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An Alternative Account of the Interpretation of Referential Metonymy and Metaphorⁱ

BEATRICE WARREN

1 Introduction

Most modern linguists agree that metaphor and metonymy are two distinct constructions arising from two distinct cognitive operations, although they are alike in that they both involve an explicit source expression (that which is mentioned) which suggests an implicit target (intended item of communication). The most common description of the fundamental difference between metaphor and metonymy is that the association which takes us from source to target is analogy and similarity between otherwise dissimilar phenomena in the case of metaphor and concomitance in the case of metonymy. The prevalent account in cognitive linguistics parallels this explanation, i.e. in the case of metaphor, there is mapping across knowledge structures (i.e. domains or ICMs); in the case of metonymy there is mapping within the same domain or domain matrix (Lakoff and Turner 1989, Croft 1993 and Kövecses and Radden 1998).

The aims of the present contribution are, first, to demonstrate that it is difficult to see how this traditional theory and the cognitivist version of it account for important syntactic, semantic and functional differences between metaphoric and metonymic expressions and, secondly, to suggest an alternative to this theory which would better account for these differences. This alternative presupposes a distinction between propositional and referential metonymy. This distinction will therefore be introduced first. Next will follow a list of differences between metaphor and metonymy which need to be accounted for. In the fourth section, finally, the alternative approach addressing these differences will be presented.

2 Propositional and Referential Metonymy

Consider the following examples representing propositional ((1)-(2)) and referential metonymy ((3)-(4)). (The metonymic expression is in italics, the intended interpretation in square brackets.)

- (1) A: How did you get to the airport?
B: *I waved down a taxi.* [A taxi took me there] (Gibbs 1994: 327)
- (2) It won't happen while I still *breathe.* [live] (Halliday 1994:340)
- (3) She married *money.* [rich person]
- (4) Give me *a hand* [help] with this.

One difference between (1)-(2) and (3)-(4) is that in the former the source expressions do not bring about violation of truth conditions, whereas in the latter they do. Another difference,

ⁱ To be submitted for publication in *Metaphor and Metonymy in Comparison and Contrast*, edited by Dirven for Mouton.

reflected in the paraphrases which disclose probable implicit connections between the source and target in these examples, is that in (1)-(2) two propositions are connected, whereas in (3)-(4) two entities (or at least reified notions) are related. That is, in the case of propositional metonymy the paraphrase is that of antecedent to consequent since contiguity between propositions is naturally verbalised in this way: if one breathes, then one lives; if one waves down a taxi and one's goal is an airport, then this taxi probably takes one to the airport in question. The validity of the consequent (the target) follows from the validity of the antecedent (the source). Consequently propositional metonymy does not give rise to statements which are literally not true¹. In the case of referential metonymy, the paraphrase yields a modifier-head construction: *money*: someone who has money; *hand*: that which the hand produces. In these it is invariably the head that is the implicit target. This means that the predication of the sentence containing the metonym apparently applies to the item of the construction with a modifying, non-referring status, giving rise to superficially non-literal statements.

The great majority of examples of metonymy given in the literature represent referential metonymy. That is, they give rise to (superficial) violations of truth conditions and they allow paraphrasing in the manner demonstrated above. In fact, I will consider these features as criterial for referential metonymy and I will consider referential metonymy as prototypical metonymy and in the following restrict myself to this type. Judging by current trends in the metonymy literature, a number of linguists will consider such an approach too reductionistic, threatening to obscure different manifestation of one and the same cognitive process. What we will possibly gain in precision, we will lose in comprehensiveness. Whether this is indeed the case will be discussed after a proper presentation of the approach. Our immediate concern will instead be differences between metaphor and metonymy.

3 Some Important Differences between Metaphor and Metonymy

There are six differences between metaphor and metonymy of particular importance. These will be listed below. As already pointed out, they are semantic, syntactic and functional in nature.

- (i) Metaphor involves seeing something in terms of something else. This is a point made very clear in Lakoff and Johnson (1980) (but it has been made before, e.g. by Stöcklein (1898: 55))². That is to say, metaphor is hypothetical in nature. Life is thought of *as if it were* a journey. Metonymy, on the other hand, is non-hypothetical. There is nothing hypothetical about *the kettle in the kettle is boiling*, for instance. It is for this reason that I make the point that non-literalness in the case of metonymy is superficial.

¹ Riemer (ms) introduces the term *hypermetonymy* for cases when the validity of the antecedent/source, although originally crucial, has ceased to be necessary, because the meaning it suggests (i.e. the consequent/target) has become conventionalised. His example is the Walpiri (or Arrente?) word for "hit", which may mean "wound", although no hitting has taken place. There are many examples of "dead" propositional metonyms in the literature. See Stern (1965:377ff), possibly the first to describe this type of meaning shift, and Warren (1992:51-63). However, terminology is confusing here: in Stern the phenomenon is referred to as *permutation* and in Warren as *implication*.

² As a matter of fact, a number of the central tenets in current theories of metaphor and metonymy are not new but have been proposed previously. For a survey, see Jäkel (1999: 9-27) and above all Nerlich and Clark (2000: 3-18).

- (ii) Metaphor will serve as a rhetorical device or as a device for extending the lexicon (Dirven 1985: 85-119, Lipka 1994: 1-15). The same is true of metonymy, but in contrast to metaphor, it need not have either of these functions. Consider the following example from Nunberg *Bill's shoes were neatly tied* [laces] (Nunberg (1996:123) or Dirven's example *different parts of the country* [inhabitants] (1993).
- (iii) Whereas (referential) metonymy does not occur above phrase-level, metaphor can, as the following example illustrates *You scratch my back and I will scratch yours* [If you help me with what I cannot manage myself but which you can easily do for me, I will return such a service] (Warren 1998), see also Dirven (1985:92).
- (iv) In the case of metaphors there are often simultaneously more than one connector between source and target. This makes it a potentially very suggestive and powerful, yet economic meaning-creating device. In the case of metonymy, there is never more than one relation connecting source and target (Warren 1992:65ff and 78-79). (It is, however, possible to find metonyms within metonyms. Consider, for instance, the Swedish word *krona* (crown), which denotes a particular coin. Although to most Swedes, it would now probably be a dead metonym, originally its interpretation would have been: "that which *has* that which *represents* a crown on it". This type of construction is also referred to as serial metonymy (Nerlich and Clarke (ms)) or inclusive metonymy (Dirven (1993).)
- (v) Metaphors can form themes which can be sustained with variations through large sections of texts. In an article about the extra-length session of Prime Minister's Questions introduced by Tony Blair in 1997, we find the following example of such a thematic metaphor, i.e. MPs ARE WELL-TRAINED POODLES. This metaphor is then varied as indicated in the illustration below. Such thematic metaphors can be conventionalised forming so-called conceptual metaphors, for instance LIFE IS A JOURNEY (Lakoff and Johnson 1980). Although there are metonymic patterns such as CONTAINER for CONTENTS, LOCATION for INHABITANTS, metonymy never gives rise to themes of the kind exemplified by conceptual metaphors.
- (vi) Without causing zeugma *Caedmon in Caedmon is a poet and difficult to read* has a non-metonymic reading (when it is the subject of *is a poet*) as well as a metonymic reading (when it is the subject of *difficult to read*)³. If one and the same expression has a literal as well as metaphorical reading, this would cause zeugma: **The mouse is a favourite food of cats and a cursor controller*.

With the possible exception of the difference mentioned first (under point (i)), the theory that metaphor involves seeing similarity between dissimilar phenomena or mapping across domain structures whereas metonymy is based on contiguity or involves mapping within a domain structure does not predict or explain the differences enumerated above.

³ The example is inspired by Croft's discussion of one of Nunberg's example. See example (73) in Croft, this volume.

TONY REWARDS HIS HOUSE-TRAINED POODLES

Boring. That was the verdict after the new, improved, extra-length, super-constructive Prime Minister's Questions, unveiled amidst much excitement yesterday. Within days, Tony Blair has experienced a sensation it took Margaret Thatcher years to organise: scores of little wet backbench tongues caressing the prime ministerial boot: a sea of moist, adoring eyes around him: the sound of orchestrated panting from those desirous of office.

Reporters' pencils dropped onto empty notepads. Tories stared at the rafters. Even Labour backbenchers yawned. One Liberal Democrat left almost before his leader had finished speaking

In short, Tont Blair's reform was a complete success for him. Interest leaked away from the session as fast as water from Thames Water's pipes.

The new Prime Minister managed his first 30-minute interrogation with ease. Mr Blair was not so much grilled as gently burnished over a warm flame, as with marshmallow. Claims that the reforms to PM's Questions will offer an opportunity for holding the premier to account, came to nothing. Instead, a troupe of backbench poodles came prancing in, on cue, with an array of patsy questions, choreographed by whips.

Labour poodles are not the same as Tory poodles. Tories would ask their Prime Minister to remind us how dreadful the Opposition were. Labour backbenchers ask Mr Blair to remind us how wonderful he is. Thus yesterday Jean Corston (Lab, Bristol) asked the Prime Minister to tell us of his determination to prevent crime. Stephen Twigg (Lab, Enfield Southgate)... Lorna Fitzimons (Lab, Rochdale)... All were rewarded with a biscuit.

Eric Illsley (Barnsley Central) requested (and — abracadabra! — received)

By now Mr Blair's boot had been licked until soggy. But Maria Fyfe (Lab, Glasgow Maryhill) was anxious for a lick, too.

And still the extended tongues dangled, hopeful.

John Major did his best to rattle him, receiving no answer to a claim (twice repeated) that The PM is less than convincing under pressure. But with Labour tongues ready only to lick, and Tory teeth sunk firmly into each other's bottoms, it is hard to see where pressure will come from.

The Times (May, 1997)

4 An Alternative Approach

The approach which I think would better explain these differences is simply the following: Metaphor is basically a property-transferring semantic operation, whereas metonymy is basically a syntagmatic construction, more precisely a modifier-head combination in which the head is implicit. This latter point is demonstrated in Table 1. That is to say, we hear *the kettle is boiling*, but we interpret the noun phrase in this example as "that which is in the kettle, i.e. the water"; we hear *Caedmon is difficult to read*, but we interpret *Caedmon* as "that which is by Caedmon, i.e. his poetry "; we hear *the shoes are neatly tied*, but we interpret *shoes* as "that which is part of the shoes, i.e. the laces".

Target		Source
implicit head and	link	Explicit part of modifier
(that which is	in)	the kettle
(that which is	by)	Cædmon
(that which is part	of)	the shoes

Table 1. Seeing metonyms as modifier-head constructions

Seeing metonyms as modifier-head constructions, we also see clearly that the standard dictionary definition of metonymy, i.e.: "the use of the name of one thing for that of another" (*Hamlyn's Encyclopedic World Dictionary*) is misleading. There is no substitution involved. The target referent does not replace the source referent. *Cædmon is difficult to read*, e.g. is not interpreted as "poetry is difficult to read", but "the poetry by Caedmon is difficult". So, interpreting metonyms involves combining source and target to form a referring unit. (Therefore, when we use the term *target* in connection with metonymic expressions, it, strictly speaking, frequently represents the intended referent only partially.)

As already pointed out we have now also an explanation for the non-literal reading of metonyms: the predication apparently applies to the modifier of the construction: *the kettle* in *the kettle is boiling*, *Caedmon* in *Caedmon is difficult*, whereas in actual fact it applies to the implicit head: (the water in) *the kettle*, (the poetry by) *Caedmon*.

This theory also reveals why metonymic expressions are non-hypothetical. They are based on actual, normally well-established relations between source and target referents. We do not look upon water as if it were a kettle. We do not look upon laces as if they were shoes.

Moreover, if we accept that (referential) metonyms are basically abbreviated noun phrases, it follows that they are restricted to phrase level and that they can be formed without necessarily having a naming or rhetorical function. They do, however, appear to have an information-structure type of function. Consider and compare:

- (5) The laces of the shoes were neatly tied.
- (6) The laces were neatly tied. [of the shoes]
- (7) The shoes were neatly tied. [the laces]

Provided (7) is metonymically interpreted, these three sentences describe the same state of affairs and have the same truth conditions, but they focus on different referents. In (5) and particularly in (6), the focus is on the laces. In (7) it is on the shoes, bringing about an implication that because the laces were neatly tied, the shoes as a whole were neat. It seems that spontaneous metonymic constructions frequently occur because the speaker is focussing on the modifier rather than on the head. Both are, however, mentally present for the speaker and retrieved by the interpreter.

In this connection it should be pointed out that Nunberg has a different explanation of why we interpret the sentence *the shoes were neatly tied* the way we do (Nunberg 1995). According to Nunberg, in this example there is no transfer of reference but instead predicate transfer. That is to say, the referent of *the shoes* is shoes not laces, but the predicate is roughly paraphraseable as 'having the property of having neatly tied laces'. In my view, both shoes and laces are accessed as parts of the metonymic noun phrase and the predicate applies to the laces (the implicit head), which brings about the non-literality of the example. The proposition of the sentence, however, is of relevance to the shoes in question and could be said to be about these. It appears then that in metonymy modifiers can anomalously be made topics. In my view it is this "linguistic twist" that makes metonymic constructions interesting

and more than simply abbreviated noun phrases. Often they seem so natural and normal and yet –on closer inspection– there is something wrong about them. It should be added here that this explanation agrees partially with Langacker’s view of the function of metonymy which is that “a well-chosen metonymic expression lets us mention one entity that is salient and easily coded, and thereby evoke –essentially automatically– a target that is either of lesser interest or harder to name”(1993:30).

In order to explain the difference mentioned under point (iv), let us briefly consider what is involved in interpreting metaphors by means of the example in (8).

(8) This book is *a gold mine*.

The interpretation is probably something along the following lines: “This book contains much valuable information”. We arrive at this interpretation by extracting features of gold mines that would be applicable to books. That is, we are invited to look upon a particular book as if it were a gold mine *in some respect or respects*. The task of the interpreter is to determine in what respect or respects, i.e. to choose among the features of the source referent some relevant one or ones and attribute this or these to the target. This explains why there may be several connectors between source and target in metaphors and may also serve as an explanation of why metaphors can introduce a theme or generate a family of metaphors, i.e.: the same source expression may offer different properties of the same target in different contexts.

This example also demonstrates the very different roles that the source expression plays in the interpretation of metaphors and metonyms. In metonymy it is a restrictive complement which together with the implicit target, its head, forms a referring unit. The source and the target are connected by means of a relation and we now see why it is natural that there should be one relation only. This relation is typically one of location in time or space, possession, causation or constituency giving rise to metonymic patterns, which so many linguists have noticed and described (see, e.g., Nerlich et al (1999), Leisi (1985), Lipka (1988). In fact, there is fairly strong evidence that the same array of relations are activated as in other modifier-head constructions such as noun-noun compounds, adjective-noun combinations and genitive constructions (Warren 1992: 66-67 and 1999: 124-127) and that it therefore is possible to posit a set of default relations between source and target.

In metaphor, the source expression is a holder of properties, some of which represent economically and efficiently attributes of the target. In some cases the properties that we wish to express are so elusive that they cannot be expressed in any other way than by metaphors, which probably accounts for the strong tendency of concrete-to-abstract directionality in metaphor. The reverse direction (abstract-to-concrete) is rare. There is, not surprisingly, no such directionality in metonymy.

In the view presented here, then, that which connects the source and the target in metaphorical expressions is a property, often several properties, whereas that which connects source and implicit target in metonymy is a relation. The matching process involved in retrieving applicable properties in the formation and interpretation of metaphors is a cognitive activity which is commonly referred to as seeing analogies. Therefore, I naturally concede that metaphor is based on analogy and resemblance. My point is that it is only when we have singled out some particular property or properties that we feel that we have succeeded in interpreting a metaphor. Consequently, I would consider *her mother’s eyes in Anne has her mother’s eyes* a metonym, not a metaphor, although the connector is a resemblance relation, maintaining that it is possible to interpret this phrase without envisaging in what way Anne’s eyes are like those of her mother. The essence of metaphor is property transferral, the essence of metonymy is highlighting.

Let me finally attempt to explain why *Caedmon is a poet and difficult to read* is non-zeugmatic, whereas **The mouse is a favourite food of cats and a practical cursor controller* is zeugmatic. When *Caedmon* is combined with the predicate *is a poet*, we mentally access a particular person as its referent; when *Caedmon* is combined with the predicate *difficult to read* what has already been accessed is retained but with an implicit addition coerced by the predicate, viz. that which this person has produced. The referent of *Caedmon* is the same in its metonymic and non-metonymic reading. As has already been suggested above, it can also be assigned topic status in both readings⁴. In metaphorical extensions, the source expression has never been assigned a contextual referent and can therefore not act as an argument that the predicate can combine with.

5 Concluding Discussion

It has been suggested above that referential metonymy is basically a modifier-head construction in which the head is implicit bringing about full focus on the modifier, i.e. the explicit source expression. There is no substitution involved since both the explicit modifier and the implicit head form necessary parts of the intended interpretation. The association between source and target in metonymy is a relation. Although the metonymic source expression is syntactically a modifier, from a textual point of view it can assume topic status.

Whereas metonymy is seen as describable in syntactic terms, metaphor is seen as basically a semantic operation in which at least one property, often a selection of properties, of the source is transferred to the target. These properties constitute the link between source and target as well as important parts of the new sense which is created. Whereas in metonymy the nature of the association between target and source is to a certain extent predictable (frequently involving possession, location, causation, constituency, but also resemblance), the connecting association between source and target in metaphor is unpredictable. Any property of the source referent that in some way is reminiscent of a property of the target is in principle possible.

The above sums up the alternative approach advocated in this paper. We may now ask in what way or ways it differs from other approaches.

One difference is that my definition of metonymy is stricter than that of most linguists in that I insist that (referential) metonymy must (i) be non-literal and (ii) allow a paraphrase that has the structure of a noun phrase in which the head is implicit. Other linguists see metonymy as pervasive in language with a number of semantic repercussions (see Taylor (1995) and Radden (2000)). Note, however, that I do not maintain that the associations commonly involved in metonymy are restricted to metonymy. On the contrary, I have repeatedly pointed out that there is a set of relations that tend to be implicit and which form important parts of the semantics of compounds, adjectives and genitive constructions (and which tend to be represented as cases: locatives, causatives, possessives, essives, etc.) In other words, I agree that an important aspect of metonymy is pervasive in language, but I do not think that whenever there is an implicit part-whole or producer-product or inhabitant-place relation, or some other relation that could be classed as contiguous, this necessarily gives rise to something we could call metonymy. *Honey bee*, *bullet hole*, *ecstasy* (the drug), *hand* [aid], *healthy* as in *healthy air* and *calve* as in *the cow calved* all involve an implicit causal link, but they are not all metonyms. True, by calling some of these examples compounds, some adjectives, some metonyms and some denominal verbs, this particular

⁴ See also Panther and Radden (1999: 912) for a discussion of this issue in connection with anaphorical reference.

similarity is blurred, but the claim that they are all metonymic or based in metonymy blurs their differences. To avoid confusion, a fairly rigid definition seems to me warranted.

Taking a broader perspective on the approach suggested here and comparing it to other approaches, it is possible to maintain that it is a further development of Jakobson's view that metonymy is syntagmatic involving combination, whereas metaphor is paradigmatic involving selection (Jakobson 1956). In producing utterances we work simultaneously along these two axes: we combine, creating syntactic structures and we select, creating meaning. This agrees with my position that metonymy is basically a syntactic construction on a par with compounding, genitive constructions and adjective-noun combinations, whereas metaphor is a semantic operation. This does not mean, however, that metonymy cannot be used for semantic purposes. Like metaphor, metonymy constitutes partially implicit descriptions of what it denotes. This implicitness may vary as to degree. We have the type described by Dirven (1993) as linear metonymy, which is quite straightforward: [those living in] *the town* rejoiced at the news, I like [that which is produced by] *Mozart*, [that which represents] *the cloud* in the picture is well done, she has *her mother's eyes*. There are, however, also metonymic expressions which serve to create both new names and new senses and which may involve implicitness to a considerably higher degree. Consider, for example, *egghead*: "the kind of person who tends to have an egg-shaped head". Although this paraphrase could be said to reveal the motivation of construction, it would not amount to its definition. The meaning of this metonym can only be formed provided the interpreter has determined the features which render the intended referent a member of the particular set that *egghead* labels. Having an egg-shaped head is not prominent among these. Dirven (1993), if I have understood him correctly, calls suggestive metonyms of this kind conjunctive. Metonymy may also have great rhetorical force: *the pen is mightier than the sword* is doubtless much more expressive than *persuasive words are superior to violence*. (Moreover, this particular example competes with metaphor as to figurative force, a point I will return to presently.)

It is also possible to maintain that the approach presented here is a further development of the traditional view that metonymy involves contiguity, whereas metaphor involves seeing similarity in dissimilarity. The association taking us from source to target in metonymy has normally a different experiential basis than the association taking us from source to target in metaphor (but not invariably). The former type of association is dependent on us having experienced source and target more or less simultaneously, which is reflected in the types of connectors we find in metonymy: X is part of Y or vice versa; X and Y co-occur in space and/or time; X consists of Y or vice versa; X causes Y or vice versa. The latter type of association depends on perceiving partial similarity – basically the same cognitive ability underlying categorisation – and does not necessitate that X and Y have been experienced simultaneously. My point is, however, that it is not the type of relation that determines whether there is metonymy or metaphor, since resemblance relations are not restricted to metaphor. Instead the crucial difference is the function of the source expression. In metaphor it makes a set of properties available from which some have to be selected and transferred, in metonymy it forms together with the connector a predication restricting the reference of the target⁵.

Finally, it is perhaps possible to see some similarity also between theories of domain mapping and the present approach. That is to say, since metonymic sources and targets have normally been experienced simultaneously, according to the cognitivist definition of *domain*,

⁵ In order to avoid any misunderstanding, I feel it should be pointed out here that the fact that referential metonymy has reference does not mean that it cannot have predicative uses. Consider: *that girl is a heartthrob* [something that causes a heartthrob, i.e. a very attractive girl].

they will naturally be mentally represented in the same domain. However, although the links between source and target in metaphor need not be readymade, it is difficult to accept that they never are or can be. Surely the connection between pigs and uncleanness is fairly well established, for example. Generally the theory of domains is difficult to apply since domain boundaries are not observable, nor intuitively self-evident and therefore, as pointed out by Riemer (ms) and Ruiz de Mendoza Ibáñez (1997), methodically and theoretically problematic. Possibly what gives the impression of across-domain mapping is the fact that the denotata of source and target in metaphor cannot be collapsed, but must belong to separate categories. For instance, if we were to include cursor controllers in the same category as rodents, we would have a category comprising practically all concrete entities. Furthermore, whereas the term *mapping* appears appropriate in the case of metaphorisation (we map features of one type of phenomenon onto some other phenomenon), it seems less so in the case of metonymy. The term must in that case at least be understood differently.

Throughout this paper I have emphasised differences between metaphor and metonymy. Admittedly there are also similarities: both violate truth conditions⁶ both are commonly involved in semantic change, both can achieve true figure-of-speech status. Consider again [that which is achieved by] *the pen is mightier than* [that which is achieved by] *the sword*, which conveys the proposition that rational argument will in the long run prevail over brute force, through conjuring up a scene in which the pen and the sword are engaged in combat, simultaneously making them representatives of two opposing sides of human nature. Or, consider *the hand* [of the person] *that rocks the cradle will rule the land*, which combines the image of the gentle hand of a loving mother with the firm grip of a strong-willed, ambitious person and which simultaneously communicates the proposition that the mother of a ruler will –through her past motherly care– be in a position to decisively influence the ruling of a country. These expressions could be claimed to be as symbolic and as many-faceted as the most powerful metaphor. But, I maintain, the similarity resides in effect and does not necessarily imply that the processes that produce metaphor and metonymy are occasionally blurred.

References

- Croft, William. 1993. The role of domains in the interpretation of metaphors and metonymies. *Cognitive Linguistics* 4-4.335-370.
- Dirven, René. 1985. Metaphor as a basic means for extending the lexicon. In *The Ubiquity of Metaphor*, ed. W. Paprotté and R. Dirven. Amsterdam/Philadelphia: John Benjamins.
- Dirven, René. 1993. Metonymy and Metaphor: Different Mental Strategies of Conceptualisation. *Leuvense Bijdragen* 82: 1-28.
- Gibbs, Raymond W. 1994. *The Poetics of Mind: Figurative Thought, Language and Understanding*. Cambridge: Cambridge University Press.
- Jacobson, Roman. 1956. The metaphoric and metonymic poles. In *Fundamentals of Language*. Vol.2, ed. R. Jakobson and M. Halle. The Hague/Paris: Mouton.
- Jäkel, Olaf. 1999. Kant, Blumenberg, Weinrich: Some forgotten contributions to the the cognitive theory of metaphor. In *Metaphor in Cognitive Linguistics*, ed. R. Gibbs and G. Steen. Amsterdam/Philadelphia: John Benjamins.
- Halliday, M A K. 1994. *An Introduction to Functional Grammar*. London-Melbourne-Auckland: Edward Arnold.

⁶ At least if we restrict our attention to referential metonymy.

- Kövecses, Zoltán and Radden, Günter. 1998. Metonymy: developing a cognitive linguistic view. *Cognitive Linguistics* 9-1, 37-77.
- Lakoff, George and Johnson, Mark. 1980. *Metaphors we live by*. Chicago: The University of Chicago Press.
- Lakoff, George and Turner, Mark. 1989. *More than cool reason: a field guide to poetic metaphor*. Chicago: The University of Chicago Press.
- Langacker, Ronald. 1993. Reference-point constructions. *Cognitive Linguistics* 4-1, 1-38.
- Leisi, Ernst. [1936]1985. *Praxis der englischen Semantik*. Heidelberg: Winter.
- Lipka, Leonhard. 1988. A rose is a rose is a rose: on simple and dual categorization in natural languages. In *Understanding the lexicon*, ed. W. Hülsen and R. Schulze, 355-366. Tübingen: Niemeyer.
- Lipka, Leonhard. 1994. Wortbildung, Metapher and Metonymieprozesse, Resultate and ihre Beschreibung. *Münstersches Logbuch zur Linguistik* 5.
- Nerlich, Brigitte, Clarke, David and Todd, Zazie. 1999. Mummy, I like being a sandwich in *Metonymy in Language and Thought*, ed. K-U Panther and G. Radden, 361-383. Amsterdam/Philadelphia: John Benjamins.
- Nerlich, Brigitte and Clark, David. 2000. Blending the past and the present: Conceptual and linguistic integration 1800-2000. *Logos and language* Vol.1, No.1: 318.
- Nerlich, Brigitte and Clark, David. (ms) "Serial metonymy".
- Nunberg, Geoffrey. 1996. Transfer of meanings. In *Lexical semantics*, ed. J. Pustejovsky and B. Boguraev. Oxford: Clarendon Press.
- Panther, Klaus-Uwe and Radden, Günter. 1999. Introduction. In *Metonymy in Language and Thought*, ed. K-U. Panther and G. Radden, 1-14, Amsterdam/Philadelphia: John Benjamins.
- Radden, Günter. 2000. How metonymic are metaphors. In *Metaphor and metonymy at the crossroads: a cognitive perspective*, ed. A. Barcelona, Antonio, 93-108, Berlin/New York: Mouton de Gruyter.
- Riemer, Nick. (ms) "Metaphor and metonymy in semantic extension".
- Ruiz de Mendoza Ibáñez, Francisco José. 1997. Metaphor, metonymy and conceptual interaction. *Atlantis. Journal of the Spanish Association for Anglo-American Studies* 19(1): 281-295.
- Stöcklein, Joh. 1898. *Bedeutungswandel der Wörter*. München: Lindauersche Buchhandlung.
- Taylor, John. 1995. *Linguistic Categorisation. Prototypes in Linguistic Theory*. (ch 7) Oxford: Clarendon Press.
- Warren, Beatrice. 1992. *Sense Developments*. Stockholm: Almqvist & Wiksell.
- Warren, Beatrice. 1998. What is metonymy? In *Historical Linguistics 1995*, ed. R. Hogg and L. van Bergen. Amsterdam/Philadelphia: John Benjamins.
- Warren, Beatrice. 1999. Aspects of referential metonymy. In *Metonymy in Language and Thought*, ed. K-U. Panther and G. Radden, 121-135, Amsterdam/Philadelphia: John Benjamins.