren (2006: 31–32), including "*The palace* should not scorn *the cottage*." Here we have at the very least a pair of coordinated metonymic links: one from palace to nobility and another from cottage to common person. In this case the very salient physical contrast between palace and cottage is, plausibly, mapped to the contrast between the nobility and the common people. Therefore, we have mapping of structure (that is external to both palace and cottage).

In sum, we have seen in two different ways in which metonymy can involve mapping of source structure: mapping of structure in Representational metonymy that is based on similarity, and mapping of structure by sets of coordinated metonymies as in the the cradle-rocking example and palace/cottage example. Thus, metaphor and metonymy overlap on the dimension of the extent of mapping of structure, even if, typically, metonymy does none of this and metaphor does much.

[5]The is the form quoted in Warren (2006:p.31). However, the form familiar to the present author is "The hand that rocks the cradle rules the world." Nothing hangs on the differences.

Going back to the possibility in the previous subsection that metaphor involves identification of source items with target items, we could now perhaps say that under this view the key difference between metaphor and metonymy msut actually be distilled down to just the act of identification, which is present in metaphor and not in metonymy. Although the identification is counterfactual and generally leads to considerable structure-mapping/transfer, neither of these features of metaphor is a firm distinguisher from metonymy.

3 The Multi-Dimensional Space

[[Dec07: SET OF DIMENSIONS ADJUSTED; major changes in some subsections]]

We now define a set of "dimensions" from the putatively (partially-)constitutive differences between metaphor and metonymy covered in section 2, together with the notion of Surface-Based Link Following from the Introduction. Particular uses of metaphor and metonymy in particular utterances will then occupy particular positions in the overall space spanned by these dimensions. However, since we may not have included all dimensions that might help differentiate metaphor from metonymy, it is possible for a place in the space to be occupied by cases with different degrees or types of metaphoricity and metonymicity. The dimensions are:

- *Qualitative Difference:* The extent and type of qualitative difference between source item(s) and target item(s).
- *Division Hopping:* The extent to which, and way in which, boundaries between divisions (such as domains) are crossed.
- *Surface-Based Link Following*: the extent to which source/target link-following is involved where the source item in a link is a direct sense or referent of an expression within the utterance.
- *Contiguity:* The type and extent of contiguity involved in source-target links.
- *Similarity:* The type and extent of similarity involved in source-target links.
- *Linkage Survival:* The extent to which source-target linkages involved are kept as part of the message conveyed about the target.
- *Mapping Complexity:* the extent to which structure (internal structure, properties or external associations) of the source items are mapped or transferred to target items.
- *Source Reality:* The extent to which source items are real as opposed to being imaginary or hypothetical in some way.[6]
- *Linkage Counterfactuality:* The extent to which the source-target linkages involved (incl. identifications of source items with target items) are counterfactual.
- *Cognitive Identification*: the extent to which source items are identified with target items (in the understanding process, not (just) by the overt wording in the utterance) rather being than merely linked to them.

We use the word "dimension" only loosely and highly metaphorically: dimensions are not meant to be numerical scales or even discrete linear scales. A dimension in the list above generally involves several

[6]But we note again that this issue needs to be more carefully expressed to take account of the target itself not being part of reality, but within, for instance, a fictional story.

different issues, e.g. both the type and the extent of contiguity. A dimension may involve qualitative elements. Even when a dimension is potentially quantitative, as in the *Qualitative Difference* dimension, where the extent of difference could perhaps be quantified, it is possible that further deconstruction is eventually desirable, e.g., into several different types of qualitative difference; and we have mentioned the possibility of decomposing the *Contiguity* dimension into different types of contiguity (cf. Peirsman & Geeraerts 2006). Also, the dimensions can be construed differently by different researchers: one may construe divisions as being to do with ICMs, another to do with some other construct. Finally, it may be that further dimensions, distinctly different from the ones above, should be added.

The main conclusions implied by the discussion in section 2 of each dimension are as follows, with some additional comments.

- *Qualitative Difference:*

  The qualitative difference that can occur in metaphor, while often large, can be indefinitely small, notably in proper-name metaphor.

- *Division Hopping:*

  While metonymy may have some systematic connection to a specific "*pre hoc*" division structure (e.g., have a tendency to stay within a domain matrix, where domains and matrices are defined independently of considerations of metaphor and metonymy), metaphor sometimes stays within and sometimes crosses between divisions of the sort that have been proposed in the literature. Since the qualitative difference in metaphor can be arbitrarily small, there would have to be arbitrarily small divisions, as well as larger ones, in some hierarchical or otherwise multi-level arrangement of divisions, to ensure both that all metaphor crossed between divisions and all metonymy stayed within a division. (E.g., any two objects would have to be in different divisions, in case a metaphorical relationship were stated between them.) But then any metonymy and any metaphor would both stay within some (possibly large) division and cross between (possibly very small) divisions, and division-crossing would provide no way by itself of differentiating between metaphor and metonymy.

- *Surface-Based Link-Following*: Surface-Based Link-Following is extremely common in metonymy (though not necessary for it and possibly not sufficient), but often occurs also in metaphor.

- *Contiguity:*

  In metonymy we may see any of the types of contiguity that have been proposed in the literature, but add that metaphorical mapping links (whether or not they are regarded as similarity links) can themselves act as contiguity links, notably in referential metaphor.

- *Similarity:*

  In metaphorical mapping links we may see any of the types of similarity that have been proposed in the literature, but add that contiguity links can also involve similarity (in ways other than that implied by the point that any similarity links in metaphor can be used as contiguity links). This happens (at least) in Partive and Representational metonymy.

- *Linkage Survival:*

  Involvement of the linkage in the message is arguably crucial for metonymy, but can also be important in metaphor. However, it is probably absent in much mundane metaphor.

- *Mapping Complexity:*

  There are at least two different ways in which metonymy can involve mapping of the structure of the source: structural aspects of similarity, notably perceptual similarity in some types of Representational metonymy, and structured packages of metonymic links, where associations between source items carry over (even if it's only a case of a *package* of source items mapping to a *package* it target items: that packaging is itself a structural element). Thus, metaphor and metonymy overlap on complexity

of structure mapping, even if metonymy usually does not map structure and metaphor often maps a significant amount of structure.

- *Source Reality:*

  Metaphor source items are typically hypothetical (even when they belong to non-imaginary categories) but metonymic source items are typically real (or rather, as real as the target items). However, certain common types of metaphor involve real source items, and certain common types of metonymy allow unreal source items. These can easily be either imaginary items or hypothetical members of non-imaginary categories.

- *Linkage Counterfactuality:*

  Metaphorical identification of source item with target items, if it occurs, is definitely counterfactual. Metonymic links are usually factual, but can be counterfactual. This counterfactuality of metonymic linkages, when it applies, may be generally weaker than the counterfactuality of metaphorical identification but the issue is likely to be one of degree and there may be overlap.

  Non-identificatory metaphoric links may usually be non-factual but can, in widely-accepted, engrained conceptual metaphors, be as factual as some factual links in metonymy.

- *Cognitive Identification*: There is no reason to think that identification of source items with target items occurs in metonymy understanding, but neither is it clear to what extent such identification occurs in metaphor understanding. *If* it turns out that metaphor always involves identification, then this will be the one firm differentiator between metaphor and metonymy out of all the candidates discussed in this paper. (Of course, there may be candidates we have not considered.)

Because of the complex picture this presents, it is useful to look specifically at the dimensions other than *Cognitive Identification* that are relatively good at differentiating typical forms of metaphor from typical forms of metonymy (relative to the author's own subjective view of what is regarded as typical in the literature).

- *Similarity:* Metonymy typically only involves similarity in a relatively limited sense if any, whereas similarity of *some* sort arises in all metaphor (granting that the similarity may be uncovered or even created by the metaphor itself, or the siginificant similarity may be entirely in external associations of source items, as in insultingly claiming that someone is a piece of dirt).

- *Source Reality:* In metonymy the source items are typically as real as the target items but in metaphor they are typically not.

- *Linkage Survival:* In metonymy the source/target linkages are typically (and perhaps always) part of the message whereas in metaphor they are typically not.

- *Mapping Complexity:* Metaphor typically involves mappings of internal structure and/or external associations of source items but metonymy typically does not.

3.1 Degree of Independence of the Dimensions

Language can to a significant extent vary independently on the different dimensions, although we are not yet in a position to say how densely populated different parts of the space are. As an example of this partial independence of the dimensions from each other, the position on the *Source Reality* dimension and the position on the *Mapping Complexity* dimension are to a large extent independent of each other.

On the other hand, the dimensions are not entirely independent, in that there are interactions between them, and in this respect differ yet further from ordinary dimensions in 3D space. For example, *Similarity*

and *Contiguity* interact, in that linkages used in a similarity can be used for metonymic acts and therefore be regarded as contiguity linkages, and some types of contiguity links imply types of similarity. Some other clear cases of interaction are: between *Qualitative Difference* and *Division Hopping*; between *Linkage Counterfactuality* and *Source Reality*; and between *Source Reality* and *Linkage Survival*. However, in no case does position on one dimension actually determine position on another.

3.2 Overlap of Metaphor and Metonymy

[[Dec07: CLARIFIED, hopefully; notion of intermediacy CHANGED]]

We have shown that there is is a potential for overlap on each dimension identified above with the possible exception of *Cognitive Identification*. Thus, aside from this possible exception, no single one of the dimensions serves to differentiate metaphor and metonymy in general.

Now, such overlap on individual dimensions, even if it applies to every dimension, does not by itself imply that metaphor and metonymy overlap in the space as a whole, i.e. that that there is any place in the space where there is both an example of metaphor and an example of metonymy. This is made clear by the diagram in Figure 1, showing how two regions in a multi-dimensional space can have no overlap even though for every dimension the regions' projections on that dimension overlap.

—FIGURE 1 ABOUT HERE—

((2 right triangles in 2D, with gap between))

(Of course, overlap in the space does imply overlap on each dimension separately.) Nevertheless, metaphor and metonymy do in fact overlap in the space as a whole, unless the metaphor cases in question must be held to involve Cognitive Identification. Ignoring this proviso, one case of overlap between between metaphor and metonymy is provided by suitable types of Representational metonymy and image metaphor. On the metonymy side, consider

((N1)) "There's a snake to the left of the drawing",

referring to a curved line in the drawing, where the line is intended an image of a snake. On the metaphor side, consider

((N2)) "The snake crosses from one side of the paper to the other"

as a way of just of describing a line in a drawing, there being no actual snake in the discourse context. Imagine that the snake lines in the two drawings have the same shape. Let us look at how these specific examples might be situated on our dimensions, under suitable assumptions:

- *Qualitative Difference:* Both examples have exactly the same degree of qualitative difference. Both link a line to a snake.
- *Division Hopping:* Both examples fare equally on any system of divisions.
- *Surface-Based Link-Following and Contiguity*: (N2) is a case of referential metaphor. It thereby involves Surface-Based Link-Following, and the metaphorical line/snake link can be regarded as a contiguity as usual. In (N1) we also have Surface-Based Link-Following, and the representational link can be regarded as one of contiguity.
- *Similarity:* Both examples involve the same type and degree of visual similarity, and it is likely that no other type of similarity is involved (e.g., it is not the the case that in one of the examples the line is

drawn in ink made partly out of snake bile). Also, as explained in section 2.3.2, it is plausible that he understander of (N1) needs to keep the visual similarity of the line to a snake in mind.

- *Linkage Survival:* In (N1), it is likely that it is important for the discourse that the image referred to in the drawing be a depiction of a snake. For instance, the discourse might go on to discuss a depicted mouse that is shown as next to the snake and is in danger of being eaten. In (N2), it is possible that the only way of later referring to the particular line mentioned would be to call it "the snake" or something similar, such as "the snaky line." Equally, the only way of referring economically to a particular end of the line might be a phrase such as "the line's head," alluding to the hypothetical snake's head (cf. the discussion of the neck of a camel-like cloud in section 2.4). Thus, the connection to a snake needs to be maintained as part of further thought about the line.

- *Mapping Complexity:* Both examples rely on visual similarity. On the assumption (again) that this is all there is to the similarity, the degree of mapping of internal structure is the same. Further, neither the metaphor nor the metonymy need draw upon external associations of snakes.

- *Source Reality:* In (N1), "a snake" can be interpreted as referring to a hypothetical snake as opposed to any particular, real snake. Equally, in (N2) it would be normal to assume that no actual snake was being used as source item.

- *Linkage Counterfactuality:* Assuming that both examples involve a presumption of likeness between the line and the snake, the degree of linkage counterfactuality is the same (ignoring the question of the metaphor being analysed as involving Cognitive Identification).

Although, as we noted above, coincidence of location of two utterances in the space does not imply they are equal on metaphoricity and metonymicity, (N1) and (N2) are so similar as regards the depicted scenario that we might wonder whether both should be regarded as both metaphorical and metonymic. We mean here that in each of (N1), (N2), the use of the snake/line link is simultaneously and intrinsically both metaphorical and metonymic (rather than that the sentences involve a combination of separate acts of metaphor and metonymy). A numerical analogy here is that the number 2 is simultaneously and intrinsically both prime and even: it is not that 2 has one component that is prime and another component that is even. However, the metonymicity of (N2) could be said to be less than that of (N1), because in (N2) the Linkage Survival is more incidental than it is in (N1). In (N2), the Linkage Survival assumed above is for convenience arising from a supposed difficulty of identifying the line or parts of it in some other way, and under other assumptions there might not be any Linkage Survival, whereas in (N1) the Linkage Survival is key and would occur even if it were quite easy to describe the line in some other terms. So, in general, it may be that metaphor that uses Surface-Based Link-Following is less metonymic (if metonymic at all) than typical sorts of metonymic sentence.

On the other hand, it may be that we should class any example of representational metonymy that relies on similarity as an aspect of the representation link, and that motivates the understander to attend to the similarity itself, as being to that extent metaphorical.

Opposite to the issue of overlap is the issue of intermediacy between metaphor and metonymy. Intermediacy can in principle exist either within an individual dimension or in the space as a whole. In the space as a whole, an intermediate utterance would be one that falls neither in the metaphor region nor the metonymy region but that could in some sense be said to be between these regions. The narrow gap between the triangles in Figure 1 illustrates the situation, but notice that in a more complex situation there could be both some overlap and some gaps, as shown in Figure 2.

—((FIGURE 2 ABOUT HERE))—

((as Figure 1 but the triangles rotated/distorted a bit so they have some overlap but still a channel between them as well))

On an individual dimension, an intermediate utterance would be one whose position along that dimension were in neither the region(s) of that dimension occupied by metaphor nor the range(s) occupied by metonymy. Again, we could have in principle both overlap and gaps along a single dimension (Figure 3), as there is no guarantee that metaphor or metonymy occupies just one simple connected stretch along a dimension, and in any case the notion of a dimension as a geometric line is highly imperfect metaphor, as we have emphasized.

—((FIGURE 3 ABOUT HERE))—

((one dimension, with both overlap and gaps))

It is not clear that there are gaps on any of the dimensions we have listed, but notice that there may be gaps in the overall space even if there are no gaps on any dimension, as Figures 1 and 2 show. (However, whenever there is a gap on a dimension there must be a corresponding gap in the overall space. So intermediacy on a dimension implies intermediacy in the space as long as between-ness on a dimension implies between-ness in the space, other dimensional values being kept constant.)

The types of intermediacy we have been discussing are "hard" in that it appeals to being definitely outside both the entire metaphorical and metonymic regions of a dimension or of the whole space. It is in this sense that it is the opposite of overlap. But a "softer" form of intermediacy is where an utterance is required only to be outside the regions that contain *typical* sorts of metaphor and metonymy. So it may still involve an (atypical) form of metaphor or an (atypical) form of metonymy or both. If both, then we do also have a type of overlap. Hard intermediacy, soft intermediacy and overlap are all ways in which we can say that there are interesting possibilities outside the classes of utterances that are purely metaphorical and utterances that are purely metonymic.

4 Additional Discussion

[[Dec07: not much change)]]

4.1 What We Are Not Addressing

A given utterance can often be given alternative analyses, some literal, some metaphorical, some metonymic, etc. This is independent of the question of where the different interpretations individually lie on our dimensions. One reading of "France beats England" could be (a) that the French football team wins a match against the English one (typical case of metonymy) but another (b) could be that France is bigger than England (metaphorical in a typical way, appealing to the common metaphorical use of "beat" to talk about any sort if superiority that is contextually salient).

Secondly, alternative metaphorical and metonymic analyses of a given utterance can sometimes lead to much the same semantic/pragmatic result. For example, Low? REF discusses locutions such as "This newspaper thinks/says" ((CHECK)), addressing the issue that that they could either be analysed as exemplifying the metonymic schema INSTITUTION FOR REPRESENTATIVE OF IT or as resting on the conceptual metaphor INSTITUTION AS PERSON. (Hobbs REF also briefly addresses such cases.) In many cases it probably does not matter which analysis is adopted. (But note that the metaphorical option does allow rich elaborations such as "This newspaper is shouting out that ..." where it is not claimed that any particular person involved in the newspaper shouts anything.) The coincidence of result does not imply a coincidence of placing or even each different analysis is somehow atypical or lies within a metaphor/metonymy overlap.

Thirdly, metaphor and metonymy can be mixed together in complex ways in the same utterance. Thus, one analysis of "Mike tore Peter's book to shreds" is that "Peter's book" refers indirectly to the ideas in it (a

typical sort of metonymy) and the tearing-to-shreds is a metaphorical description of an attack by Mike on the *ideas*, not the book, appealing to the common way of speaking of ideas as if they were physical objects. The ability to chain metaphor and metonymy in this way is independent of the question of where they separately lie on our dimensions.

4.2 Metonymy-Infused Analyses of Metaphor

We have already suggested that the following of a metaphoric link from source to target could be regarded as metonymy. But there are other ways in which core aspects of metaphor depending under some accounts of metaphor could be analysed as metonymy, even if the author of the account does not hold with such an analysis.

For instance, consider a feature-transfer approach (such as in REFS), and an example such as "Mike is a lion." Let us suppose that features of dominance and courage are transferred to Mike, on the basis that a lion, at least as a cultural stereotype, has these features. The step that goes from a lion to those features could, if we wished, be construed as metonymical. Indeed, Ritchie (2006: 74) suggests such a view in passing, as one possibility in the case of a proper-name metaphor concerning Margaret Thatcher as president of the USA. More generally, bearing in mind that accessing features shades into performing inference, Langlotz (2006) tends to regard inference steps conducted within the terms of the source domain, where those steps lead to mappable aspects of the source, as a matter of metonymy. (See also REFs.)

Another possible case is provided by the categorization approach to metaphor (Glucksberg & Keysar 1990), where a metaphor of form *A is B* is analysed as stating *A is B*$*$ for some category B$*$ derived from B. This step from B$*$ to B could, if we wished, be construed as metonymy (irrespective of whether B$*$ already existed or was already linked to B before the metaphorical utterance in question was encountered). Ricoeur (1977) ((CHECK in Fass or DELETE)) regards metaphor as double metonymy, in that first there is a metonymic step from source item to a general item covering both source and target, and then a second metonymic step down to the target item.

While such metonymy-infused analyses of metaphor are possible, they do not imply that metaphor is constituted entirely of metonymy. There remain large non-metonymic aspects. For one thing, the metonymy, such as it is, is of a specialized type and is regimented in a particular way. But also, we are left with such questions as how the particular features for transfer, super-categories B$*$, or whatever are selected on a particular occasion or entrenched through usage. This may require, for example, finding suitable similarities or structural matches between sources and targets, and it is here that non-metonymic metaphoricity would in part reside (in an part in the specific way that metonymy is then regimented).

5 Conclusion

[[Dec07: REWORKED]]

The arguments in this paper lead to the conclusion that of the dimensions that we have abstracted from attempts to differentiate metaphor and metonymy, only one, namely *Cognitive Identification*, is a real candidate for being a differentiator by itself. This is because there is overlap between metaphor and metonymy on each other dimension. In some cases the overlap is extensive. And, again putting *Cognitive Identification* aside, not only do the dimensions fail individually to differentiate the two tropes, but they cannot do so in conjunction either, because there is overlap of the metaphor and metonymy regions of the space defined by the dimensions.

Also, basing a differentiation on a distinction between *Contiguity* and *Similarity* fails for several reasons: any similarity link used in metaphor can be regarded as contiguity (or rather, there is not evident reason why it should not be) and the links used in certain types of metonymy involve similarity. Another particular conclusion is that the degree of *Qualitative Difference* in metaphor can be very small even though metaphor is often discussed as only connecting things of very different types. This conclusion makes it difficult to differentiate metaphor and metonymy according to whether or not they cross division boundaries.

Notwithstanding the overlap in the overall space and on individual dimensions, the most typical forms of metaphor and the most typical forms of metonymy are, perhaps, in clearly separable regions of some dimensions (apart from *Cognitive Identification*), notably *Similarity, Source Reality, Linkage Survival* and *Mapping Complexity.* However, further analysis of this requires better analysis of what the epithet "typical" means.

Going back to the question of differentiating metaphor and metonymy in general, we do not leap to the conclusion that *Cognitive Identification* can serve this function, as more work needs to be done to establish that metaphor always does involve identification. Thus, while cognitive identification may be *sufficient* for metaphor (remembering that it is not just a matter of identifying source items and target items, but requires that it be done with a particular intent in terms of highlighting, transfer, etc.), it is not completely clear that it is *necessary*.

It is likely that some of our dimensions will prove on further examination to be of too little use to be worth keeping in the deconstruction of metaphor and metonymy. On the other hand, it is likely that extra dimensions should be added to the analysis, whether they are entirely new or obtained by further deconstruction of the dimensions we have discussed.

There is, of course, room for disagreement about where a given expression lies on a given dimension. A particularly difficult dimension on which place expressions is *Linkage Survival*, and indeed here there may be genuine and ineradicable language-user relativity (as in many other aspects of metaphor and metonymy). Nevertheless, by making the dimensions more explicit and important, the task of identifying/annotating metaphor and metonymy and developing processing approaches to them may overall become more precise, transparent and evaluable.

Indeed, unless it should turn out that *Cognitive Identification* or some dimension can indeed serve as a firm differentiator, perhaps in conjunction with some other dimensions, we tentatively suggest that the focus of detailed analytical or empirical study should not be of metaphor or metonymy as such, but rather of individual dimensions or carefully defined portions of the overall space. That is, it is the dimensions that are fundamental, with the words "metaphor" and "metonymy" perhaps just being heuristically useful labels for certain purposes.

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