

LUND UNIVERSITY

Referential metonymy

Warren, Beatrice

2006

Link to publication

Citation for published version (APA): Warren, B. (2006). Referential metonymy. (Scripta Minora Regiae Societatis Humaniorum Litterarum Lundensis). Kungliga Humanistiska vetenskapssamfundet i Lund.

Total number of authors:

General rights

Unless other specific re-use rights are stated the following general rights apply:

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights. • Users may download and print one copy of any publication from the public portal for the purpose of private study or recorder.

or research.

You may not further distribute the material or use it for any profit-making activity or commercial gain
 You may freely distribute the URL identifying the publication in the public portal

Read more about Creative commons licenses: https://creativecommons.org/licenses/

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

LUND UNIVERSITY

PO Box 117 221 00 Lund +46 46-222 00 00

REFERENTIAL METONYMY

By BEATRICE WARREN

Manuscript version* of monograph published in:

Scripta Minora, 2003-4, Royal Society of Letters at Lund, Sweden (2006)

ISBN 91-22-02148-5

*Please note that the page numbering in this version differs from that in the published version

Contents

1.	INTRO	DUCTION	3
2.	PART I: HOMING IN ON REFERENTIAL METONYMY		5
	2.1	Propositional and referential metonymy	5
	2.2	Metonymy and synecdoche	10
	2.3	Metonymy and metaphor	12
3.	PART I	I: DESCRIBING REFERENTIAL METONYMY	19
	3.1	Syntactic characteristics	19
	3.2	Notional characteristics	32
		3.2.1 Reference scope of the explicit element	32
		3.2.2 Metonymy as a rhetorical device	37
		3.2.3 Semantic patterns	41
		3.2.3.1 Theoretical status of the patterns	67
	3.3	Interpretation and formation of referential metonymy	74
4.	SUMMING UP		77
	ACKNOWLEDGEMENTS		79
	APPENDIX		79
	REFERENCES		85

1. Introduction

"Metonymy has been studied for at least two thousand years by rhetoricians, for two hundred years by historical semanticists, and for about ten years by cognitive linguists." Nerlich and Clarke (2001: 245)

Lakoff and Johnson's book *Metaphors We Live By* published in 1980 revitalised research into metaphor but also–although somewhat later–into metonymy. It was above all the views that metaphor and metonymy are conceptual and pervasive that researchers found insightful and inspiring. Metaphorical and metonymic concepts, it was claimed, structure our thoughts and attitudes and influence the very way we perceive reality. Examples of metaphor and metonymy were therefore seen as linguistic evidence of particular conceptual metaphors and metonymies such as LOVE IS A JOURNEY (conceptual metaphor) and THE FACE FOR THE PERSON (conceptual metonymy).

Metonymic thinking was characterized in general terms as that which allows us "to conceptualize one thing by means of its relation to something else" (Lakoff and Johnson 1980:39) or more precisely as the practice "to take one well-understood or easy-to-perceive aspect of something and use it to stand either for the thing as a whole or for some other aspect or part of it" (Lakoff 1987:77). This brought about a much less restricted view of metonymy than the traditional approach, and a number of expressions which previously had not been considered examples of metonymy were classed as such. For instance, ironies were found to exemplify the conceptual metonymy A CONCEPT STANDS FOR ITS OPPOSITE (Vosshagen 1999), denominal verbs were found to be event-schema metonymies (Dirven 1999) and many noun-based -er nominals were make use of the high-level conceptual metonymy thought to PARTICIPANT FOR ACTION/ACTIVITY (Panther and Thornburg

2002). The most radical approach was adopted by Radden and Kövesces, who suggested that words are sign metonymies in that the form of a word metonymically stands for the concept it denotes (Radden and Kövesces 1999: 24), a view which seems extreme but is consistent with the characterisation of metonymic thinking as our ability to make X stand for Y.

The research question that inspired many linguists concerned with metonymy after the publication of *Metaphors We Live By* thus appears to have been: How does metonymic thinking affect language? The research questions pursued in the present contribution are more modest and more traditional in that the direction of the approach is reversed, i.e. from linguistic evidence to assumed mental processing. They concern why and how linguistic examples of metonymy are formed and also descriptive aspects such as what are the syntactic and semantic characteristics of metonymy. Given such an approach, the heterogeneous set of examples revealed by recent metonymy research is problematic. In fact, it necessarily leads to subcategorisation. Ironies are produced for very different reasons and under very different conditions than, say, denominal verbs. In order to isolate a homogeneous set of examples the following method was employed: All the examples of metonymy appearing in 53 sources (mainly academic articles written on the topic of metonymy) published after 1980 were collected (see appendix). This yielded a total of 1018 different expressions (repeated examples were not counted). 634 (62.5%) of these would most probably be accepted as metonymic by traditionalists. They have in common that there is no other term for them than metonymy. They have in common also that they implicitly denote some entity or entities that the speaker/writer feels confident that the interpreter will be able to envisage by connecting it/them with an explicit expression (the metonym). There is no change of part-of-speech status (i.e. the explicit element is, with some few exceptions, a noun and the implicit element can invariably be represented by a nominal expression). Nor is there a change of the conventional sense of the explicit expression. As will become evident, I will also claim that they have in common that the explicit expression represents an attribute of (=feature ascribed to) the implied entity.

Since the examples answering to this description form the largest subcategory and also have by far the largest distribution (i.e. are cited as examples in almost all of the sources), their metonymic status must be considered robust. In fact, a considerable number of linguists would want to expand the category to include also expressions that imply states and situations. There are, however, reasons for the suggested restriction which will be given presently.

Besides an introduction and a conclusion, the study consists of two main parts, the first of which is entitled *Homing in on referential metonymy*. This part introduces a distinction between propositional and referential metonymy, the latter of which is, as the title indicates, the topic of the present study. This part also contains a discussion of differences between metonymy and neighbouring tropes. The second part (*Describing referential metonymy*) consists of three main sections. The first two of these contain, in turn, descriptions of syntactic and notional characteristics. In the final section, the interpretation and formation of referential metonymy are considered.

2. Part I: Homing in on referential metonymy

2.1. Propositional and referential metonymy

A distinction will be made between those metonymies that relate one entity with another and those that relate two propositions. The former kind will be referred as to as referential, the latter as propositional. Consider first some examples of propositional metonymy:

- (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*. [I *live*] (Halliday 1994:340)
- (3) Drive carefully. The roads are *greasy*. [They are *slippery*] (Warren1998:302)

- (4) He raised his eyebrows. [He was surprised] (Goossens 2002:363)
- (5) They went to the altar. [They were married] (Radden and Kövecses1999:33)

The metonymic expression is in italics; the notion intended to be conveyed in square brackets.

It is suggested that the proposition "I waved down a taxi" gives rise to the proposition "I went by taxi" and, similarly, the proposition "Someone breathes" gives rise to the proposition "Someone is alive" etc., as indicated in Table 1.

Explicit proposition	Implicit proposition	
Someone waved down a	This person went by taxi	
taxi		
Someone breathes	This person is alive	
Some roads are greasy	These roads are slippery	
Someone raises his	This person is surprised	
eyebrows		
Some people went to the	These people were	
altar	married	

Table 1. Examples of linked propositions

One prerequisite for a proposition to suggest another is that we have experienced them as contiguous: if roads are greasy, then they are also slippery, etc. This if-then relation need not be absolute or causal. It is sufficient that the two propositions are likely to be concurrent. Another prerequisite for an explicit proposition to implicitly convey another is that in the context at hand the implicit proposition either is more relevant than the explicit one or at least strengthens its relevance. An example of the importance of the context is (6) in which the addition of *he had lost his wife* helps suggest the proposition "he was sad".

(6) He walked with *drooping shoulders*: He had lost his wife. (Barcelona 2000:4)

The examples above demonstrate that although one proposition is linked to another, the notional shift can frequently be located in a particular word (greasy ->"slippery", breathe->"live", etc.), sometimes effecting permanent changes of meaning. A case in point is Stern's famous example of Middle English bede, originally meaning "prayer", which developed the current meaning of bead since when one counts one's prayers, one also counts the balls of one's rosary (Stern 1965:353-354). Another example is the adjective and adverb fast(e), which originally meant "firm/firmly", but which took on the meaning "rapid" since if one runs "firmly", one also runs rapidly (Stern 1965:377).

Of the examples in my collection, 57 (5.6%) are deemed propositional. Prominent among these are those found in Pauwels's study of metonymic uses of *put, set, lay* and *place*. For instance:

(7) set foot in a place [visit a place]
 put you across my knee [subject someone to corporal punishment]
 lay his rifle aside [stop being a soldier] (Pauwels 1999:264 –266)

Expressions involving body language also make up a fairly large proportion of examples as already shown by (4) and (6), but perhaps the most interesting subgroup are the indirect speech act constructions, which are seen as metonymic by a number of scholars. Stefanowitsch (2003), for instance, has devoted an article to such constructions and discusses examples such as:

- (8) Can you pass the salt? [pass the salt] (Stefanowitsch 2003:108)
- (9) Would you mind closing the door? [close the door] (Stefanowitsch 2003:108)

(10) I'd like a cheeseburger with fries. [give me a cheeseburger with fries](Stefanowitsch 2003:108)

The connection between the explicit and implicit in these examples is different from the rest of my examples of propositional metonymy in that questions and commands do not have the status of proper propositions. Nevertheless, arguably there is a kind of if-then relation between what is stated and what is implied: if someone likes a cheeseburger with fries, (s)he is likely to request one given the opportunity and if someone is willing or able to carry out a particular action, (s)he is likely to be asked to perform this action given certain conditions.

There are differences between propositional and referential metonymy which justify that they are distinguished. First, consider some examples of referential metonymy:

- (11) I will put *you* on the governor's report. [your behaviour] (Pauwels1999:269)
- (12) I have been reading *the man* for ages, but had never seen him in the flesh. (referring to Chomsky) (Nunberg 1996:131)
- (13) Maria is *a divine voice*. [person with a divine voice] (Papafragou 1996:61)
- (14) *Table 13* is complaining. [people at table 13] (Dirven 1999:275)

As the examples above demonstrate, referential metonymy tends to violate truth conditions: one cannot literally include a person in a report or read a man; nor can a woman be a voice or tables complain. Propositional metonymy, on the other hand, tends to be literally true since the validity of the consequent (implicitly conveyed notion) depends on the validity of the antecedent (explicit expression).

In the case of propositional metonymy, it is natural to relate the implicit and explicit notions by means of if-then relations, whereas this is less natural in the case of referential metonymy and a different kind of paraphrasing suggests itself:

- (11) I will put *you* on the governor's report. [your behaviour]
 (Pauwels 1999:269) *you* = "that which you did"
- (12) I have been reading *the man* for ages, but had never seen him in the flesh. *the man* = "<u>that which</u> the man has written" (Nunberg:1996:131)
- (13) Maria is *a divine voice*. [person with a divine voice]
 (Papafragou 1996:61) *a divine voice* ="someone with a divine voice"
- (14) *Table 13* is complaining. [customer(s) at table 13] (Dirven 1999:275) *Table 13* = "<u>the one(s)</u> at table 13"

These paraphrases reveal that referential metonymies could be said to have a syntax: the implicit element is the head and the referring element. The explicit element is actually part of a modifier, but since the syntax of the utterance in which it occurs specifies it as a nominal head, the predication of the sentence apparently applies to the explicit element, giving rise to a superficial non-literalness. In referential metonymy, the explicit element is syntactically referring but semantically non-referring. It is important that we realise that there is no substitution involved as standard definitions of metonymy imply. The explicit element does not replace the implicit element but is a complement. As pointed out by Warren (1999:128), we do not refer to "music" in *I like Mozart* but to "music composed by Mozart" and we do not refer to "water" in *the bathtub is running over*, but to "the water in the bathtub".

There are some other differences between propositional and referential metonymy that should be mentioned. One is that in the case of propositional metonymy, an intended implied notion can fail to be conveyed or, reversely, it can be conveyed without being intended. Unintended implications, if detected by the speaker, are cancellable. Consider:

(15) The tomatoes are green [unripe] but ripe nevertheless.

Referential metonymy, on the other hand, does not appear to be unintended and cancellable. (16) is more difficult to make sense of:

(16) *?The bathtub* is running over, but it is empty.

Further, propositional metonymy gives rise to change of meaning of verbs, nouns, adjectives and adverbs and is often involved in turning lexical items into grammatical constructions (see Bybee, Perkins and Pagliuca (1994) and Hopper and Traugott (1993)). Referential metonymy is, with few exceptions, restricted to nouns.

The basis of the difference between propositional and referential metonymy is the following: In the case of propositional metonymy, the mention of state/event A will also convey state/event B, since if A is true then B is normally true too. States and events are expressed by clauses. In the case of referential metonymy, the speaker trusts that by mentioning an attribute prominent in the context at hand of the entity (or entities) that (s)he wants to refer to, his or her interlocutor will be able to identify it (or them). Entities are generally expressed by noun phrases.

The above account of the process giving rise to propositional metonymy agrees with the process Dik (1977: 283-300) terms *inductive generalisation in semantic change*¹ and Quellar (2003:215) *abduction* (in turn inspired by Peirce). In essence, it also agrees with what Stern calls *permutation*, a process exemplified by the change of meaning in *bead* (see above). The difference is that Stern does not see the process as an if-then relation but as

¹ Dik did not connect this process with metonymy. Nor did Warren, who initially used the term *implication* (1992: 51-62, 101), which was, however, later changed into *propositional metonymy* (1999:122) to conform with accepted terminology.

the fortuitous possibility to interpret a particular expression in an utterance in two ways without affecting the essential meaning of the whole. Whether one interprets *bead* as "prayer" or "ball of rosary" in *he was counting his beads*, the event in question would be equally adequately described. Whereas I agree that propositional metonymies may sometimes be unintended, my assumption is that they are often invited. The fact that they are not infrequently euphemistic (consider go to the toilet, sleep with somebody, for instance) is evidence that they can be intended.

Most linguists working with metonymy make no distinction between referential and propositional metonymy² and it should be conceded that it is not always possible to distinguish between the two. *Bead*, for instance, could have developed its present sense from referential metonymy. *He was counting his beads* could have been construed as "he was counting that which represents prayers, i.e. the balls of the rosary". Consider also *a sail approached*, which invites both the paraphrase "that which has a sail (i.e. a yacht) approached" and an if-then construal: if a sail approached, then it is likely that a yacht approached. However, in another context, for instance *a sail capsized*, I would class *sail* as a clear case of referential metonymy, since my assumption is that an interpretation of this sentence would necessarily involve that *sail* is "amended" to harmonise with the predicate verb *capsize*.

2.2. Metonymy and synecdoche

² Panther and Thornburg (1999: 335) single out referential metonymy as a special type of metonymy but include it as a subcategory of what they term propositional metonymy. Propositional metonymy in turn is contrasted to illocutionary metonymy, which is the other main category in their classification. Koch (1999:154-155) rejects the distinction between referential and propositional metonymy on two grounds: (i) It is possible to find examples of referential metonyms that are not nouns. (The examples he gives are not convincing, e.g. the shift in *sad* from "distressed" to "distressing". If somebody is distressed, this is likely to cause distress.) (ii) Koch's theory is that metonymy is a figure/ground effect. That is to say, the standard use of a term represents the figure but it also involves some ground. In metonymic interpretations the relation between figure and ground are reversed: the figure becomes backgrounded and the ground becomes foregrounded. Propositional as well as referential metonymy are frame-based figure/ground effects. Koch concedes, however, that propositional metonymy is a particular type of figure/ground effect (p156), which in fact invalidates this second ground for rejecting the distinction between propositional and referential metonymy.

As pointed out by Nerlich (ms:4), the dozen or so tropes in classical rhetoric gradually whittled down first to four (metaphor, metonymy, synecdoche, irony), then to three (metaphor, metonymy and synecdoche) and finally to two (metaphor and metonymy). As we can see, metonymy is-in the words of Bredin (1984:47)-one of the great survivors, but synecdoche "hung on" for a long time too. In fact, it may be too early to announce its demise. The term synecdoche is still in common use and is defined in encyclopædias as a trope involving "transfer of name between part and whole, species and genus". This definition is confusingly similar to that of metonymy. Sceptre for "sovereign" is a standard example of metonymy and sail for "ship" of synecdoche (both occur in Hamlyn Encyclopædic World Dictionary, for instance). So what is the difference? Many linguists see no difference and consider synecdoche as a subtype of metonymy (Lakoff and Johnson 1980:36, Croft 1993: 350, Warren 1992a: 64, Koch 1999:154, among others), which in effect means that it is superfluous. However, it has been argued in particular by Seto (1999:91-120) that we must distinguish between part-whole relations and speciesgenus relations. The former are partonomies (a sail is part of a ship), the latter are taxonomic kind-of relations (man for "human being" or token for type as in this shirt sells well). If we make this distinction, we can find a use for synecdoche distinct from metonymy. Synecdoche should then, Seto suggests, be defined as category-related transfer, whereas metonymy involves entity-related transfer. However, defined in this way, synecdoche loses much of its status as a trope and becomes a general semantic mechanism, often used to establish coherence in text, as pointed out by Nerlich (ms:22-23) and Nerlich and Clarke (1999:203-210; cf. also Warren (1992a: 25)).

The positions outlined above are positions adopted in the present study. That is, partonomy and taxonomy are very different relations and metonymy should be restricted to partonomic relations, i.e. to relations between entities, which means that part-whole synecdoches should be integrated with metonymy. However, before we leave the discussion of how to distinguish between synecdoche and metonymy, Bredin's alternative should be considered. According to Bredin (Bredin 1984), we should distinguish between structural and extrinsic relations:

Structural relations are relations within things, extrinsic relations are relations among things. --- Thus, the relations of an object to the parts of which it is composed, or the material out of which it is made, are structural relations. So, too, is the relation between two concepts whenever the extension of one includes the extension of the other-the relation, for instance, between *man* and *mortal*. (pp 53-54).

Bredin then suggests that metonymy is based on extrinsic and synecdoche on structural relations and that the distinction is connected with our ability to synthesise (make different entities combine into one whole as in metonymy) and analyse (see the constituent parts or matter of a whole as in synecdoche). The distinction is interesting and will be brought up again. However, it is not always clear-cut. For instance, is the relation between *hand* and 'applause' structural or extrinsic? Further, Bredin does not consider whether this conceptual difference is linguistically relevant. Above all, as is evident from the quotation above, Bredin does not keep partonomy and taxonomy apart, although there are good reasons to see these relations as conceptually different with clear linguistic repercussions.

2.3. Metonymy and metaphor

Metaphor and metonymy are, as we have seen, the two master tropes which have intrigued past and present scholars. It is generally accepted that they are fundamentally different, but it is also often conceded that it is not always clear whether one should classify a given expression as metaphorical or metonymic. In the following it will be suggested that provided we distinguish between propositional and referential metonymy and then restrict our attention to referential metonymy, which after all must be considered the kernel of metonymy, the nature of the differences between metaphor and metonymy will become at least somewhat clearer. It will further be suggested that the differences are consequences of the following: In metonymy³, the explicit element (the so-called source) and the implicit element (the so-called target⁴) are linked to form a referential unit, whereas in metaphor the source is annihilated by the target (cf. Dirven 1993:6, 14). That is to say, the explicit element in metaphor no longer has its conventional meaning *or* reference, whereas in metonymy the conventional meaning is intact but its referential force is lost since its actual function is that of a modifier of the implicit element which has head status. Hence my suggestion that, unlike metaphors, metonymic expressions have a syntactic structure. The role of the explicit element in metaphor is that of a holder of properties, *one or some of which* represent attributes of the target. So, whereas the attribute that the explicit element represents in metonymy is true of the target as such, the source in metaphor is only partially true of the target.

One essential and necessary component in metaphorical interpretations is *property selection*. Property selection means that the interpreter has to scan all types of knowledge of the source–encyclopædic as well as linguistic–considering also the context at hand. The selected property or properties have to be divorced from the source and applied to the target. This in turn often involves *property adjustment* since the properties of the source are normally not applicable to the target as such. Consider the conventional metaphor in *a blunt statement*. The bluntness of a statement is not the same property as the bluntness of a knife. This property adjustment is in my view an impressive human cognitive feat which engages one's imagination and has far-reaching consequences. It serves to make the evasive non-demonstrable expressible and comprehensible, as has been pointed out by a number of scholars. Property adjustment therefore does not only make metaphor a very potent expressive device, but, in the words of Lakoff and Johnson (1980), it allows us to "get a handle" on the non-physical and so

³ The reader is reminded that in the following discussion of this section *metonymy* stands for referential metonymy.

⁴ Source (or trigger) and target are terms introduced by cognitive linguists. They correspond to vehicle (=source) and tenor (=target) introduced by Richards (1965). The terminology made use of in this article is *implicit element* (=target) and *explicit element* (=source/trigger). These terms have been introduced because in metonymy the target (i.e. intended interpretation) cannot only be the implicit element.

enables the formation of abstract notions. The importance of this effect probably cannot be exaggerated. This agrees with the observation that in metaphor the direction tends to be from a physical source to a non-physical target, a tendency which is absent in metonymy.

I claimed above that metonymies are superficially non-literal. Metaphor in contrast I consider truly non-literal. This is because metaphor can be said to involve an element of hypothesis: Life is thought of *as if it were* a journey. Metonymy, on the other hand, is non-hypothetical. There is nothing hypothetical about the interpretation of *the kettle is boiling*, for instance. It amounts to a completely factual statement. This does not mean that metonymy cannot occasionally have figurative force comparable to that of metaphors. It is perhaps in cases like these that scholars have hesitated whether to classify something as metaphorical or metonymic, i.e. when effects are similar, although causes differ. Consider the italicised phrase in the extract below (from Lawrence Durrell's novel *Bitter Lemons*, p 1.)

Three thoughts belong to Venice at dawn, seen from the deck of a ship which is to carry me down through the islands to Cyprus; *a Venice* wobbling in a thousand fresh-water reflections, cool as a jelly.

I would classify *a Venice* as metonymic: it is the mirror image ("that which represents Venice") that wobbles, but I certainly agree that *a Venice wobbling in a thousand fresh-water reflections* is a verbal image as good as any metaphor.

As this example illustrates, metonymy-just as metaphor-can have rhetorical force and-just as metaphor-it can serve to extend the lexicon, but there are numerous examples of metonymic expressions which serve neither of these functions. Consider, for instance, *turn up the heat*, *I am parked over there*, *the milk tipped over*, *you have a flat tire*. These seem to serve purely mundane and ad hoc purposes in a way similar to other modifier-head constructions such as adjective-noun combinations and genitive constructions. Metaphors, on the other hand, practically always

have some expressive force because of their non-factual character. Note also that metaphors could not be function words such as *I* and *you* in the examples of metonyms just cited, since these do not have sufficient content to act as "holders of properties".

An interesting feature of metaphors is that they can form themes. Such themes can be sustained with variations through large sections of texts and can be conventionalised, forming conceptual metaphors, for instance LIFE IS A JOURNEY. I connect this theme-creative capacity with the role of the metaphorical source element as that of a holder of properties. The same source expression may be exploited to suggest different properties of the same target in different contexts. Metonyms cannot form themes in this way since the source element as such is an attribute of the target. They can, however, form patterns such as Part-Whole, Cause-Effect, Place-Object since different explicit elements may be related in the same way to the implicit element. This explains why there are clusters of metaphors connected to the same conceptual metaphor, whereas in metonymy we find semantic patterns based on the particular type of relation between the explicit and implicit elements.

Finally, one essential difference between referential metonymies and metaphors concerns their syntactic interaction with surrounding elements in the utterance. Whereas metonymic subjects need not agree as to number with their predicates as in (17), metaphors consistently display number agreement.

(17) *The French fries* is waiting.

Also in the case of anaphoric pronouns, there are differences. In metaphorical expressions, the pronoun will predictably agree with the target, whereas in the case of metonymic constructions it sometimes agrees with the explicit and sometimes with the implicit element of the expression.

(18) *Ringo* was hit in the fender when *he* was momentarily distracted by a motorcycle. (explicit antecedent) (Nunberg 1996:114)

(19) The French fries is waiting and she is getting impatient. (implicit antecedent)

These differences are consistent with the view argued for here, i.e. interpretations of metaphor involve the annihilation of the source by the target, whereas in metonymy both the explicit element and the implicit element are conveyed.

The traditional account of what distinguishes metaphor from metonymy is that the relation connecting source and target involves resemblance in the case of metaphor and contiguity in the case of metonymy. This can be connected with the theory suggested by Wundt (1900:577) that there are only two main ways in which associations can be formed: there must either be something about Y that is reminiscent of X, or X and Y must have been experienced simultaneously, or more or less so. It is also in line with the Peircean distinction between the two types of motivated signs: icons (based on similarity) and indexes (based on contiguity). In addition, it seems consistent with Jacobson's view that metaphor is paradigmatic whereas metonymy is syntagmatic in nature (Jacobson 1956:76-82). Indeed, it seems plausible that these two types of association, which are clearly different, are involved in the two main tropes and it is true that property selection seems to presuppose resemblance. However, describing the differences between metaphor and metonymy simply in terms of resemblance and contiguity does not seem sufficient. It does not, for instance, explain the frequent mundane character of metonymic constructions as compared to the expressiveness of metaphors or why the syntactic interaction of metonymic expressions with their surroundings differs from that of metaphors. It will be argued here that it is not the resemblance relation per se that distinguishes metaphor from metonymy. Consider her mother's voice in (20). It does not strike one as metaphorical in spite of the fact that it obviously involves a resemblance relation.

(20) She has her mother's voice.

In fact I would class it as metonymic. It allows the type of paraphrase characteristic of referential metonymy : "that [i.e. a voice] which is like her mother's voice". The mood is factual. In (21), the anaphoric pronoun is ambiguous. It could refer to either the mother's or the daughter's voice. As just pointed out, the possibility of taking either the explicit or the implicit element as antecedent is a characteristic restricted to metonymy.

(21) She has *her mother's voice*, although *it* is a bit deeper.

Finally, according to my approach, interpretations of metaphors depend on property selection. *Shoebox* in (22), for instance, makes no sense unless one has some notion of which attribute or attributes of a shoebox is/are applicable to the target. (20), however, is interpretable without property selection.

(22) We live in a shoebox.

The account of what distinguishes metaphor from metonymy favoured by many cognitive linguists is that in the case of metaphor, there is mapping across domains (i.e. knowledge structures) and in the case of metonymy there is mapping within the same domain or domain matrix (e.g. Lakoff and Turner 1989, Croft 1993 and Kövecses and Radden 1998). This account does not appear radically different from the traditional explanation. Claiming that metaphor involves mappings across domains brings to mind the traditional view that metaphor involves seeing similarity in dissimilarity and claiming that metonymy involves mapping within the same domain does seem synonymous with the claim that metonymy is based on contiguity. My criticism of this approach is therefore the same as that of the traditional approach. Although in the main not incorrect, it is not sufficiently precise to explain differences between the two master tropes.

In this connection, it should be pointed out that some linguists have questioned the methodological soundness of basing explanations on the assumption that we can determine domain borders. Barcelona (2000:8-9) points out that if we accept Langacker's characterisation of domains as that which includes the entrenched knowledge a speaker has about an area of experience, then "(t)his will vary in breadth from speaker to speaker and in many cases has no precise boundaries". Warren (1999b: 226)⁵, Feyaerts (2000: 63)⁶ and Riemer (2002:384)⁷ make similar claims.

Having finally isolated the type of construction that will be termed referential metonymy, we can now proceed to a description of its syntactic and semantic characteristics, which will be undertaken in that order.

3. Part II: Describing referential metonymy

3.1 Syntactic characteristics

Referential metonyms are nominals and can function syntactically as nominals, i.e. as subjects, objects, predicative and prepositional complements :

- (23) *The milk* tipped over. (Radden and Kövecses 1999:41)
- (24) She married money. (Warren 1995:140)
- (25) This is *Eve*. (pointing to a person in a photograph) (Warren 1998:305)
- (26) A lot of Americans protested *during Vietnam*. (Frisson and Pickering 1999:1383)

They can also be modifiers:

- (27) *Table-top* sale "sale of <u>that which is on table tops</u>" (Nerlich et al 1999: 374)
- (28) *Topless* waitress "waitress who has <u>that [i.e. dress] which is without a</u> <u>top</u>"

⁵ Warren (1999b:227-228): " ...since domains do not seem to be static and invariant constructions of our experience but adaptable to context, surely it is the interpretation we favour that induces the formation of domains and not the domains that basically induce interpretations."

⁶ Feyaerts (2000: 63): "Methodologically speaking, it appears that the notion of domain is too malleable to serve as an adequate criterion in the discussion about the distinction between metaphor and metonymy."

⁷ Riemer (2002:384): " ...it is unwise to use identity versus difference between the semantic domains involved as a basis for the differentiation of metaphor and metonymy: the determination of the two should not be based on considerations of semantic domain in the absence of independent means of delimiting these."

(29) *Red* pen "pen that has <u>that [i.e. ink] which is red</u>" (Langacker 1991:192)

In (27) and (28) it is the dissonance between the (explicit) modifier and the (explicit) head that causes an implicit element to be part of the interpretation. In (29), the metonymic extension resolves an ambiguity.

As with other nominals, they can have predicative functions as pointed out by Ruiz de Mendoza (2000:114 and 2002:494) and as demonstrated by (30) through (34). (In this respect the term *referential metonymy* is admittedly somewhat of a misnomer.)

- (30) She's just *a pretty face*. (Lakoff and Johnson 1980:37)
- (31) What a *beauty!* (Nerlich et al 1999: 382)
- (32) She is my pride and joy. (Seto 1999:111)
- (33) Our new boss is good news. (Warren 1992a:163)
- (34) You *funny-face*! (endearment) (Warren 1992a:71)

If the metonymic expression contains a modifier, the adjective may modify the explicit element as in:

- (35) *red lamp* [brothel] "the place where there is a red lamp" (Warren 1992b:150)
- (36) We don't hire *longhairs*. "people with long hair" (Lakoff and Johnson 1980: 38)
- (37) That is the house *the yellow Volvo* lives in. "the one who has the yellow Volvo"
- (38) He is *a fine bass*. "person with a fine bass" (Ruiz de Mendoza 2000:114)
- (39) *Many big names* have turned up. [many famous people] "many people with big names" (Radden and Kövecses 1999:41)

It may also modify the implicit head:

- (40) I tried to find a vacant meter. "vacant place at a meter" (Seto 1999:104)
- (41) The book got *good press*. [good reviews]"that which was in the press [i.e. reviews] was good" (Warren 1995:140)
- (42) These are *foolish words* "that which words convey [i.e. their content] is foolish" (Fass 1997:98)
- (43) She has *a good head* [intelligence] "that which is part of/in a head is good" (Barcelona 2000: 11)
- (44) They are taking on *new hands* down at the factory. [manual workers]"those who have hands (that can produce manual work) are new"(Gibbs 1999:63)
- (45) soothe the savage *breast* [strong feelings] "that which is in the breast [feelings] is savage"

Also when there is a prepositional modifier, the head of the modifier can be either the explicit or implicit element. In (46) it is the person that is "for sale", not the dress, whereas in (47) it is the car owner that has a cigar, not the car.

- (46) *dress for sale* [prostitute] (Warren 1992b:150)
- (47) The man with the cigar is parked out back. (Nunberg 1996:112)

Some cases can be characterised as mergers in the sense that the interpretation would be the same whether the explicit or the implicit element is the head. Consider:

- (48) *The whole village* rejoiced. "people in the whole village" or "all people in the village" (Seto 1999: 103)
- (49) The Milford Track is *the finest walk* in the world. "the finest place where one can walk" or "the place where the finest walks can be enjoyed" (Seto 1999:109)

These examples support the view that two elements are mentally present and contribute to the interpretation of referential metonymy. They also suggest that an adjective is syntactically free to be attached to either of these depending on what agrees with world knowledge and context. Finally, consider also (50):

(50) You have eaten *your whole lunch box*. "all the things in your box" (Nerlich et al 1999: 375)

In (50) the form of the adjective agrees with the explicit element although notionally it modifies the implicit element. This example can be said to reflect what will be termed *double exposure*. Double exposure is my metaphor for the effect that is brought about by the fact that the explicit element takes the syntactic position of a nominal head, but turns into a modifier when interpreted, simultaneously suggesting an implicit head. These functions attached to one item are not clearly kept apart. This may explain why paraphrases in which the functions are disentangled do not seem quite equivalent. The effect of double exposure is lost.

The analogy between metonymy and double exposure is similar to the analogy of metonymy as a figure/ground constellation suggested by Koch (1999:151). That is, for instance, we can perceive a figure either as a white cross on black background or as a black cross on white background. There is, however, an important difference between the two analogies in that in the case of double exposure, the explicit and implicit elements are perceived simultaneously, although the latter is shadowy.

It was mentioned above (p15) that anaphoric pronouns of metonymic constructions sometimes agree with the explicit element as in (18/51) and sometimes with the implicit element as in (19/52).

- (18/51) *Ringo* was hit in the fender when *he* was momentarily distracted by a motorcycle. (explicit antecedent) (Nunberg 1996:114)
- (19/52) The French fries is waiting and (s)he is getting upset. (implicit antecedent)

The explanation that first springs to mind is that either of the two elementsthe explicit or the implicit-can act as antecedents, and world knowledge and context determine which. French fries cannot be upset but customers can, hence the antecedent is the implicit element in (52). Similarly cars cannot be distracted but Ringo could, hence the antecedent is the explicit element in (51).

However, this does not seem to hold. Consider:

(53) *Ringo* was hit in the fender when **it* turned left.

The implicit element does not appear to be available as antecedent in (53), although context invites such an interpretation.

A number of solutions to the problem of anaphora of metonymic expressions have been suggested, more precisely by Stallard (1993), Nunberg (1996), Ruiz de Mendoza (2004) and Warren (2004). These suggestions reflect different theoretical approaches to metonymy and will therefore be considered in some detail.

Ruiz de Mendoza (2004) bases his explanation on relationships between domains. There is, he claims, a matrix-to-subdomain relationship between the explicit and implicit elements in metonymic expressions and normally only the matrix domain will be available for "antecedentship"⁸. So, if the implicit element is a subdomain of the explicit element, the explicit element will be the antecedent, but if it is a matrix domain of the explicit element, it will be the antecedent.

implicit element
subdomain
matrix domain -> antecedent

explicit element

matrix domain -> antecedent subdomain

⁸ He also considers so-called double metonyms (see p 64) as antecedents and suggests that in this case the choice of pronoun depends on what is compatible with the predicate it occurs with, but if the predicate does not bias the choice, then the matrix domain of the embedded metonym selects the pronoun.

- (54) Nixon bombed Hanoi. He killed many. ("bombers" subdomain of Nixon)
- (55) *The French fries* is waiting. *She* is upset. ("customer" matrix domain of *fries*)

This suggestion rests on the possibility of determining what domain includes what other domain. There seem to be no other criteria but intuition for this. Intuition is an important tool in linguistics but only provided it has intersubjective support. It is debatable whether there is such support in the case of domain boundaries⁹. Compare (56) and (57). In (56) the water is the subdomain of the kettle, which, as predicted by Ruiz de Mendoza, is the antecedent since "container is over content" (2004: 8). However, in (57), in which the implicit element must represent some liquid (most likely water) since only liquids boil, water is in the subdomain of potatoes, which seems strange. Furthermore, (58) is inconsistent with the "container over content" rule since *it* is allowed to take "content" as its antecedent.

- (56) The kettle is boiling and *it* is hot. ("water" is subdomain of *kettle*)
- (57) *The potatoes* are boiling and *they* will be ready soon. (?"water" is subdomain of *potatoes*)
- (58) *The milk* tipped and *it* stained the tablecloth.

Also one wonders how Ruiz de Mendoza would handle the fact that in (59) *car* would be subdomain of *Ringo*, but in (60) it would be the matrix domain of *Ringo*.

- (59) *Ringo* was hit in the fender when *he* [Ringo] was distracted. (car is subdomain of Ringo)
- (60) *Ringo* was hit in the fender when *he* [his car] was parked at the university. (*car* is matrix domain of *Ringo*)

Nunberg (1996) suggests that we must distinguish between deferred reference (reference transfer) and predicate transfer. Deferred reference is

⁹ See also p 19 for objections raised against basing explanations on domain structure.

exemplified by (61) uttered by the owner of a car when handing a car park attendant a car key. In this case nominal transfer is possible. Predicate transfer is exemplified in (62). The character of the predicate transfer is approximately as indicated within brackets.

- (61) This is parked out back. (Nunberg 1996:110)(*that which belongs to*) this is parked out back. (deferred reference)
- (62) I am parked out back. (Nunberg 1996:110)I (*have the property of having a car that is*) parked out back. (predicate transfer)

In the case of nominal transfer, the antecedent of an anaphoric element will be the implicit element:

(63) This is parked out back and *it* won't start. (nominal transfer: implicit antecedent)

In the case of predicate transfer, the antecedent of an anaphoric element has to be the explicit element:

(64) *The man with the cigar* is parked out back and *he* might be an hour. (extended predicate: explicit antecedent)

The implicit antecedent is not possible in this case as shown by (65).

(65) The man with the cigar is parked out back and *it might not start.

Exactly how and why the mental processing involved in predicate transfer is accomplished is not made clear by Nunberg. However, it must be taken to involve the following: The conventional meaning of the predicate is first accessed since it is the incompatibility of the predicate with some nominal element of the utterance that triggers the extension of this noun, an extension which is then somehow incorporated as part of the predicate. This seems somewhat implausible. In this respect Stallard's suggestion is easier to accept, which, if I understand him correctly, is that in some instances of metonymy the argument structure of the verb is shifted so that it accommodates the explicit element as an argument¹⁰.

Another weakness of Nunberg's explanation is that it is not consistent with the fact that there are numerous examples of nouns with conventionalised metonymic senses (*tea* in the sense of a meal, *silver* meaning cutlery, *ecstasy* referring to a drug, *box* referring to a container, *date* in the sense of appointment or person encountered at an appointment, etc., etc.) but few, if any, examples of verbs having conventionalised metonymic senses of the type illustrated above¹¹.

What is interesting about Nunberg's and Stallard's accounts, however, is their intuition that in some utterances containing metonyms the predicate is about the explicit rather than the implicit element and that the choice of anaphoric pronoun is connected to this. Consider (54/66) again and (67), which may demonstrate this more clearly than Nunberg's examples cited above.

(54/66)	Nixon bombed Hanoi. (He killed many.)
(67)	<i>This pot</i> has boiled dry. (<i>It</i> is destroyed.)

It seems clear that (66) and (67) are assertions about Nixon and a particular pot respectively rather than about pilots or some liquid in the pot.

My explanation accords with Nunberg's and Stallard's intuition concerning the role of the predicate vis-à-vis the explicit noun, but it is seen as a double exposure phenomenon. Compare (68) to (69):

(68) The laces of the boots were neatly tied and they [the laces] were clean.

¹⁰ For a more in-depth review and comparison of Stallard's and Nunberg's approaches, the reader is referred to Fass (1997: 83-91).

¹¹ See, however, p 46 for a metonymic construction, originally referential, but taken to have changed into a predicational metonymy. I argue, however, that this change is not direct but effected via propositional metonymy.

(69) *The boots* [their laces] were neatly tied and *they* [the boots] were clean.

These examples seem to indicate that that which we perceive to be the topic of an utterance will be the antecedent of an anaphoric pronoun **and** that the explicit member of a metonymic expression, in spite of the fact that it is notionally a modifier, can be taken to be the topic, because it is in topic position. However, a metonymic subject can assert its topic status only if the predicate can be thought of as being an appropriate comment about the topic. Let us try this out:

- (54/70) Nixon bombed Hanoi. (He killed many.)What can I tell you about Nixon? Well, he had people bomb Hanoi.
- (19/71) The French fries is waiting. (She is upset.)What can I tell you about the French fries? ??Well, the customer who ordered them is waiting.
- (56/72) The kettle is boiling (and it is hot.)What can I tell you about the kettle? Well, the water in it is boiling just now.
- (57/73) The potatoes are boiling (and they will be ready soon.)What can I tell you about the potatoes? Well, the water they are in is boiling.

As we can see, this is in line with Nunberg's and Stallard's intuition that something is asserted about the explicit part of the subject in some metonymies but not in all. The difference between Nunberg's and my explanation is that the implicit element is always part of the nominal subject in my account, whereas it is sometimes part of the predicate in Nunberg's account. One consequence of this difference is that Nunberg would maintain that in (69/74) *boots* and the anaphoric pronoun are co-referential, whereas I would maintain that they are not, but so to speak "co-topical".

(69/74) *The boots* [their laces] were neatly tied and *they* [the boots] were clean.

Similarly, in (75) Nunberg would maintain that *Cædmon* refers to the poet when acting as the subject of *was the first Anglo-Saxon poet* and of *fills only a couple of pages*, whereas I maintain that it changes reference. It refers to the poet in the former case and to Cædmon's poetry in the latter.

(75) *Cædmon*, who was the first Anglo-Saxon poet, fills only a couple of pages in this book of poetry. (Nunberg 1979: ex. 29 p 196)

In other words, my account stipulates that change of reference is permissible but change of topic is not. This would allow (59/76) in which the topic is kept but referents differ. It would also allow (60/77) in which the topic and the referents are kept, but it would not allow (53/78) in which the referents were kept but the topic changed.

- (59/76) *Ringo* [his car] was hit in the fender when *he* [Ringo] was distracted.
- (60/77) *Ringo* [his car] was hit in the fender when *he* [his car] was parked at the university.
- (53/78) *Ringo* [his car] was hit in the fender when **it* [his car] was parked at the university.

This approach also predicts the use of *himself* in (79) and *him* in (80) where the pronouns receive a metonymic reading.

- (79) Norman Mailer [the writer] likes to read himself/*itself [his writing] before going to sleep. (Fass 1997:388)
- (80) Norman Mailer is my favourite writer. I have read him/*it since I was a teenager.

Possibly the difference between Nunberg and my account emanates from the fact that I see the implicit element as a complement of the explicit noun and not as a replacement, whereas Nunberg seems to adhere to the traditional view that metonymies involve substitution, i.e. the implicit content replaces the explicit content. There may also be a difference as to attitude towards compositionality. Nunberg seems to want the semantic content of a conveyed proposition to be neatly distributed among the elements of an utterance, whereas I do not believe that such a neat distribution is necessary.

My approach implies that metonymy is a focussing construction. That is, referential metonymic constructions occur because the speaker is focussing on an attribute of some entity causing the entity to be implicit although it is mentally present and conveyed. However, metonymy is simultaneously frequently a topicalisation manoeuvre in that non-referring items (i.e. 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. As an illustration, consider again abbreviated versions of (68) and (69):

- (68/81) The laces of the boots were neatly tied.
- (69/82) The boots were neatly tied.

Provided (69/82) is metonymically interpreted, it expresses the same proposition as (68/81), but its focus is different. In (68/81) the focus is on the laces, whereas in (69/82) it is on the boots, bringing about the implication supported by its topic status, that, because the laces were neatly tied, the boots as a whole were neat. In other words, the fact that the laces were neatly tied becomes an assertion applicable also to the boots. This is an example of double exposure in which the implicit element is particularly shadowy.

Also when the antecedent is not a subject but a grammatical object, it is the entity affected by the action of the predicate that is the natural antecedent. Compare (83) and (84):

- (83) The grateful old lady thanked *the store* [the staff]¹². *They* [the staff] were pleasantly surprised that she did.
- (84) The grateful old lady thanked *the store* [the staff]. **It* [the store] is next to the petrol station.

In some cases the predicate is such that it can be taken to affect the implicit or the explicit entity, in which case either can serve as antecedent. Compare (85) and (86):

- (85) She rearranged *the bookshelf* ("that which is on <u>the shelf</u>")¹³. *It* [the bookshelf] is now tidy.
- (86) She rearranged *the bookshelf* ("that which is on the shelf"). *It* [the books] is now in alphabetical order.

There appears to be a difference between a metonymic subject and a metonymic object as antecedents in that in the former case, the pronoun agrees as to form (gender) with the subject if this is perceived to be topic since switching topic is avoided, whereas in the latter case the requirement of formal agreement can be relaxed. Compare (87) and (88):

(87) *Shakespeare* is required reading, but I like *him/*it*¹⁴.
(88) Have you read *Shakespeare*? Did you like *him/it*?¹⁵

Note that in (88), *him* and *it* have the same notional antecedent, i.e. *him* does not refer to Shakespeare the person. This is because *read* singles out Shakespeare's work as the affected entity.

Finally, it should be pointed out that if the metonym is fully lexicalised, the explicit element is not available as antecedent. In (89) *it* cannot refer to the tail and in (90) *it* cannot refer to the back of the book.

¹² The example is from Frisson and Pickering (1999:1382-1383).

¹³ The example is from Seto (1999:103).

¹⁴ It is of course possible, but the antecedent would be "that Shakespeare is required reading".

¹⁵ There is a difference between *him* and *it* in that *it* suggests a particular piece by Shakespeare, whereas *him* suggests his work in general. *It* could also be interpreted as having a clausal antecedent.

(89) There is the bird that is a *wagtail*. *It is forked.

(90) I bought a *paperback*. *It is dirty, but the covers are clean.

This demonstrates that in lexicalised metonyms the metonymic interpretation is stored "ready-made", i.e. the originally contextually induced content has become a permanent part of the expression. This explains why lexicalised metonyms, unlike spontaneous metonyms, do not necessarily require context to be perceived as metonymic.

Above it has been argued that there is a connection between choice of anaphoric pronoun and which entity the predicate is an assertion of. If the predicate can be taken to be about the explicit element, this element becomes the preferred antecedent, otherwise the implicit element can act as antecedent. This approach has to explain how the predicate can be literally true of the implicit element and at the same time be perceived to assert something about the explicit noun with which it is often truth conditionally incompatible (pots cannot boil, for instance). Nunberg solves this by claiming that in these cases the predicate does not express its conventional meaning. Stallard suggests that the argument structure of the verb is changed and the present author maintains that, because of its syntactic position, the explicit element may be perceived to be the topic or affected object of the utterance in spite of its non-referring status provided the proposition expressed can be taken to (indirectly) apply to it. In other words, what is suggested is that, aided by syntax, speakers can promote notional modifiers to affected entities and also that, although the implicit element is always backgrounded, it may be more or less so. It is less so when it can retain its antecedent status which logically is its right, and it is more so when it relinquishes this status to the explicit element.

3. 2. Notional characteristics

3.2.1. Reference scope of the explicit element

Having considered the syntactic behaviour of metonymies it is time to turn to notional characteristics. These are after all metonymy's main claim to fame. We will begin by discussing the function of the explicit element. Above (p9), it was suggested that it is a necessary complement of the implicit head, implying that it has restrictive functions. This is borne out by the examples in my collection with a few interesting exceptions, which will be considered presently. As a rule, however, the explicit element specifies either some particular entity or entities or a certain kind of entity. Examples of the former, which will be termed specifics, include:

- (14/91) *Table 13* is complaining. [the one(s) at Table 13]. (Dirven 1999:275)
- (16/92) *The bathtub* is running over. [the water in the tub] (Warren 1999a:127)
- (93) "*Cat*" has three letters. [that which is (the word) *cat*] (Croft 2002:182)
- (94) *I'm* the ham sandwich; *the quiche* is my friend. [the person who will have the ham sandwich/the quiche] (Fass 1997: 388)
- (95) *Bill* is in the Guinness book of records. [Bill's name ?and achievement] (Radden and Kövecses 1999:41)
- (96) Is it *me* or you in the printer? [my or your document] (Warren 1999a:127)

As is natural, specifics are typically nonce utterances. However, they may attain proper name status as shown by *Little Red Riding Hood*, *Battle* (the place name), and the nickname in (97):

(97) Where is *the Brain* now that we need him? (Papafragou 2003: 181)

Several of my examples of specifics can in fact be said to be unspecified specifics, i.e. the explicit element does not have full specifying force. Consider (98), which contains an unspecified specific as well as a specified specific.

(98) A *Mercedes* rear-ended *me*. [the driver of a Mercedes, whoever (s)he was] and [my car] (Lakoff and Johnson 1980:38)

(99) through (102) contain some other examples of probably unspecified specifics.

- (83/99) The grateful old lady thanked *the store*. [those in the store, whoever they were] (Frisson and Pickering 1999:1382-1383)
- (100) Please, answer *the door*. [the one(s) at the door, whoever (s)he/they may be] (Warren 1995:142)
- (101) She rearranged *the bookshelf*. [those things on the bookshelf, whatever they were] (Seto 1999:103)
- (102) *Washington* has started negotiations with *Moscow*. [those in Washington/Moscow, whoever they are] (Gibbs 1999:64).

These examples demonstrate one of the virtues of metonymic expressions which Langacker (1993:30) describes as follows: "A well-chosen metonymic expression lets us mention one entity that is salient and easily coded, and thereby evokes–essentially automatically–a target that is either of lesser interest or *harder to name*"¹⁶. That is to say, although we may lack precise knowledge of the entities involved, we may nevertheless be as specific as the situation at hand requires.

Naturally enough, metonyms involving unspecified specifics do not easily lexicalise. It is unlikely that *door* would take on the sense "caller at door", for instance. Nevertheless, it is not uncommon for them to form part of fixed verbal phrases such as those listed in (103).

(103) answer the door/the phone lay the table watch TV pay the bills place your bets write a cheque

¹⁶ The italics are mine.

In these phrases the action in which the referents of the metonyms are involved is a kind of action, which probably explains the conventionalisation of the phrases.

When the explicit element suggests a class of entities, the metonymic expression serves as a category name. Consider (104):

(104) I love being *a lunch box* [one of those who bring lunch boxes] (Nerlich et al 1999:370)

(104) was uttered by Matthew, close to 5 years old, when he was allowed to replace school lunches, which he did not like, with a lunch box. Evidently to Matthew there were two categories: those who have school lunches and those who bring lunch boxes, and he was pleased to eventually be allowed to be "a lunch box".

Other examples in which the explicit element has classifying force include:

- (105) We don't hire *longhairs*. [the kind of people with long hair] (Lakoff and Johnson 1980:38)
- (106) *The best brains* in Britain were set to solve the problem. [those with the best brains] (Warren 1995:140)
- (107) I'll have a *Löwenbräu*. [a glass/bottle of the kind of beer that Löwenbräu produces] (Lakoff and Johnson 1980:38)
- (108) I smell *skunk*. [the kind of smell that skunks have] (Radden and Kövecses 1999:32)

As can be expected, such category names can lexicalise:

- (109) There are 20,000 uniforms in this city. [uniformed policemen] (Frisson and Pickering 1999:1368)
- (110) Give him *a hand*. [help] or [applause] (Warren 1995:139)
- (111) There is a *wire* for you. [telegram]
- (112) He was wearing glasses. [spectacles] (Seto 1999:110)
- (113) I have some *oils* by a famous painter. [oil paintings] (Seto 1999:110)

A good proportion of the lexicalised metonyms are so-called Bahuvrihi compounds: *hunchback, paleface, potbelly, highbrow, hardhat, paperback, wagtail, rubberneck* etc.

Some may lose their motivation and become dead metonyms. For instance:

(114) cash originally 'moneybox' (Nerlich and Clarke 2001:265) red tape originally "that which has red tape round it", i.e. [official documents] (Warren 1995:139) box originally "that which is made of box wood" (Warren 1995:144) bar (='pub') "that which has a bar (counter)" (Koch 1999: 140) pupil (part of eye) "that which reflects a pupil (small person)" letter "that which consists of letters", originally 'anything written'

It is not always possible to determine which function the explicit element has. In (115), for instance, "the kind of brush stroke characteristic of Turner" may be a possible interpretation, but also simply "the brush stroke that Turner made". Similarly, (11/116) may suggest some particular action by the person in question or the kind of behaviour that (s)he is generally capable of.

- (115) *the brush* by Turner [brush stroke] (Seto 1999:111)
- (11/116) I will put *you* on the governor's report. [your behaviour] (Pauwels 1999:269)

Context may clarify, but vagueness as to specifics or kind may also be a consequence of the fact that the two are not always distinct.

The examples of this section have so far demonstrated that the metonymic construction—in keeping with its nominal character—serves as a naming device. It can be used for nonce denotations specifying some particular entity or entities or it can be used to suggest "a kind", in which case the metonymy may be conventionalised. However, as already mentioned, there
are some few examples of metonyms which seem to have a non-restrictive explicit element, for instance (117):

(117) Let's see *how many mouths* there are to feed. (Nerlich et al 1999: 375)

The explicit element represents an attribute that is taken to suggest some entity or entities "essentially automatically" (to quote Langacker). The kind of attribute chosen therefore reveals what property of the entity in question the speaker considers quintessential in a particular context. The choice of *mouth* is in line with this requirement of the explicit element, but it has no specifying force (normally at least one cannot feed anything that does not have a mouth). This suggests that this metonym was coined for no other reason than a rhetorical one and we will return to this example in the next section. First, however, some more examples merit attention, i.e. (118)–(121), in which the explicit element is judged to lack specifying force.

- (118) In the deep darkness soon after midnight, *a hand* gently knocked against Adam's bedroom window.¹⁷
- (119) There is *a big nose* waiting for us.
- (120) There are *an awful lot of faces* out there in the audience. (Lakoff and Johnson 1980:37)
- (121) *Twenty sailor hats* were marching down the gang plank. (Nerlich et al 1999:382)

(119) was uttered by a dog owner when cautiously opening the front door of his house, creating a small gap in which an enthusiastic dog's nose appeared. In this example, as in (118), the metonymic expression can hardly be taken to specify a particular entity or kind of entity. Instead it is used to emphasise that the existence of something is only partially perceived. In (118), this gives the impression of a disembodied body part and can be seen as creating a rhetorical effect. In (120) and (121) the metonyms have a similar effect, conveying a visual impression.

¹⁷ The example occurs in Viberg (1999:103), although not as an example of metonymy. It was originally in Swedish.

The importance of (118)–(121) is that they demonstrate that, although the explicit element as a rule is restrictive, this is not an essential requirement. They also exemplify metonymic rhetoricity, which is the topic of the next section.

3.2.2. Metonymy as a rhetorical device

The rhetorical force of metonyms naturally depends mainly on the nature of the explicit attribute. It is not possible to give directives specifying what this nature should be¹⁸. It is possible, however, to describe effects of well chosen attributes and it is possible to point out certain devices used to enhance rhetoricity in metonymy. These topics will be pursued in the present section.

When the chosen attribute has some figurative force, there is a double exposure effect which makes metonymic figurativeness similar to that of metaphors. It was suggested that the metonym in (117) has some rhetorical force because of its unwarranted indirect reference, unwarranted in the sense that it has no denotational rationale. Much of its expressive impact is, however, probably also induced by the image flitting by of a number of people with big gaping mouths waiting to be fed. The combination of the mundane proposition of feeding people with this image can be seen as a kind of double exposure effect, i.e. a scenario, often of concrete nature, translates into a proposition usually of a more general kind. We find a better example of this in *the hand that rocks the cradle will rule the land*, which is described by Warren (2002:127) in the following way:

Consider *the <u>hand</u>..... 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

¹⁸ Dirven (1993 and 2002) suggests that the greater the conceptual distance between explicit and implicit elements, the more figurative the expression will be. *Crown* for "monarch", for instance, has figurative force since we have a concrete symbol for a more abstract reality (1993:18). Many of the examples in the present section support this suggestion, which may be generally true. There are, however, no hard and fast rules for determining conceptual distance and there are examples of mundane metonyms which involve concrete source but abstract target.

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.

We find yet another example of double exposure brought about by the figurative force of the attributes we find in *the pen is mightier than 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" (Warren 2002:127). This example also illustrates the effect of parallelism (two instruments are chosen as attributes), which–judging by examples in my collection–seems to be a natural device to enhance rhetoricity in metonymy:

- (122) They prefer *the bullet* to *the ballot box*. (Gibbs 1999:63)
- (123) You can't read the history of the United States, my friends, without learning the great story of the thousands of unnamed women. And if it's ever told straight, you'll know it's *the sunbonnet* and not *the sombrero* that has settled the country. (Corbett, cited in Papafragou 1996:188)
- (124) *The palace* should not scorn *the cottage*. (Fass (1997:32)
- (125) *Capital* has learnt to sit down to *labour*. (Papafragou 1996:188)

In the extract below, first quoted by Gibbs (*The Poetics of Mind*, p 334), the parallelism is extended:

We thought we were onto *a steam iron* yesterday, but we were too late. *Steam irons* never have any trouble finding roommates. She could pick her own pad and not even have to share a bathroom. *Stereos* are a dime a dozen. Everyone's got their own systems. We've just had a streak of bad luck. First, *our Mr Coffee* flunked out of school and went back home. When we replaced her, *our electric*

*typewriter*¹⁹ got married and split, and we got stuck with a girl who said she was getting a leather coat, but she just said that to get the room.

(From a newspaper column by Erma Bombeck)

Naturally the expressivity of these metonyms also depends on the character of the attributes which reveal the unashamedly mercenary view of students in judging merits of roommates. There are in fact two kinds of attributes that tend to be used to convey subjective attitudes and which therefore have some expressive force. They are (i) those that characterise people as to possessions as in the examples just given or, above all, as to some anatomical feature exemplified by the frequent metonymic use of words for private parts and also by phrases such as *she is just a pretty face* and (ii) those that characterise entities as to impact, for example *heartthrob* [a sexually attractive person], *guts-ache* [person that is a nuisance], *yum-yum* [something sweet and nice], *yuck* [disgusting entity], *heartburn* [jealousy].

Finally, there are examples in which rhetorical force is achieved by different types of combinations of readings. Consider first (126):

(126) A watched *pot* never boils. (Fass 1997:70)

I argue that *pot* here has a non-metonymic as well as a metonymic reading (cf. the discussion of example (75)). When combined with *watched*, it is non-metonymic, when combined with *boil*, it is metonymic (pots cannot boil). Thus (126) constitutes a condensed and elegant way of expressing a proposition which, without a metonymic construction, would have to be worded along the lines: "the liquid in a pot that is watched does not boil". The fact that (126) also invites a metaphorical reading–i.e.:"something anxiously awaited seems to take a very long time to happen"–of course enhances its rhetorical character, but even without such a reading, (126) demonstrates that the metonymic construction makes possible elegant

¹⁹ Note the double exposure effect of *our* in *our Mr Coffee* and *our electric typewriter*. *Our* may determine the implicit and the explicit element.

compression of expression. Next, consider (127), originally a headline taken from a financial paper.

(127) Coke Flows Past Forecast: Soft drink company posts gains.(Coulson and Todd 2003:54)

A possible analysis of (127) is the following: the non-metonymic reading of *Coke* (the drink) sanctions the use of the predicate *Flows Past Forecast*, which is a metaphor for "exceeds expectation". The overall context on the other hand suggests a metonymic reading of *Coke*, i.e. [the company that produces Coke]. However, unlike (75) and (126), (127) qualifies as a pun. This is probably because in (75) and (126), the non-metonymic and metonymic readings are sequential depending on which predicate the nouns are combined with, whereas in (127) the two readings are parallel, or at least intended to be so.

Finally, (127) can serve to illustrate another factor frequently contributing to rhetoricity in metonymy, i.e. the co-occurrence of a metonymic noun with a metaphorical predicate also exemplified by the phrases in (128):

(128) catch *someone's ear*, bite *one's tongue* off, shoot *one's mouth* off. (Goossens 2002:363-365)

Having acknowledged the status of metonymy as a master trope, our next concern will be the semantic relation between explicit and implicit elements, an aspect of metonymy which is, I will argue, of great importance in semantic theory.

3.2.3. Semantic patterns

Many, if not indeed most, students of metonymy have observed recurrent types of relations between the explicit and implicit elements forming patterns such as PART FOR WHOLE, WHOLE FOR PART, GARMENT FOR PERSON, CONTAINER FOR CONTENTS, PLACE FOR INSTITUTION, PRODUCER FOR PRODUCT, INSTRUMENT FOR RESULT, MATTER FOR ARTEFACT²⁰, etc. In the more recent cognitive approaches, it is also accepted that there are metonymic semantic patterns. As has already been pointed out, these are not simply a matter of language but considered to be conceptual. Linguistic examples of metonymy are instances of such conceptual metonymies and, according to Lakoff and Johnson (1980), they influence our thoughts and actions. Since there appears to be no finite list of conceptual metonymies (in Panther and Thornburg (2003: 271-273) alone, there are 75 different conceptual metonymies listed in the index), they are probably not intended as part of a classification.

The traditional typologies offered in the literature vary as to number of categories and as to degree of generality. Some are very general (PART FOR WHOLE, e.g.); others are quite specific (GARMENT FOR PERSON, e.g.). The patterns described in this section are all very general, but there are within these general categories clusters of metonyms which form more specific patterns. Some of these more specific patterns may simply be a reflection of the fact that certain types of attributes are natural classifiers or specifiers of certain types of entities. GARMENT FOR PERSON is a case in point. Garments are salient attributes of people, which is reflected in the fact that they may be used for identifying purposes, and so it is natural that there are metonyms such as *uniforms* [uniformed police], *fatigues* [common soldiers], *suits* [professionals], *hardhats* [construction workers], etc. Such metonyms would probably be produced spontaneously without any specific linguistic model as long as garments are salient attributes of people. However, there are also patterns of the more specific kind which seem to serve as models and which could be described as generalised constructions (or parts of constructions) with variable productive force. The assumption involved in assigning some patterns the status of generalised construction is the following: when metonymic expressions in certain contexts serve some communicative need particularly well, a kind of schematisation process can be initiated. The result is a low-level but nevertheless generalised and productive pattern with its own specifications

²⁰ See Nerlich et al (1999:363-364) and Lipka (1988:360-361) for surveys of patterns suggested by different scholars.

and restrictions, a pattern which represents the idiomatic way within a language community to express certain notions. An example is the phrase *to do a Napoleon/Chamberlain/Houdini*, the interpretation of which involves metonymic readings (see p 64). The distinction between these two types of specific patterns is admittedly hazy and impressionistic. The distinction between the general and the specific patterns on the other hand is naturally much more clear-cut. Specific patterns may be language-specific and may fluctuate: new ones may develop and others may fall into disuse. General patterns are stable and probably universal. They involve causation, location in time and space, possession, composition and representation. The presentation of the general patterns will be in the order just given. There is no claim that all of the more specific patterns are described. The section will be followed by a discussion of the theoretical status of the general patterns.

Causation: Who are you wearing?

If there is a causal link between the explicit and implicit elements in a metonym, it will be referred to as the CAUSER–EFFECT pattern. The explicit element may assume the role of CAUSER, in which case the implicit element takes on the role of EFFECT or vice versa. See examples listed below.

EXPLICIT ELEMENT IS CAUSER AND IMPLICIT ELEMENT IS EFFECT

a rare virus "that which a virus causes" [viral disease] (Nunberg 1996:119)

in drink "that which drinks produce" [drunkenness]

Did you hear *the whistle?* "that which whistles produce" [whistle blow] (Radden and Kövecses 1999:40)

to live by *the pen* "that which the pen produces" [writing] (Seto 1999:111)

give somebody *a ring* "that which a ring causes" [phone call]

EXPLICIT ELEMENT IS **EFFECT** AND IMPLICIT ELEMENT IS **CAUSER** scar "that which produces scars" [heroin] (Warren 1992b:149) living "that which produces a living" [occupation] safety "that which produces safety" [condom] (Warren 1992a:73)²¹ Charter 77 "those who produced Charter 77" [the group behind charter 77] (Warren 1992a:72) Death fell in showers. "that which produces death" [bullets] (Seto 1999:111)

The paraphrases "that which produce(s) X" and "that which X produce(s)" serve the heuristic purpose of determining the type of relation between the elements. It is not suggested that they represent the speaker's or interpreter's verbalisations. The same applies to all the paraphrases within quotation marks. The interpretation of the metonyms is given within square brackets.

Both CAUSER and EFFECT are very general labels. The CAUSER can be an instrument as in (129), an agent as in (130), a source as in (131) or indeed any event or process that has a particular effect as exemplified by (132) and (133). The general character of EFFECT is similarly evident from the examples.

²¹ Scar [heroin] and safety [condom] are slang expressions. Scar [heroin] was found in Slang and Euphemisms, complied by Spears, published in 1980, and safety [condom] was found in A Dictionary of Slang and Unconventional English, compiled by Partridge and edited by Beale, published in 1984.

- (129) He has a *good hand*. [dexterity] (Barcelona 2000:11)
- (130) Do you like *Mozart*? [Mozart's music] (Radden and Kövecses 1999:3)
- (108/131) I smell *skunk*. [skunk smell] (Radden and Kövecses 1999:32)
- (132) *ashes* [marijuana] (Warren 1992b:149)
- (133) red-comb [sexual arousal] (Warren1992b:149)²²

The causal link need not be direct. Consider (134)-(136). (136) was uttered by a car-passenger who felt the need for some fresh air:

- (134) *scar* "that which the use of which produces scars" [heroin] (Warren 1992b:149)
- (135) *yum-yum* "that which causes somebody to produce yum-yum" [something sweet and nice] (Warren 1992a:65)
- (136) Give me *a bit of window* "that which opening the window produces" [fresh air] (Nerlich and Clarke 2001:254)

There are some specific patterns within this category. One is the pattern in which the explicit element is typically the name of a famous writer, composer or artist and in which the implicit element represents his or her work, a pattern which will be referred to as Artist->Work of Artist. Examples are listed below.

Artist->Work of Artist

Proust is tough to read. "that which Proust produced" [Proust's writings] (Croft 2002:178)

I had been reading *the man* (Chomsky) for ages, but had never seen him in the flesh. "that which Chomsky produced" [Chomsky's writings]²³

The collector recently bought *two more Picassos*. "two more of that which Picasso produced" [two more of Picasso's works] (Papafragou 1996:171)

²² *Comb* in *red-comb* refers to the comb of a rooster.

²³ The example appeared in *The New Republic* and is quoted by Nunberg (1996:131).

My boss always wears *Chanel*. "that which Chanel produced" [Chanel's designs] (Papafragou 1996:171) The meal was excellent: we ate *Paul Bocuse*. "that which Bocuse produced" [Bocuse's meals] (Papafragou 1996:188) *Mozart* is always creeping from her room. "that which Mozart produced" [Mozart's music] (Fass 1997:105) *Who* are you wearing? "that which who? produced" [whose outfit]²⁴

The pattern has its own specifications and appears to have a number of restrictions. For instance, as indicated above, certain CAUSERS are favoured²⁵ and certain predicates also appear to be favoured, i.e. *like, read, play, possess* and synonyms. Quantification seems possible only with artists' work (paintings, sculptures) but not with authors' or musicians' productions. This suggests that the pattern is a construction-type pattern, but careful investigation is required to confirm this impression.

There is another specific pattern which may qualify as a construction-type pattern and that is the reversal of the Writer->Work of Writer metonymy. That is, the explicit element is a type of text and the implicit element represents the author of the text. In this way the proposition: "author of text+verb of communication" will be expressed simply as "text+verb of communication". There are no examples in my collection, probably because the pattern is so well-established that its metonymic character goes unnoticed. The listed examples are constructed.

Text->Anonymous Writer of Text

This book describes the problems of father-son relations. ("the one who produced the book")

The article addresses problems of relations within the family.

This section accounts for the origin of problematic family relations.

The Sun reported on the event.

²⁴ The example is authentic. A TV reporter asked a model this question at a fashion show at which outfits by different designers were displayed.

²⁵ Papafragou gives an example of a chef as CAUSER, but the example does not seem quite natural.

This pattern allows the speaker to focus on the contents of some text. The author of the text is almost completely backgrounded, but is still part of the interpretation. Evidence for this is the fact there is no clash between explicit subjects and the predicates (*describe, account for, report on*, etc.), although these normally require Agent subjects.

There is yet another construction, discovered and described by Brdar and Brdar-Szabó (2003:241-266), that should be mentioned in this connection. It involves predicative adjectives denoting linguistic actions, e.g. *be brief, clear, vague, blunt, serious,* etc. (*about/concerning/on some topic*). This construction does not highlight the author/speaker, nor the content, but the manner of delivery of some communication. Brdar and Brdar-Szabó class such examples as predicational metonymies, since they allow paraphrases involving a verb as shown in (137).

(137) The President was clear on the matter. (= spoke clearly on the matter)

They suggest, however, that the origin of the construction was referential metonymy. That is, for instance, *I* in *I'll be brief* is paraphraseable "that which I produce [i.e. my words/speech]. My suggestion is that the predicational interpretation developed by means of propositional metonymy (in my use of the term): If what one utters is brief/clear/vague, then it follows that one speaks briefly/ clearly /vaguely.

The referential metonyms of the specific patterns that have so far been described do not easily lexicalise. There is, however, a pattern whose instances frequently do. This pattern involves mentioning the origin of some type of man-made entity. The origin may be an original creator as in (138) - (140) or a manufacturing company as in (141) - (144):

- (138) *Bramley* "that which Bramley grew" [apple variety] (Warren 1995:146)
- (139) *Dobermann* "that which Dobermann bred" [a dog breed] (Warren 1995:146)

- (140) *Sandwich* "that which Sandwich provided" [two pieces of bread+filling] (Warren 1995:146)²⁶
- (141) *abbot* "that which Abbot produces" [name of barbiturate] (Warren 1992a:96)
- (142) I'll have a *Löwenbräu*. "that which Löwenbräu produces" [type of beer] (Lakoff and Johnson 1980: 38)
- (143) He bought a *Ford*. "that which Ford produces" [Ford car] (Lakoff and Johnson 1980: 38)
- (144) *Olivetti* "that which Olivetti produces" [Olivetti typewriter] (Seto 1999:111)

There are also instances of artefacts named after their place of origin: *camembert, Scotch, china, jersey,* for instance. Although these do not involve a causal link, they merit mention in this connection. The character of the noun representing EFFECT in these examples accounts for their propensity to be lexicalised. They represent unnamed artefacts which can be replicated in great numbers and which have distinct characteristics.

Finally, mention should be made of a group of metonyms in which body parts are used to refer to their functions: *ear* – hearing, attention, *eye* – gaze, *tongue* – language, *mouth* – language, *hand* – aid, applause, handwriting, manual skill, *muscle* – strength, and words for male and female genitals – sex. These tend to be part of conventionalised verb phrases and tend to have a rhetorical quality, partly because they have no denotational rationale, which emphasises their indirectness, and partly because they are often combined with metaphorical verbs: *keep an eye on*, *lay eyes on*, *give somebody the glad eye*. Cf. also examples in (128).

As is well known, causal links are not restricted to metonyms. They also occur regularly in other types of modifier-head constructions, i.e. nounnoun compounds, adjective–noun combinations, genitive constructions and in noun derivatives, which a number of descriptive studies confirm (see,

²⁶ As pointed out by Geerærts (1994: 2477), metonymic extensions of names of persons and companies tend to involve formal changes, e.g. *Sandwich* becomes *sandwich(es)*.

e.g. Ljung (1970), Brekle (1970), Aarts and Calbert (1979), Bartning (1980), Levi (1978), Warren (1978, 1984), Altenberg (1982), Leitzky (1989) and Ryder (1999)). Some examples are provided:

CAUSER-EFFECT: *bullet hole* ("hole produced by bullet"), *vocal sound* ("sound produced by voice"), *John's letters* ("letters produced by John") EFFECT-CAUSER: *honey bee* ("bee producing honey"), *noisy children* ("children producing noise"), *novelist* ("person producing novels").

Location in space and time: Your nose is running

Whereas in the pattern involving causation, the referents of the explicit and implicit elements need not co-occur in space or time, we now move on to a pattern in which they do, i.e. a pattern in which the explicit element takes on the role PLACE/TIME and the implicit element the role of OBJECT, which represents an entity occurring at PLACE/TIME. OBJECT is a very general term covering concrete as well as abstract entities. As (145) and (146) and the listed examples show, the roles can be reversed.

- (145) *Waterloo* "that which occurred at Waterloo" [the battle] (Radden and Kövecses 1999:42)
- (146) *Battle* (the place name) "the place where a battle occurred" (Radden and Kövecses 1999:42)

EXPLICIT ELEMENT IS **PLACE** AND IMPLICIT ELEMENT IS **OBJECT**

The bottle is sour. "that which is in the bottle" (Radden and Kövecses 1999:41)

Paris has dropped hemlines this year. "the one(s) in Paris" (Gibbs 1999:64)

Have you cleared this deal with *the top floor*? "the one(s) at the top floor" (Saeed 1999:181)

Your nose is running. "that which is in your nose" (Seto 1999: 96) *The whole village* rejoiced. "all the people in the village" (Seto 1999: 103)

Explicit element is **object** and implicit element is **Place**

The lemonade tipped. "that which the lemonade is in" (Nerlich et al 1999: 382)

I am bugged. "the place I am at"

We are just across the river. "the place we live/work in"

The Milford Track is *the finest walk* in the world. "the finest place where one walks/ walks occur" (Seto 1999:109)

walkabout (Australian English) "the place where walkabouts take place" [outback road] (Warren 1992a:65)

EXPLICIT ELEMENT IS **TIME** AND IMPLICIT ELEMENT IS **OBJECT** *date* [rendezvous] "that which occurs at a date" *9/11* "that which occurred at 9/11" [the al-Qaeda attack] *a three o'clock* "that which occurs at three o'clock" [meeting] (Seto 1999:111)²⁷ Are there *any more Easters* to find?²⁸ (chocolate eggs, toy rabbits, etc) "those things that "occur" at Easter" (Nerlich et al 1999: 370-372)

Instances of metonyms in which the implicit element is TIME are rare in my material. (147) can be given as an additional example.(*Fall* was originally *fall of leaves*).

(147) *fall* "the time when the fall of leaves takes place" [autumn]

Some other examples that could qualify are *barbecue* and *tea* (for *tea*, see p 65) in the sense of "meal" in that they refer to entities that have extension in time. The starting point of *barbecue* is another metonym, as pointed out by Nerlich and Clarke in their article on serial metonymy (Nerlich and Clarke 2001:263).

²⁷ This could also be classed as an abbreviation of *three o'clock meeting*. The difference between abbreviation (or ellipsis) and metonymy is that the former is verbal, i.e. actual words of established phrases have been left out; the latter can be characterised as cognitive abbreviation (see Nerlich and Clarke 2001:255).

²⁸ Uttered by five-year-old Matthew on an Easter Sunday in looking for presents which were hidden and which tended to be things associated with Easter.

(148) barbecue was originally a Haitian word for a framework of sticks on posts on which an animal could be roasted. This was extended as: "that which is on a barbecue" [roasted animal], which in turn seems to have given rise to the extension: "the event during which a barbecue is served" [occasion during which food grilled outdoors is served]

The located entity (the OBJECT) can be in, on top of, at (=close to), under or around PLACE:

- (149) to light the *Christmas tree* "that which is *in* the Christmas tree" (Radden and Kövecses 1999:31)
- (150) questions from *the floor* "the ones *on* the floor" [the audience] (Seto 1999: 104)
- (151) *Table 13* is complaining. "the one(s) *at* Table 13" (Dirven 1999:275)
- (152) Turn down *the potatoes* ?"that which is *under* the potatoes" (Seto 1999:104)
- (153) *red tape* "that which has red tape *round* it" originally [official documents] (Warren 1995:139)

These examples indicate that the representatives of OBJECT and PLACE need not coincide in space; it is enough that they are close. Nor does the location have to be the present one; it can be the place of origin as shown by examples such as *camembert, Scotch, china, jersey*, etc., mentioned on p 47.

PLACE is predominately concrete but the relation may be abstract as in (41/154):

(41/154) The book got *good press*. "that which "is in" the press" [good reviews]. (Warren 1995:140)

The same type of abstract locative relation we find in *word* in (42/155). In both cases we have examples of the conduit metaphor (Reddy 1979) according to which we see information as inserted into words, sentences, messages, etc.

(42/155) These are *foolish words*. "that which these words contain is foolish" (Fass 1997:98)

OBJECT appears to represent anything that can be located, including action and events. In fact, memorable events tend to be associated with the place they occur at (and sometimes with the time they take/took place). Therefore locative metonymy is a natural and economic way of referring to such events. Examples are supplied by–among others–Lakoff and Johnson, who class these as instances of a conceptual metonymy termed THE PLACE FOR THE EVENT.

- (156) Pearl Harbor still has an effect on our foreign policy. "that which occurred in Pearl Harbor" [Japanese air attack] (Lakoff and Johnson 1980: 39)
- (157) Watergate changed our politics. "that which occurred at Watergate" [theft of political secrets] (Lakoff and Johnson 1980: 39)
- (158) Many deformed babies were born after *Chernobyl*. "that which occurred in Chernobyl" [breakdown of nuclear reactor] (Frisson and Pickering 1999:1383)

Because of the specific character of these events, metonyms of this kind tend to be conventionalised as proper names. There are, however, places in which certain kinds of activities take place such as school, university, prison and court, and which have lexicalised activity senses.

Another pattern often mentioned in the literature is Container–Contents. The conceptual leap from a container to its contents or vice versa appears to be particularly short. This may explain why metonyms of this kind appear especially natural and inconspicuous. In (159)-(162) the explicit element represents the container and in (163)-(165) it represents content.

- (159) *The cistern* is running over. "that which the cistern contains" (Seto 1999: 103)
- (160) *The dam* has dried up. "that which the dam contains" (Seto 1999: 103)
- (161) He poured *the glass* into the pitcher. "that which the glass contained" (Radden and Kövecses 1999:42)
- (114/162) *cash* (originally "moneybox") "that which the cash contains" [money on hand] (Nerlich and Clarke 2001:265)
- (163) *The lemonade* tipped. "that which contained the lemonade" (Nerlich et al 1999: 382)
- (98/164) A Mercedes rear-ended *me*. "that which contained me" (Lakoff and Johnson 1980: 38)

There are some locative patterns which qualify as idiomatic. They include:

Name of country-> Sports team from country *Italy* beats *Germany* in cup final. (Nerlich et al 1999: 375)

Name of country-> Representative of government of country *Denmark* shot down the Maastricht treaty. (Croft 2002:162) *Germany* pushed for greater quality control in beer production. (Croft 2002:184)

Name of centre of power->people (of power) in the centre *Downing Street* denied all rumours.

The White House isn't saying anything. (Lakoff and Johnson 1980: 38)

The Kremlin threatened to boycott the next round of SALT talks. (Lakoff and Johnson 1980: 38)

Locative links also occur regularly in noun-noun compounds, in adjective– noun combinations, in genitive constructions and in noun derivatives, which is exemplified below:

PLACE-OBJECT: ghetto street, suburban areas, London's streets, Londoner. OBJECT- PLACE: mine field, agricultural area, sleeper (train carriage).

Possession: the long straw starts²⁹

This pattern has in common with the locative pattern that that which the explicit and implicit elements represent co-occurs in space. The difference is that the referent of the possessive metonym is perceived as a unit. The natural role labels are therefore WHOLE and PART. Again, the role constellation may be reversed. The prototypical PART-WHOLE relation involves inalienable possession, but also cases of alienable possession have been referred to this class. However, it should be pointed out that the distinction between location and possession is not always clear-cut ³⁰ and, similarly, it is not always easy to determine whether possession is alienable or inalienable. In this connection we may bring up Bredin's distinction between structural and extrinsic relations, the former involving analysis and the latter involving synthesis. Following Bredin, the relations we have considered so far would be extrinsic as would alienable PART-WHOLE relations, whereas inalienable possession would be structural. It follows that the cognitive processing of metonyms in this class is (possibly) not uniform.

Examples in this class fall naturally into groups depending on whether the relation is PART-WHOLE or WHOLE–PART, alienable or inalienable and also whether the "possessor" is animate or inanimate, since the distinction between animate and inanimate has a special status. Instances of the different groups are provided in lists.

PART-WHOLE: INALIENABLE AND ANIMATE "POSSESSOR"

²⁹ Example from Norrick (1981:100). Its interpretation is [the person with the long straw].

³⁰ Compare Radden and Seto (2003:233): "the notions of "possession" and "existence" are to be seen as forming a conceptual continuum, which different languages may cut up differently."

The best brains in Britain were set to solve the problem. "those with the best brains" (Warren 1995)

Maria is *a divine voice*. "someone with a divine voice" (Papafragou 1996: 191)

palefaces "the ones with pale faces" [white people] (Warren 1995:140)

tan "the one with a tan" [mulatto] (Warren 1992:150)

Many big names have turned up. "(many of) the ones with big names" [famous people] (Radden and Kövecses 1999:41)

Inalienable parts of animates will of course be body parts, but, it is suggested, also names. Instances of this kind have the potential to lexicalise since they may suggest a kind of people or animals, e.g. *rednecks*, *highbrows*, *hunchbacks*, *rubbernecks*, *wagtails* and *waxwings*, etc.

PART-WHOLE: ALIENABLE AND ANIMATE "POSSESSOR"

There are 20,000 uniforms in this city. "those who have uniforms" [uniformed policemen] (Frisson and Pickering 1999:1368)

the violin "the one with a violin" [violin player] (Dirven 1999:276) *handbook* "the one with the handbook" [bookie] (Warren 1992a:69) The *gun* he hired wanted fifty grand. "the one with a gun" [gunman] (Lakoff and Johnson 1980:38)

She married *money*. "one of those with money" (Warren 1995: 142) I'm *the ham sandwich*; *the quiche* is my friend "the one who will have the ham sandwich/the quiche" (Fass 1997:388)

There appear to be no restrictions as to the character of alienably possessed items (consider *the long straw* in *the long straw starts*), as long as they have some specifying force. Possessions of emblematic character such as sceptres, crowns, guns, handbooks and garments worn by a certain class of people are not uncommon and have the potential to be classifiers.

PART-WHOLE: INALIENABLE AND INANIMATE "POSSESSOR"

The *wings* took off from the runway. "that which has wings" [aeroplane] (Frisson and Pickering 1999:1383)

Everyone who wants *a roof* should have one. "that which has a roof" [a house] (Fass 1997:32)

a paperback "that which has a paperback" [a pocket book] (Warren 1995:143)

a motor "that which has a motor" [a car] (Warren 1995: 139)

the stage "that which has a stage" [theatre] (Radden and Kövecses 1999:48)

send out *invitations* "that which contains invitations" (Seto 1999:109)

menu (originally "list of items of a meal") "that which contains the menu" (Nerlich and Clarke 2001:261)

The last two examples should be compared to nouns such as *book*, *newspaper*, *novel* etc. which Pustejovsky (1996:90 ff) describes as dot objects in that their semantics involves physical as well as non-physical aspects, formalised as [physical object.information]. Therefore a sentence such as *The book with the red cover* (*qua* physical object) *is unreadable* (*qua* information) is quite natural and does not qualify as metonymic. *Menu* appears to have developed into a dot object, but *invitation*, I suggest, involves a contextually induced metonymic reading ("physical object").

There are no examples of inanimate "possessors" of alienable possessions, probably because these would be classed as locatives.

WHOLE–PART: INALIENABLE AND ANIMATE "POSSESSOR" *I*'m in the phone book "that which I have" [my number] (Nunberg 1996:128).

There is only one instance in my collection that was referred (with some hesitation) to this group. Constructing examples is, however, possible, e.g.: *you are a nice colour* "that which you have" [your skin and/or hair]; *he is a*

nice shape "that which he has" [his body]; *she has been cut* (at the hairdresser) "that which she has" [her hair].

WHOLE– PART: ALIENABLE AND ANIMATE "POSSESSOR"

You have a flat tire "that which you have" [bike] (Radden and Kövecses 1999: 41)

Where are *you* parked? "that which you have" [car]

Knickerbockers "that which Knickerbockers had" [loose-fitting breeches] (Warren 1995:146)

Wellingtons "that which Wellington had" [rubber boots] (Warren 1995:146)

WHOLE–PART: INALIENABLE AND INANIMATE "POSSESSOR"

My bicycle was punctured. "that which is part of my bicycle" [the tire] (Fass 1997:70)

The windmill is turning. "that which is part of the windmill" [the wings] (Seto 1999: 99)

He picked up *the phone*. "that which is part of the phone" [the receiver] (Seto 1999: 99)

Set *the oven* to a required temperature. "that which is part of the oven" ?[the knob for temperature] (Pauwels 1999:271)

She has *a good head*. "that which is part of /in a head" [intelligence] (Barcelona 2000a:11)

WHOLE– PART: ALIENABLE AND INANIMATE "POSSESSOR"

Lay out *tea* "that which belongs to/constitutes tea" (Pauwels 1999:261)

This is parked out back. "that which this is part of" (see (61); (Nunberg 1996:110))

There is a group of metonyms which Lakoff and Johnson see as instances of the conceptual metonymy INSTITUTION FOR PEOPLE RESPONSIBLE. These have been analysed in this study as a type of WHOLE–PART metonyms. The institution is the WHOLE and the members of the institution are the PARTS.

The metonyms in this group have unspecified-specific reference. Consider (165)–(167):

- (165) *Exxon* has raised its prices again. "some one or other of those that are part of Exxon" (Lakoff and Johnson 1980:38)
- (166) *The company* hired a new editor. "some one or other of those that are part of the company" (Ruiz de Mendoza 2002:497)
- (167) *Sears* approved our credit card application. "some one or other of those that are part of Sears" (Ruiz de Mendoza 2002:499)

Exactly who did the raising of prices, the hiring or the approval of applications may not be known and even if it were it is of no relevance. The fact that the construction allows the desirable degree of vagueness may have contributed to the popularity of the pattern.

Finally, a set of adjective-noun combinations merits attention. This set includes *a jealous letter, a joyful journal, an angry report*, mentioned by Fass (1997:92), to which can be added, for instance, *happy face, sad eyes, nervous smile*. In phrases of this kind, the adjective refers to some emotion and the noun either to some type of communication (letter, conversation, etc.) or some body part that can be involved in body language. Implicit is the Experiencer of the emotion, a type of Part-Whole relation. This suggests paraphrases such as "letter written by someone who experiences jealousy" and "face belonging to someone who experiences happiness". These, however, are not quite equivalent to the paraphrased phrases since the adjectives characterise the explicit nouns (*letter, face, etc.*) rather than the implicit Experiencer, which is backgrounded. We witness here the same type of effect as in topicalisation. That is, by suppressing the "logical" head of *sad* in *sad eyes, sad* is made to assert something about *eyes*.

In this connection, it should be pointed out that adjectives as explicit elements are rare in referential metonymy. They are natural only when the explicit element is a modifier of a modifier. (This is true also of *red* in *red pen* and *topless* in *topless waitress* ("waitress who has <u>that [i.e. dress]</u> which is without a top" (p18)), the only examples I am aware of apart from

the construction just described). This restriction can be connected with the fact that adjectives in English shun implicit heads and either insist on a nominal support (*the stupid man, the funny thing*) or a grammaticalised construction, i.e. the+ adjective+ implicit head = "adjective+ people/abstract concept with generic reference", as in *the poor* and *the unreal*.

The Part-Whole relation is sometimes presented as the prototypical metonymic relation. However, some linguists (Croft (2002), and above all Paradis (2004)) have pointed out that not all combinations involving Part-Whole relations can be classed as metonyms. Paradis distinguishes between three types of Part-Whole relations: zone activation, facetisation and metonymisation. A slow car exemplifies zone activation in that slow refers to the function part of the car. The court assumed that the claim was true exemplifies facetisation in that one of the facets of court "adminstrative staff" is highlighted (cf. Pustejovsky's dot objects). The red shirts won the match exemplifies metonymisation since "players" is not part of the conventional meaning of *red shirts*. Zone activation is different from facetisation in that it is present in all kinds of modifier-head readings but is like facetisation in that it highlights aspects of meaning that reside in the expression. In this they differ from metonymy in which the Part-Whole relation is created contextually. However, as conceded by Croft and Paradis, there is a continuum between the clear cases of metonymy and intrinsic facets of word meaning. This is in essence in line with Barcelona's position (2003:84-85), which is that expressions can be more or less metonymic. The red shirts in the red shirts won the match would be a prototypical metonym, whereas the book is instructive in which instructive refers to the content of the book is merely a typical metonym. The view adopted in the present study is that if the interpretation of an expression requires a metonymic extension, it can be classed as referential metonymy. Thus, for instance, *windmill* in <u>the windmill</u> is turning (="the wings of the mill are turning") is taken to be metonymic, although wings are by definition part of windmills. This approach does not unambiguously solve the problem of where to draw the line between facetisation and metonymisation, but it is consistent with the view that referential metonymy is a strategy interpreters make use of in order to make utterances best fit the situation in which they occur, a strategy which often, but not necessarily, activates unconventional facets of "meanings".

As is well known, Part-Whole relations occur regularly in noun-noun compounds, adjective–noun combinations, genitive constructions and noun derivatives. Consider:

WHOLE–PART: *chair leg* ("leg part of chair"), *lunar surface* ("surface part of moon"), *John's leg, gangster* (originally: "person part of gang"). PART–WHOLE: *armchair, rational creature, at arm's length, capitalist*.

Composition/Equation: place your bets

In the general pattern just described, the referent of the explicit element partially coincides with that which the implicit element represents (or vice versa). In the pattern to be described in this section, the referent of the explicit element completely coincides with that which the implicit element represents (or vice versa), which in Bredin's terms would be a structural relation. This pattern then completes a series of relations between the two elements involved which goes from denoting two separate entities that do not have to coincide in time or space but are seen as having a common source, via two entities that co-occur in space or time, either as two separate entities or as a unit, to complete co-occurrence. The order in which the general patterns have been presented so far was chosen to demonstrate that that which the two elements represent forms a unit to a lesser or greater extent. This is consistent with the traditional view that metonymy involves contiguity relations, but with the emphasis on unity.

Most traditional typologies include a pattern termed Material-Object, i.e. the explicit element denotes the matter that the implicit element consists of. Instances of this pattern are naturally referred to the class under study. Many of them are lexicalised, e.g.: *silver* [cutlery], *iron* [device for removing creases], *nylons* [stockings], *linen* [sheets], *glass* [drinking vessel], *glasses* [spectacles], *oils* [oil paintings], *acrylic* [acrylic painting], etc. In these examples Object, representing an artefact, and Material are

concrete, but this is not a necessary restriction. There is a productive Material-Object pattern, exemplified by (168), which itemises drink or food and in which Object is arguably abstract. Pauwels gives an interesting example, identified as (169), in which the roles are reversed and in which Object more certainly is abstract, although Material is concrete.

- (168) He had *a beer*. "that which consists of beer" [serving] (Warren 1995:144)
- (169) Place your bets. "that which your bets consist of" (Pauwels 1999:32)

A well-known Object-Material pattern is exemplified by (170)–(172). This pattern, which turns countables into uncountables, is very productive³¹. It has been described in the literature, referred to as grinding (Copestake and Briscoe (1996)).

- (170) I ate roast *chicken* for dinner "that which a chicken consists of" (Croft 2002:185)
- (171) *an inch of pencil* "that which pencils consist of" (Warren 1995:144)
- (172) There is *egg* on the knife. "that which eggs consist of" (Warren 1995:144)

There are some metonyms included in this class which exemplify Parts-Whole relations. A notable group of such metonyms are collective nouns (*team, committee, government, company,* etc.) They are classed as compositional when reference is specific (as in (173)) rather than unspecified specific (cf. (165)-(167)).

(173) *The cabinet* are agreed. "those who constitute the cabinet" (Fass 1997:34)

³¹ Note that it is not always intuitively evident whether there is a Material-Object or Object-Material conversion. Is *a stone* derived from *stone* ("that which consists of stone") or is *stone* derived from "that which a stone consists of"?

Finally there are metonyms in this class which involve equative rather than compositional relations. In some of these, the explicit element has the character of Effect (cf. (174)), which renders these examples causal in nature and which therefore could also be classed as such. Others are more clearly equative in nature.

- (174) *guts-ache* "someone who causes/constitutes guts-ache" [person that is a nuisance] (Warren 1992a:178)
- (175) She is *my pride and joy* "that which constitutes my pride and joy" (Seto 1999:111)
- (176) She is *good news*. "that which constitutes good news" [new pleasant person] (Warren 1992a:163)

Metalinguistic uses of words can also be assumed to involve an equative relation, as shown in (177). By means of this type of metonymic extension any content word can be made to give up its object language reference and refer to itself.

(177) "*Cat*" has three letters. "that which is (the word) *cat*" (Croft 2002:182)

There are compositional and equative links also in other kinds of modifierhead combinations: *metal ball, girl friend, problem child, electric arc, female priest, Dublin's fair city,* for instance.

Representation: In Len's painting, the girl with blue eyes has green eyes³².

The relation linking the explicit and implicit elements in the metonyms of this class is iconic and clearly different from the relations of contiguity described so far. Its iconic nature is reflected in the fact that the explicit element can be assigned the role label MODEL and the implicit element the label REPRESENTATIVE. This appears to be the most natural constellation, but the roles may be reversed. Cf. (178) and (179):

³² The example derives from Jackendoff (1975).

- (178) Anthony Hopkins is *Hamlet*. "the one (REPRESENTATIVE) that represents Hamlet (Model)" (Warren 1995:140)
- (179) In Goldfinger Sean Connery saves the world from a nuclear disaster. "the one (MODEL) that Sean Connery (REPRESENTATIVE) represents" (Ruiz de Mendoza 2000:116)

The REPRESENTATIVE may be pictures, statues, dummies, maps, globes, mirror images, actors' parts, toys etc. Examples are nevertheless rare in the metonymy literature but occur in Warren (1995, 1998), Fass (1997) and Ruiz de Mendoza (2000), and the relation is considered to be a vital relation by Fauconnier and Turner (2002:97-98).

- (180) Ari painted *a tanker*. "that which represents a tanker" [picture of a tanker]. (Fass 1997:71)
- (181) *James Bond* was really convincing in Goldfinger. "the one who represented James Bond" (Ruiz de Mendoza 2000:116)
- (182) *Formula One* "that which is in accordance with Formula One" [racing car] (Warren 1992a: 67)³³

Additional examples include *sand castle, fake gun, teddy bear, he saw <u>his</u> <u>face in the mirror</u>. The reader is also reminded of the extract from Lawrence Durrell's novel <i>Bitter Lemons:*

Three thoughts belong to Venice at dawn, seen from the deck of a ship which is to carry me down through the islands to Cyprus; *a Venice* wobbling in a thousand fresh-water reflections, cool as a jelly.

Finally, I place the construction "someone has X's Y" (*she has <u>her</u> <u>mother's voice</u>*) in this class, as a special version of representation. My reason for this is the following: Although representation and resemblance must be taken to be iconic relations, they are nevertheless different. As already pointed out, the kind of resemblance relation forming the basis of

³³ Admittedly, the implicit element in this case does not quite fit the role of REPRESENTATIVE. Nevertheless the relation is that of representation of a model.

many metaphors involves property selection and adaptation, whereas representation simply involves matching representation with its model (or vice versa). These are cognitively different processes, and the implicit relation in the construction "someone has X's Y" is closer to representation than resemblance.

Possibly the recognition of representations is a cognitive process restricted to homo sapiens. Dogs, for instance, do not seem able to make a distinction between icons and the real thing. Be that as it may, the conceptual leap from REPRESENTATIVE to MODEL appears to be short and metonyms of this kind tend to go unnoticed, also among linguists who have worried about the non-compositionality of compounds such as *rubber chicken*, *plastic flower* and fake gun (see Pitt and Katz 2000). This may explain the scarcity of examples in the literature in spite of the facts that there are a number of possible representatives and probably no restrictions connected with the pattern. Another explanation may be that expressions of this kind do not meet the requirement that metonymy should involve contiguity relations. It is true that there is no contiguity in a physical sense, but it can be argued that relating the explicit and implicit elements nevertheless involves synthesis. My main argument for assigning the kind of examples given in this section metonymy status is, however, that their linguistic structure and behaviour agree with that of other examples of referential metonymy.

Again, I conclude the section by adducing examples demonstrating that this particular relation is not restricted to metonymy: *nude portraits, John's picture, conventional pattern* ("pattern in accordance with convention").

Combinations of patterns: you are here (on maps)

There are some instances which require more than one metonymic extension in order to be interpretable. Consider the instruction *you are here* next to a ringed-in area on a map. *You* in this case suggests the following interpretation "the position where you are (a locative relation) on the map (a representative relation)", or phrased in the manner adhered to in this study: "that which represents the place where you are". Another example is (183).

(183) Shakespeare is on the top shelf and *it* is a good quality edition.(Ruiz de Mendoza 2002: 517)

As pointed out by Mendoza, *Shakespeare* in this context must be a double metonymy, in Mendoza's terminology: AUTHOR FOR WORK FOR FORMAT and in my terminology: "that which <u>contains</u> that which Shakespeare produced", i.e. a possessive/locative relation is combined with a causal relation. A third example is *hand* in the sense 'manual worker': "those who have that which produce manual work". Yet another example is *panel*. At one time this denoted a slip of parchment containing names of jurors (see Nerlich and Clarke 2001:260). This gave rise to the sense "jurors", probably by means of metonymic extensions along the following lines: "those with that (i.e. names) which are on the panel", combining a possessive with a locative relation. (Panel was subsequently used of similar types of groups of people with some public mission.) Consider finally the dead metonyms *pupil* (part of eye) and *crown* (a certain type of coin), which must originally have been interpreted as "that which <u>contains</u> the reflection of a pupil" and "that which has that which represents a crown on it, and the metonymic extensions involved in the construction to do a Napoleon/Chamberlain/Houdini, etc., i.e. "(to do) that which represents what Napoleon/Chamberlain/Houdini etc. did".

Reddy (1979:309) and Dirven (2002:84) discuss chains of metonymy which differ from the examples given above in that there is only one type of relation which, however, includes several elements. In (184), *library* is said to suggest "ideas" via a chain of part-whole relations: books, pages of books, words on the pages, and the content of words.

(184) You'll find better ideas than that in *the library*. (Reddy 1979:309)

It is debatable whether all these elements are in fact accessed in interpreting (184). However, contrary to the claim in Warren (1992:98), it seems clear that the interpretation of a metonym may involve more than one metonymic extension. Such metonyms will be referred to as

metonyms-in-metonyms (or double metonymy), reflecting the notion that one metonymic relation is embedded in another.

Metonyms-in-metonyms should not be confused with serial metonymy, a term adopted from Nerlich and Clarke (2001). Serial metonymy is a diachronic phenomenon and refers to the fact that an established metonym may give rise to yet another metonym which in turn may undergo metonymisation and so on forming chains of metonyms (or metonyms of metonyms). The different senses of *tea* as described by Dirven (2002:81) may serve as an example: name of a plant->leaves of plant->drink from leaves->light meal involving the drink. There is no reason to assume that the formation or interpretation of metonyms based on conventionalised metonyms.

It should also be pointed out here, if only in passing, that there are not only metonyms-in-metonyms but also metaphors-in-metonyms and probably metonyms-in-metaphors. An example of the former is *jelly* in the sense "fat person", i.e. "someone who <u>consists of</u> something which <u>is like</u> jelly", and an example of the latter is *clockwork orange* ³⁴, meaning "person made into an automaton", i.e. "someone who <u>is like</u> the "hero" <u>of</u> Clockwork Orange."³⁵

In concluding the presentation of the semantic patterns, some problems involved in determining the connection between the explicit and the

³⁵ The interaction of metaphor and metonymy is also discussed by Goossens (1995) and (2002). Goossens distinguishes between two main types: *metaphor from metonymy* and *metonymy within metaphor*. (Contrary to Warren, he suggests that metaphor-in-metonymy would be "difficult to conceptualise and therefore exceptional" (1995:174).) *Metaphor from metonymy* is actually a metaphor based on an established metonym, i.e. the metonymic sense is not created in the interpretative process but exists prior to it. One of Goossens's examples is *close-lipped*, "which is used to indicate that a person is silent" (a metonymic reading, in my view a propositional metonym), but which can be metaphorised to "indicate that someone does not give away what one would really want to hear" (1995:169). Goossens describes *metonymy within metaphor* as "a metonymically used entity …embedded in a (complex) metaphorical expression" (1995:172), e.g. *catch someone's ear* or *shoot one's mouth off*. Arguably the interpretation of these is in a sense compositional (*catch* (="attract") and *ear* (= "attention", e.g.). These examples are therefore not incontestable examples of metonymic as well as metaphorical readings connected to the interpretation of one and the same expression.

³⁴ The examples were extracted from Chapman's *New Dictionary of American Slang (jelly)* and *The Second Barnhart Dictionary of New English (clockwork orange).*

implicit elements should be pointed out. One problem is that more than one analysis may be possible. This is the case with the pattern CONTROLLER FOR CONTROLLED, suggested by Lakoff and Johnson (1980:38) and exemplified by Nixon bombed Hanoi and Napoleon lost at Waterloo. An alternative analysis could be that these are basically PART-WHOLE constructions, i.e. Nixon and Napoleon are "parts" of those who actually fought³⁶. The "controller interpretation" is supplied by our knowledge of the special status of Nixon and Napoleon. The choice of analysis has consequences since if the controlling relation is chosen, the pattern is irregular, whereas the part-of relation would be "regular". Another problem concerns opaque motivations which appear to arise when the relation is not empirically manifest. This is exemplified by many of the expressions containing *heart* discussed by Niemeier (2000:195-213). These expressions are exceptional in that their interpretations tend to be fairly clear, but their motivation often unclear. For instance, how is *broken heart* to be analysed? Is it that the agony felt is as if one's physical heart is broken (metaphorical) or is it that which the heart contains (i.e. one's hope of amorous bliss) is shattered (metonymic and metaphorical)? Another set of examples the motivation of which seems unclear includes red tape, which via 'official document' has developed the sense 'bureaucracy'; crown, which-possibly via 'monarch'-can also mean 'monarchy'; and the Oval Office, whichpossibly via '(American) president'-can also mean (American) presidency'. Is the link in the case of *red tape* "that which consists of/causes official documents", and is it "that system that has a monarch/president" in the case of *crown* and the *Oval Office*?

3.2.3.1. Theoretical Status of the Patterns

For a metonymic interpretation to be successful, the explicit element must suggest the implicit element "essentially automatically". Since, with some few exceptions, the 634 referential metonyms of the present study could be referred to one or the other of the five main categories, the classification seems to have revealed what types of associations have this force: A Part will readily suggest the Whole, or vice versa, an Effect the Cause,

³⁶ Cf. Croft's (2002:184) interpretation of *Bush* in *Bush* lobbied against the biodiversity treaty, which is 'the US government', an interpretation which agrees with the paraphrase "that which Bush is member of".

Instrument or Causer, or vice versa, a Location or Period of Time an object or event connected to them, or vice versa, Constituent Matter or Parts will evoke the Whole and an icon that which it represents. (The reversibility of the patterns follows from the fact that, if there is an association between X and Y which has been formed by experiencing X and Y simultaneously, this association is likely to take us not only from X to Y but also from Y to X.) The patterns are, however, not exclusive to referential metonymy, as was repeatedly pointed out above and made evident by the general character of the categories in the classification presented. In fact, the semantic structure of metonyms is parallel to that of other types of modifier-head combinations and the relations connecting explicit and implicit elements in metonymy can be regarded as being "regular" in the sense argued for by Norrick (1981). Norrick insists that an adequate semantic theory should "provide a battery of regular principles for relating lexical readings with their (possible) contextual interpretations" (1981:12), and that a semantic theory that fails to provide such an inventory also fails to capture an important semantic generalisation. According to Norrick, a relation can be shown to be regular when an expression requires a reading distinct from that supplied by the lexicon owing to features of the context and when native speakers consistently agree on the novel interpretation of this expression. As an example, consider the interpretation of *thimble* in (185).

(185) Add *a thimble* of the liquid to the mixture.

Most interpreters would find it natural to interpret *thimble* in this context as "that which a thimble (can) contain", i.e. the volume of a thimble. They would probably find an interpretation involving the addition of the thimble itself unlikely and reject an interpretation involving a volume exceeding or being less than the volume of a thimble.

Norrick distinguishes between two main types of regular relations: metaphoric (based on similarity) of which there are five different types and metonymic (based on contiguity) of which there are eighteen different types. The latter include well-known metonymic patterns such as CauseEffect, Instrument-Effect, Artefact-Producer, Part-Whole, Location-Occupants, etc. None of the so-called metonymic relations produce only metonyms. This is in accordance with Norrick's claim, amply exemplified, that the same types of implicit relations permeate the lexicon³⁷. Above all, they can be found between different senses of lexical items (i.e. in polysemous items), between the components of morphologically complex items, and between literal and figurative senses³⁸. That is, it is not the case that there are certain patterns specific for, for instance, compounds and others for denominal verbs or metonymy, etc. It is sometimes claimed that metonymy is ubiquitous (Gibbs (1999), Taylor (2002), Radden (2002) and Panther (2004) among others). If metonymy is understood to refer to manifestations of our ability to instantly supply an implicit link between concepts of entities/actions/states and combine these to form some single integrated phenomenon, then metonymy is indeed pervasive in language.

Norrick is satisfied with presenting his battery of regular relations and with demonstrating their ubiquitous relevance. He does not consider their rationale. There are, however, theories in more recent years that suggest relevant explanations. Of particular interest are Barsalou's (1992) frame theory and Pustejovsky's qualia theory (1996).

Barsalou offers a theory of the cognitive organisation of human knowledge. He suggests that all knowledge is represented in frames, i.e. frames represent categories of all kinds, of animates, objects, locations, physical events, mental events, etc. (1992:29). A frame consists of a set of *attributes*³⁹ which in turn has values. It is the distinction between *attributes* and values that is of particular importance for our purposes. Examples of *attribute*-value relations include "blue" and "green" as values of <u>colour</u>;

³⁷ There may be certain patterns which are not applicable to certain constructions, e.g. it is hardly possible to make the morpheme -er take on the role Effect. In fact, not all of Norrick's metonymic relations produce referential metonyms. ³⁸ Norrick is not the only one to insist that there is a set of regularly occurring relations in the lexicon.

³⁸ Norrick is not the only one to insist that there is a set of regularly occurring relations in the lexicon. Warren ((1985) and (1992: 66-67)) has made the same claim and more recently Fauconnier and Turner (2002:89-106) have pointed out that certain relations, which they refer to as "vital relations", "show up again and again" in linking mental spaces and elements in them. Among them are Identity, Time, Space, Cause-Effect, Part-Whole, Representation.

³⁹ In order to avoid confusion between the non-theoretical use of *attribute* and Barsalou's term *attribute*, the latter will be italicised.

"oval" and "square" as values of shape; "adult", "male", "human" and "married" as values of <u>age</u>, <u>sex</u>, <u>species</u> and <u>marital status</u>, respectively, which are *attributes* of *bachelor*. Barsalou cites evidence that supports the theory that people (and animals) encode characteristics of members of categories as values of more abstract attributes rather than as independent features. As the examples above show, the relationship between *attribute* and value is of the same kind as that between animal and "elephant", "deer", "lion" etc. or between furniture and "chair", "table", "bed", etc. That is, *attributes* in Barsalou's terminology are abstractions and there may be several taxonomic levels of attributes. Attributes naturally vary depending on type of category. Physical objects, Barsalou points out, are likely to have <u>colour</u>, <u>shape</u> and <u>weight</u> as *attributes*, whereas <u>location</u>, time and goal are likely attributes for events. Barsalou also mentions parts of category members (feathers, hands, trunks, e.g.) as frequent attributes. There may be relations between *attributes* in a frame and also between attributes and the frame category. For instance, robin and feather are both attributes of bird, but a robin "is a" bird and feather "is part of" a bird.

Since *attributes* are abstractions, it seems reasonable to assume that there is a topmost level of abstraction which would constrain the multitude of features of a category into a limited number of semantically distinctive types. In the case of nouns, empirical research indicates that Effects, Cause(r), Instruments, Part/Feature, Location, Constituent Matter/Parts are likely to be such top-level *attributes*⁴⁰. Applying this theory to referential metonymy, the explicit element would represent a value with particular contextual relevance which the interpreter connects with an *attribute* of the implicit element. For instance, uniform would suggest Part of the intended referent, ecstasy Effect of the intended referent, Downing Street the Location of the intended referent, etc. This would explain why linguists in their analyses of metonymic expressions come up with patterns such as Cause-Effect, Part-Whole. Location-Occupants, Garment-Person,

⁴⁰ The status of Model and Representative as *attributes* is uncertain. Not surprisingly, it has not been suggested in the literature. Nouns such as *picture* and *drawing* and adjectives such as *conventional* and *traditional* can be said to contain such features of meaning, but it is uncertain whether they would have the status of *attributes*.

Instrument-User etc., patterns which may vary as to the abstractness of the *attribute*.

Barsalou's list of common attributes brings to mind Pustejovsky's list of qualia (1996:85-86), which is:

- CONSTITUTIVE: the relation between an object and its constituents, or proper parts.
 i. Material ii.Weight iii. Parts and component elements
- FORMAL: that which distinguishes the object within a larger domain.
 i. Orientation ii. Magnitude iii. Shape iv. Dimensionality v. Colour vi. Position
- 3. TELIC: purpose or function of the object.
 i. Purpose that an agent has in performing an act. ii. Built-in function or aim which specifies certain activities
- 4. AGENTIVE: factors involved in the origin or "bringing about" of an object.i. Creator ii. Artefact iii. Natural Kind iv. Causal Chain

Just as *attributes*, qualia can be taken to have an organising function, but they are different from *attributes* in that they are restricted to features of nouns.

Pustejovsky's aim is parallel to Norrick's, i.e. to specify formally the generative devices "by which words can achieve a potentially infinite number of senses in context, while limiting the number of senses actually stored in the lexicon" (1996:105). Qualia structures are part of these devices in that they are activated to produce implicit non-listed meanings when certain words are combined. Combining, for instance, *juice* with *glass* would involve the activation of the Constitutive quale of "liquid" in

juice and the Telic role of "for containing drink" in *glass*, yielding "glass (for) containing juice".

Pustejovsky claims that the four qualia "contribute to (or in fact determine) our ability to name an object... " (1996:85). This view can be connected with a theory by Clark and Clark (1979:789), inspired by Rosch and her colleagues' research into the principles of human categorisation, and which suggested that the basis for categorisation of objects includes (i) physical characteristics (cf. the CONSTITUTIVE and FORMAL qualia), (ii) ontogeny (cf. the AGENTIVE quale) and (iii) potential roles (cf. TELIC quale). In other words, Barsalou, Pustejovsky, Clark and Clark can be said to suggest (at least in my interpretation) that there are certain cognitively motivated constraints in forming the meanings of nouns. Also, there is fair agreement as to what these constraints would be. The fact that the constraining features also agree fairly well with the findings of descriptive studies lends further support to these theories.

However, although there is support for the kind of regularity advocated by Norrick and Pustejovsky, their principles and systems cannot fully account for the creation of novel meanings. It is hardly controversial to claim that, in working out the conveyed content of linguistic expressions, the interpreter does not only consult linguistic knowledge, but also knowledge of context-situational and linguistic-and encyclopedic knowledge. If given no other clues than the meanings of the constituents, an interpreter would probably construe a compound such as sunbed as "bed in the sun" (a locative relation) or "bed for sunbathing" (a purpose relation), but it is only when one has been able to match this compound with its intended referent that one knows what it means ("equipment with ultraviolet lights that one lies on to get suntanned"). In the case of metonymy, the view adopted here is that the semantic information contained in linguistic items influences the formation of metonyms and guide or confirm but do not fully determine interpretations. Consider the metonym hand, which has several lexicalised meanings (applause, help, dexterity, handwriting), all involving the attribute Instrument, but which nevertheless has been connected with different referents.
In fact, the influence of context may be such that it overrides regular semantic patterns or qualia structures (as indeed acknowledged by Pustejovsky). In the present material there are metonyms–although not many–that could not readily be included in any of the general categories. Examples of such "irregular" constructions are two types of metonyms contextually restricted to hospital settings, i.e. those that mention the complaint of the patient (*liver*, gall bladder, etc.) and those that mention the treatment (*vasectomy*, *by-pass*, etc.). Paraphrases revealing possible connections between explicit and implicit elements could be "someone who has undergone/is to undergo medical treatment of liver/gall bladder" and "someone (to be) subjected to vasectomy/by-pass" respectively. Papafragou (1996:175) and Radden and Kövecses (1999:40) supply two more examples considered irregular, i.e.: you should avoid marrying <u>a</u> sheep at all costs (sheep=someone born in the Year of the sheep) and that's <u>me</u> (me= my bus).

If context and encyclopedic knowledge are allowed such decisive influence on interpretations, one may question whether there is any need for "a battery of regular relations" as advocated by Norrick and others. However, his approach appears to find support in the fact that there are certain interpretations we find natural without guidance from context. Uncle's *picture*, for instance, would be understood as "picture belonging to Uncle" (alienable part), "picture made by Uncle" (artefact), or "picture of Uncle" (for representing something), and the list would stop there, *unless* context suggests otherwise. The question remains, however, whether the knowledge of the kind just appealed to (i.e. that pictures are manmade objects, normally intended to represent something and normally possessed items) is indeed linguistic in nature or general and accessed from domain structures (or event schemas or ICMs) as argued by some. As indicated above, the position adopted here is that interpreters consult world knowledge and abstract semantic patterns. More precisely, the hypothesis is that there is a set of default semantic patterns which function as templates, supplying modifier-head constructions with a "raw" semantic structure and possibly serving as pointers as to what kind of world knowledge should be activated, filling the templates with further semantic content. In this way, semantic amorphousness is reduced, which facilitates interpretation⁴¹, at the same time as a certain degree of semantic flexibility is permitted. For instance, in a combination in which the head denotes a human being and the modifying element a building, the connection between the referents of these elements would predictably be one of location, but the more specific nature of the locative relation may vary according to contextual and world knowledge⁴².

As we have established, adherence to regular relations, although common, is not a necessary condition. Nor is it a sufficient condition. In the discussion of the semantic patterns, it was pointed out that there are restrictions. The impression gained from the present study is that an account of restrictions will have to be connected to the more specific patterns since these differ as to the manner and degree of restrictions. However, the status of the more specific patterns as well as their restrictions need a great deal of further research.

⁴¹ This agrees with one of the tenets of the graded salience hypothesis suggested by Giora (2003:10-12), i.e. coded information is more accessible than uncoded information.

⁴² Compare the results of a test reported in Ryder (1999:277) in which 26 American undergraduates were asked to define *garage man*. 24 of the testees said that it referred to man working in a garage, one that it was a man living in a garage and one that it was a man who works on a garage.

3.3. Interpretation and formation of referential metonymy

We are now ready to consider more precisely the factors involved in the interpretation and construction of referential metonymy. Consider first (186):

(14/151/186) *Table 13* is complaining.

(186) exemplifies a typical context which induces a metonymic interpretation in that it contains a verb whose subject does not fit its argument structure. Nevertheless, the utterance will probably not strike the interpreter as anomalous since it can be amended by complementing the dissonant argument with an implicit element compatible with the verb. This implicit element is consequently necessarily nominal and the referring part and head of the argument, whereas the explicit element assumes modifier status. Note that it is only the head that can be implicitly conveyed. Compare versions a) and b) of (187) and (188). (Heads are underlined. The interpreter must be imagined to know the full context.)

- (187) <u>The jar containing milk tipped over.</u>
 a. *The milk* tipped over. -> [the jar]
 b. The jar tipped over. ->*[the milk]
- (188) <u>The water</u> in the kettle was boiling.
 a. The kettle was boiling. ->[water]
 b. *The water* was boiling. -> *[kettle]

In the case of (151/186) (i.e. <u>Table 13</u> is complaining), the verb requires that the implied referent is human. The semantic character of the explicit element supplies an additional clue in suggesting a connection between it and the implicit head, in this case a locative relation since tables are used by people for sitting at (a telic quale). (As has been demonstrated, occasionally more than one connection is required as in the case of *hand* in the sense "manual worker", in which the two *attributes* "part of human" and "instrument" have been exploited.) This is as far as linguistic clues could help the interpreter. Context and world knowledge will supply further

clues. If the setting is a restaurant, "customer(s)" is a likely interpretation. If the setting is a room where teams play bridge, "players" may suggest itself and if the setting is a prison, "prisoners", etc. In fact, as already observed it is only in the case of lexicalised metonyms that context is not a crucial factor in constructing the conveyed content of a metonymic expression.

Consider next (189) in which there is dissonance between the metonymic adjective *angry* and its head. This induces the introduction of an implicit Experiencer, who is also the author of the letter. However, the interpretation will be that the anger of the letter-writer affects the character of the letter. In this sense, *angry* is accepted as an appropriate modifier of *letter*, in the same way as, for instance, *boil* in *the pot has boiled dry* in a sense is accepted as an appropriate predicate of *pot*.

(189) I received an *angry* letter.

Consider finally (190) as a statement made in a conversation about pop music. There is no misfit between the verb and its arguments but the utterance does not make sense in the situation at hand in its literal interpretation. An interpretation involving a metonymic extension, i.e. 'I like Madonna's music', can correct its irrelevance.

(190) I like Madonna.

(186), (189) and (190) demonstrate that a metonymic interpretation can be triggered by semantic dissonance between a verb and its argument or a modifier and its head, or if it (the utterance) does not fit the situation at hand. In either case it is the interpreter's attempt to make an utterance relevant that ultimately induces a metonymic construal, the effect of which is that anomaly and/or irrelevance is removed. The examples also demonstrate that linguistic, contextual and general knowledge is activated in forming an interpretation. As relevance theorists point out, activation will cease when the interpretation is deemed to make sense in the situation at hand.

A language user will be induced to *produce* a metonymic expression if the mention of some attribute of the intended referent or referents is the easiest and most efficient way of referring to it or them. Referential metonymies are particularly useful when exact knowledge of the referent(s) in question is missing and/or irrelevant. It is also particularly useful when the event or state of the proposition to be conveyed is seen to affect the attribute of some referent rather than the referent itself. This latter use of the construction can be demonstrated by again bringing up the event in which a jar containing milk has tipped over. This accident could affect the jar (it cracked, e.g.), in which case (191) would be a natural description of the event. It could also affect the milk (which was, say, absorbed by the table-cloth). Without a metonymic construction, this latter event would have to be rendered as in (192) or (193). A metonymic construction makes (194) possible, which conveys the event in fewer words with focus on what is relevant.

- (191) The jar (with milk in it) tipped over and cracked.
- (192) The milk in the jar that tipped over was absorbed by the tablecloth.
- (193) The jar with milk in it tipped over and the milk was absorbed by the table-cloth.
- (194) The milk tipped over and was absorbed by the table-cloth.

However, as repeatedly pointed out, a metonymic construction is only efficient provided the explicit element "essentially automatically" suggests the implicit entity. The analysis of the examples in the present study supports the hypothesis that there are certain abstract semantic patterns which aid retrieval of the implicit entity. These include the mention of the model of an iconic representation (*Anthony Hopkins is <u>Hamlet</u>*) or of some entity contiguously connected to the implicit entity. The examples also revealed that there are different degrees of contiguity. There may be complete co-occurrence (composition and equation), partial co-occurrence (inalienable part-whole relations), closeness, past or present, rather than

actual unification (alienable possession, spatial, temporal and causal relations).

4. Summing Up

It has been suggested that distinctions should be made between taxonomic (synecdoche) and partonomic (metonymy) relations and between metonymies that relate one entity to another (referential metonymy) and those that relate two propositions (propositional metonymy). Given these distinctions, referential metonymy has quite a distinct character. It is a nominal construction normally consisting of two elements, occasionally, as in the case of double metonymy, of three. Only one of the elements is explicit. This element is normally a noun, but can be an adjective. If so, the metonym tends to be embedded in a noun phrase. As a rule, however, a referential metonym is an argument of a verb. Frequently the explicit element does not agree with the semantics of the verb, which gives rise to a superficially non-literal utterance. The implicit element is created as an extension to the explicit element in order to correct the anomaly and achieve a relevant interpretation. It follows that the implicit element must agree with the selectional restrictions of the verb. An extension can also be triggered by a literally true, but in the context at hand irrelevant, utterance. In this case the implicit extension must serve to remove the irrelevance of the utterance. That there is an extension of this kind is supported by the fact that an adjective may modify either the explicit element (he is a fine bass "person with a fine bass") or the implicit element (I tried to find <u>a vacant</u> *meter* "vacant place at a meter") and by the fact that anaphoric pronouns may take either the explicit element as antecedent (the kettle is boiling and it (the kettle) is hot) or the implicit element (the French fries is waiting and (s)he is getting upset).

Since two elements are involved in referential metonymy, it can be said to have a syntax, and since it is the implicit element that agrees with the verb, it is this element that assumes referring status and becomes the head. The explicit element can consequently be characterised as a modifier. As such it has mainly restrictive functions directing attention to some specific entity or entities (*the bathtub is running over* [the water in the tub]) or some kind

(*we don't hire <u>longhairs</u>* [people with long hair]). It often serves to pick out unknown "specifics" (*answer <u>the phone</u>* [whoever calls]). This is a particularly important function of metonymic expressions. When it is nonrestrictive, as in *let's see <u>how many mouths</u> there are to feed*, the metonym tends to have rhetorical qualities.

As is natural, the ground is prepared for lexicalisation when the explicit element suggests a kind. Unlike spontaneous metonyms the interpretation of which is dependent on context, the metonymic interpretation of lexicalised metonyms is stored "ready-made" (at least when fully lexicalised) and can sometimes be perceived without context. If a lexicalised metonym does receive a metonymic reading, we have an instance of serial metonymy (i.e. metonymisation of established metonyms). In the history of English words, there are a number of such chains of metonyms.

Although serving above all the rather mundane function of naming, referential metonymy can achieve figurativeness similar to that of metaphors. This occurs in particular when a description of a concrete situation suggests a more abstract proposition as in *the hand that rocks the cradle rules the world*, which suggests that past motherly care achieves a position of power.

The modifier status of the explicit element agrees with its semantic role, which is that of denoting an attribute (=feature) of the implicit head. In order for this role to be fulfilled, the connection between the explicit and implicit elements must be retrieved. General and contextual knowledge, the semantic character of the verb and the explicit element serve as clues. The fact that there is a set of "regular" role combinations in modifier-head constructions may also act as well-trodden conceptual pathways in suggesting the connection. These role combinations include Cause(r)-Effect, Spatial or Temporal Location-Object, Part-Whole, Constituent Matter/Parts-Whole, Model-Representative. Of these. Model-Representative is the "odd man out" since it cannot be said to involve a physical contiguity relation. The patterns are all reversible. It was argued

that they reflect the type of information we instinctively establish when determining what kind of entity we are confronting. That is to say, particularly important information in the conceptualisation of entities would be the origin, effect, when and where something can be found and what it consists of. This would also apply to the conceptual unification of entities involved in modifier-head constructions. This explanation of the existence of the patterns agrees with theories that claim that the multitude of features of an entity are organised into kinds (*attributes* or qualia). However, the role of context in interpreting referential metonymies was found to be essential. Context will initiate the extension-of-argument process and elicit relevant general knowledge.

The study also contained proposals concerning the function of referential metonymy. It was claimed that it is resorted to not only because it efficiently indicates the intended referent or referents but often because it is a natural construction when the event or state to be conveyed is seen as affecting the attribute of an entity although logically it relates to the entity itself, as exemplified by <u>the milk tipped over</u>, <u>the potatoes</u> are boiling, and <u>the cistern</u> is running over. In such cases the verb is accepted as an appropriate predicate of the explicit element in spite of the semantic incompatibility. It was argued that this kind of interpretation is made possible by the introduction of an implicit although backgrounded nominal element agreeing with the verb and that it is reinforced by the topic position of the explicit element.

Acknowledgements

The study was made possible by a grant from the Swedish Research Council. Many thanks to Johanna Bar∂dal, Lena Ekberg, Brigitte Nerlich, Carita Paradis and Marianne Thormählen for helpful comments on an earlier version of the report.

Appendix: Sources from which examples have been collected

Barcelona, Antonio. 2000a. Introduction. The cognitive theory of metaphor and metonymy. In Barcelona, Antonio (ed.). *Metaphor and metonymy at the crossroads*. Berlin and New York: Mouton de Gruyter, 1-25. (8 examples)

Barcelona, Antonio. 2000b. On the plausibility of claiming a metonymic motivation for conceptual metaphor. In Barcelona, Antonio (ed.) *Metaphor and metonymy at the crossroads*. Berlin and New York: Mouton de Gruyter. 31-58. (4 examples)

Barcelona, Antonio. 2003. The case for a metonymic basis of pragmatic inferencing. In Panther, Klaus-Uwe and Thornburg, Linda (eds.). *Metonymy and Pragmatic Inferencing*. Amsterdam/Philadelphia: John Benjamins Publishing Company, 81-102. (3 examples)

Bartsch, Renate. 2002. Generating polysemy: metaphor and metonymy. In Dirven, René and Pörings, Ralf (eds.). *Metaphor and Metonymy in Comparison and Contrast*. Berlin and New York: Mouton de Gruyter, 49-74. (3 examples)

Brdar, Mario and Brdar-Szabó, Rita. 2003. Metonymic coding of linguistic action in English, Croatian and Hungarian. In Panther, Klaus-Uwe and Thornburg, Linda (eds.). *Metonymy and Pragmatic Inferencing*. Amsterdam/Philadelphia: John Benjamins Publishing Company, 241-266. (39 examples)

Croft, William. 2002. Domains in metaphors and metonymies. In Dirven, René and Pörings, Ralf (eds.). *Metaphor and Metonymy in Comparison and Contrast*. Berlin and New York: Mouton de Gruyter, 161-203. (17 examples)

Coulson, Seana and Oakley, Todd. 2003. Metonymy and conceptual blending. In Panther, Klaus-Uwe and Thornburg, Linda (eds.). *Metonymy and Pragmatic Inferencing*. Amsterdam/Philadelphia: John Benjamins Publishing Company, 51-79 (1 example)

Dirven, René. 1999. Conversion as a conceptual metonymy of event schemata. In Panther, Klaus-Uwe and Radden, Günter (eds.). *Metonymy in Language and Thought*. Amsterdam/Philadelphia: John Benjamins Publishing Company, 275-287. (35 examples)

Dirven, René. 2002. Metonymy and metaphor: Conceptualisation strategies. In Dirven, René and Pörings, Ralf (eds.). *Metaphor and Metonymy in Comparison and Contrast* (eds.). Berlin and New York: Mouton de Gruyter, 75-111. (10 examples)

Fass, Dan. 1997. *Processing Metonymy and Metaphor*. Greenwich, Connecticut, London: Ablex Publishing Corporation. (51 examples)

Frisson, Steven and Pickering, Martin J. 1999. The processing of metonymy: evidence from eye movements, *Journal of Experimental Psychology: Learning, Memory, and Cognition*, (25) 6, 1366-1383. (36 examples)

Gibbs, Raymond. 1999. Speaking and thinking with metonymy. In Panther, Klaus-Uwe and Radden, Günter (eds.). *Metonymy in Language and Thought*. Amsterdam/Philadelphia: John Benjamins Publishing Company, 61-76. (23 examples)

Goossens, Louis. 2002. Metaphtonymy: the interaction of metaphor and metonymy in expressions for linguistic action. In Dirven, René and Pörings, Ralf. *Metaphor and Metonymy in Comparison and Contrast*. Berlin and New York: Mouton de Gruyter, 349-377. (12 examples)

Koch, Peter. 1999. Frame and contiguity. In Panther, Klaus-Uwe and Radden, Günter (eds.). *Metonymy in Language and Thought*. Amsterdam/Philadelphia: John Benjamins Publishing Company, 139-167. (3 examples)

Lakoff, George and Johnson, Mark. 1980. *Metaphors We Live By*. Chicago and London: The Chicago University Press, 35-39. (48 examples)

Langacker, Ronald. 1991. Active zones. In *Concept, Image and Symbol*. Berlin, New York: Mouton de Gruyter, 189-201. (4 examples)

Nerlich, Brigitte, Clarke, David D. and Todd, Zazie. 1999. Mummy, I like being a sandwich. In Panther, Klaus-Uwe and Radden, Günter (eds.). *Metonymy in Language and Thought*. Amsterdam/Philadelphia: John Benjamins Publishing Company, 361-383. (19 examples)

Nerlich, Brigitte and Clarke, David D. 2001. Serial metonymy, *Journal of Historical Pragmatics* 2(2):245-275. (18 examples)

Nunberg, Geoffrey. 1996. Transfer of meanings. In Pustejovsky, James and Boguraev, Branimir (eds.). *Lexical Semantics*. Oxford: Clarendon Press (pp 109-132) and in *Journal of Semantics* 12:109-132. (23 examples)

Panther, Klaus-Uwe and Thornburg, Linda. 2002. The roles of metaphor and metonymy in -er nominals. In Dirven, René and Pörings, Ralf (eds.). *Metaphor and Metonymy in Comparison and Contrast*. Berlin and New York: Mouton de Gruyter, 280-319. (54 examples)

Panther, Klaus-Uwe and Thornburg, Linda. 2003. Introduction: On the nature of conceptual metonymy. In Panther, Klaus-Uwe and Thornburg, Linda (eds.). *Metonymy and Pragmatic Inferencing*. Amsterdam/Philadelphia: John Benjamins Publishing Company, 1-20. (3 examples)

Panther, Klaus-Uwe and Thornburg, Linda. 2003. Metonymies as natural inference and activation schemas. In Panther, Klaus-Uwe and Thornburg, Linda (eds.). *Metonymy and Pragmatic Inferencing*. Amsterdam/Philadelphia: John Benjamins Publishing Company, 127-147. (6 examples)

Pankhurst, Ann. 1999. Morrison's song of Solomon. In Panther, Klaus-Uwe and Radden, Günter (eds.). *Metonymy in Language and Thought*. Amsterdam/Philadelphia: John Benjamins Publishing Company. (1 example)

Papafragou, Anna. 1996. On metonymy, Lingua 99:169-195. (23 examples)

Pauwels, Paul. 1999. Putting metonymy in its place. In Panther, Klaus-Uwe and Radden, Günter (eds.). *Metonymy in Language and Thought*. Amsterdam/Philadelphia: John Benjamins Publishing Company, 255-273. (30 examples)

Queller, Kurt. 2003. Metonymic sense shifts: Its origins in hearers' abductive construal of usage in context. In Cuyckens, Hubert, René, Dirven & John Taylor (eds.). *Cognitive Approaches to Lexical Semantics*. Berlin/New York: Mouton de Gruyter, 211-241. (3 examples)

Radden, Günter and Kövecses, Zoltán. 1999. Towards a theory of metonymy. In Panther, Klaus-Uwe and Radden, Günter (eds.). *Metonymy in Language and Thought*. Amsterdam/Philadelphia: John Benjamins Publishing Company. (141 examples)

Ruiz de Mendoza Ibánez, Francisco J. 2000. The role of mappings and domains in understanding metonymy. In Barcelona, Antonio (ed.). *Metaphor and Metonymy at the Crossroads*. Berlin and New York: Mouton de Gruyter, 109-132. (9 examples)

Ruiz de Mendoza Ibánez, Francisco J. and Díez Velasco, Olga I. 2002. Patterns of conceptual interaction. In Dirven, René and Pörings, Ralf (eds.). *Metaphor and Metonymy in Comparison and Contrast*. Berlin and New York: Mouton de Gruyter, 489-532. (28 examples)

Ruiz de Mendoza, Francisco J. and Pérez Hernández, Lorena. 2003. Cognitive operations and pragmatic implication. In Panther, Klaus-Uwe and Thornburg, Linda (eds.). *Metonymy and Pragmatic Inferencing*. Amsterdam/Philadelphia: John Benjamins Publishing Company, 23-49. (11 examples)

Saeed, John. 1997. *Semantics*. Oxford, UK and Cambridge, USA: Blackwell Publishers. (ch 7 and p320 ff) (10 examples)

Seto, Ken-ichi. 1999. Distinguishing metonymy from synecdoche. In Panther, Klaus-Uwe and Radden, Günter (eds.). *Metonymy in Language and Thought*. Amsterdam/Philadelphia: John Benjamins Publishing Company, 77-120. (74 examples)

Stefanowitsch, Anatol. 2003. A construction-based approach to indirect speech acts. In Panther, Klaus-Uwe and Thornburg, Linda (eds.). *Metonymy and Pragmatic Inferencing*. Amsterdam/Philadelphia: John Benjamins Publishing Company, 105-126. (3 examples)

Taylor, R. John. 2002. Category extension by metonymy and metaphor. In Dirven, René and Pörings, Ralf (eds.). *Metaphor and Metonymy in Comparison and Contrast*. Berlin and New York: Mouton de Gruyter, 323-347. (9 examples)

Voßhagen, Chistian. 1999. Opposition as a metonymic principle. In Panther, Klaus-Uwe and Radden, Günter (eds.). *Metonymy in Language and Thought*. Amsterdam/Philadelphia: John Benjamins Publishing Company, 289-308. (99 examples)

Waltereit, Richard. 1999. Grammatical constraints on metonymic reference. In Panther, Klaus-Uwe and Radden, Günter (eds.). *Metonymy in Language and Thought*. Amsterdam/Philadelphia: John Benjamins Publishing Company, 233-253. (1 example)

Warren, Beatrice. 1992a Sense Developments. Stockholm: Almqvist & Wiksell International. (ch 5) (68 examples)

Warren, Beatrice. 1992b. What euphemisms tell us about the interpretation of words, *Studia Linguistica* 46 (2): 128-142. (28 examples)

Warren, Beatrice. 1995. Distinguishing between metaphor and metonymy. In Melchers, Gunnel and Warren, Beatrice (eds.). *Studies in Anglistics*. Stockholm: Almqvist & Wiksell International, 137-150. (46 examples)

Warren, Beatrice. 1998. What *is* metonymy? In Hogg, Richards and van Bergen, Linda (eds.). *Historical Linguistics 1995*, Amsterdam/Philadelphia: John Benjamins, 301-310 (4 examples).

Warren, Beatrice. 1999. Aspects of referential metonymy. In Panther, Klaus-Uwe and Radden, Günter (eds.). *Metonymy in Language and Thought*. Amsterdam/Philadelphia: John Benjamins Publishing Company, 121-135. (5 examples)

Warren, Beatrice. 2002. An alternative account of the interpretation of referential metonymy and metaphor. In Dirven, René and Pörings, Ralf (eds.). *Metaphor and Metonymy in Comparison and Contrast*. Berlin/New York: Mouton de Gruyter. 113-133. (4 examples)

Zelinsky-Wibbelt, Cornelia. 2003. Discourse and lexicalization. In Zelinsky-Wibbelt, Cornelia (ed.). *Text, Context, Concepts*. Berlin/New York: Mouton de Gruyter, 19- 34. (1 example)

Altogether there are 53 sources yielding 1018 different examples, out of which 634 (62.5%) fit the suggested criteria for referential metonymy and 57 the suggested criteria for propositional metonymy. Only English examples were collected.

The collection of referential metonyms cannot be said to be truly representative since many examples were constructed on the analogy of well-known metonyms. Sometimes a particular pattern was examined (of Frisson's 36 examples, 26 were Place-forinstitution/event metonyms, for instance), which added to the bias of the collection. I have therefore refrained from reporting on statistical results. These would in any case be of little interest and in this case possibly misleading. The collection was used to test hypotheses and to ascertain, as far as possible, descriptive accuracy.

References

(See also appendix)

Aarts, Jan and Calbert, Joseph. 1979. *Metaphor and Non-metaphor. The Semantics of Adjective-noun Combinations*. Tübingen: Max Niemeyer Verlag.

Altenberg, Bengt. 1982. *The Genitive v. the of-Construction*. Lund Studies in English 62.

Barcelona, Antonio. 2000. Introduction. The cognitive theory of metaphor and metonymy in Barcelona, Antonio (ed.). *Metaphor and Metonymy at the Crossroads*. Berlin and New York: Mouton de Gruyter, 1-25.

Barcelona, Antonio. 2003. The case for a metonymic basis of pragmatic inferencing. In Panther, Klaus-Uwe and Thornburg, Linda (eds.). *Metonymy and Pragmatic Inferencing*. Amsterdam/Philadelphia: John Benjamins Publishing Company, 81-102.

Brdar, Mario and Brdar-Szabó, Rita. 2003. Metonymic coding of linguistic action in English, Croation and Hungarian. In Panther, Klaus-Uwe and

Thornburg, Linda (eds.). *Metonymy and Pragmatic Inferencing*. Amsterdam/Philadelphia: John Benjamins Publishing Company, 241-266.

Barsalou, Lawrence W. 1992. Frames, Concepts and Conceptual Fields. In Kittay, Eva Feder and Lehrer, Adrienne (eds.) *Frames, Fields and Contrasts*. Hilldale: Lawrence Erlbaum Associates, 21-74.

Bartning, Inge. 1980. Remarques sur la syntaxe et la sémantique de pseudo-adjectifs dénominaux en français. Stockhom: Almquist &Wiksell International.

Bredin, Hugh. 1984. Metonymy, Poetics Today 5(1): 45-58.

Brekle, Herbert.E. 1970. *Generative Satzsemantik und transformationelle Syntax im System der englischen Nominalkomposition*. München: Wilhelm Fink.

Bybee, Joan, Perkins, Revere, and Pagliuca, William. (1994). *The Evolution of Grammar:Tense, Aspect, and Modality in the Languages of the World*. Chicago and London: University of Chicago Press.

Clark, Eve and Clark, Herbert. 1979. When nouns surface as verbs, *Language*, 55(4): 467-481.

Copestake, Ann and Briscoe, Ted. 1996. Semi-productive polysemy and sense extension. In Pustejovsky, James and Boguraev, Branimir (eds.). *Lexical Semantics*. Oxford: Clarendon Press, 15-67.

Croft, William. 1993. The role of domains in the interpretation of metaphors and metonymies, *Cognitive Linguistics* 4(4): 335-370.

Dik, Simon. 1977. Inductive generalisation in semantic change. In Hopper, Paul (ed.). *Studies in Descriptive and Theoretical Linguistics: Festschrift for Winfred P. Lehmann*. Amsterdam: John Benjamins, 283-370. Dirven, René. 1993. Metonymy and metaphor: Different mental strategies of conceptualisation, *Leuvense Bijdragen* 82: 1-28.

Dirven, René. 1999. Conversion as a conceptual metonymy of event schemata. In Panther, Klaus-Uwe and Radden, Günter (eds.). *Metonymy in Language and Thought*. Amsterdam/Philadelphia: John Benjamins Publishing Company, 275-287.

Dirven, René. 2002. Metonymy and metaphor: Conceptualisation strategies. In Dirven, René and Pörings, Ralf (eds.). *Metaphor and Metonymy in Comparison and Contrast* (eds.). Berlin and New York: Mouton de Gruyter, 75-111.

Fass, Dan. 1997. *Processing Metonymy and Metaphor*. Greenwich, Connecticut, London: Ablex Publishing Corporation.

Fauconnier, Gilles and Mark Turner. 2002. *The Way We Think: Conceptual Blending and the Mind's Hidden Complexities*. Basic Books.

Feyaerts, Kurt. 2000. Refining the Inheritance Hypothesis: Interaction between metaphoric and metonymic hierarchies. In Barcelona, Antonio (ed.) *Metaphor and Metonymy at the Crossroads*. Berlin and New York: Mouton de Gruyter, 59-76.

Geerærts, Dirk. 1994.Metonymy. In Asher, R. and Simpson, J. (eds.). *The Encyclopedia of Language and Linguistics*. *Vol.5*. Oxford and New York: Pergamon Press, 2477-2478.

Gibbs, Raymond. 1994. *The Poetics of Mind: Figurative Thought, Language and Understanding*. Cambridge University Press.

Gibbs, Raymond. 1999. Speaking and thinking with metonymy. In Panther, Klaus-Uwe and Radden, Günter (eds.). *Metonymy in Language and Thought*. Amsterdam/Philadelphia: John Benjamins Publishing Company, 61-76.

Giora, Rachel. 2003. On Our Mind. Oxford University Press.

Goossens, Louis. 1995. Metaphtonymy: the interaction of metaphor and metonymy in expressions for linguistic action. In Goossens, Louis, Paul Pauwels, Brygida Rudzka-Ostyn, Anne-Marie Simon Vandenbergen and Johan Vanparys (eds.). *By Word of Mouth. Metaphor, Metonymy and Linguistic Action in a Cognitive Perspective*. Amsterdam/Philadelphia: John Benjamins, 159-174.

Goossens, Louis. 2002. Metaphtonymy: the interaction of metaphor and metonymy in expressions for linguistic action. In Dirven René and Pörings, Ralf. *Metaphor and Metonymy in Comparison and Contrast*. Berlin - New York: Mouton de Gruyter, 349-377.

Koch, Peter. 1999. Frame and contiguity. In Panther, Klaus-Uwe and Radden, Günter (eds.). *Metonymy in Language and Thought*. Amsterdam/Philadelphia: John Benjamins Publishing Company, 139-167.

Halliday, M. A. K. 1994. *An Introduction to Functional Grammar*. London/Melbourne/Auckland: Edward Arnold.

Hopper, Paul and Traugott, Elizabeth. 1993. *Grammaticalisation*. Cambridge University Press.

Jackendoff, Ray. 1975. On belief contexts, *Linguistic Inquiry* 6:53-93.

Jacobson, Roman. 1956. The metaphoric and metonymic poles. In Jacobson, Roman and Halle, Morris (eds.). *Fundamentals of Language*, Gravenhage:Mouton & Co, 76-82.

Kövecses, Zoltán and Radden, Günter. 1998. Metonymy: developing a cognitive linguistic view, *Cognitive Linguistics* 9(1): 37-77.

Lakoff, George. 1987. Women, Fire and Dangerous Things: What Categories Reveal about the Mind. Chicago: The University of Chicago Press.

Lakoff, George and Johnson, Mark. 1980. *Metaphors We Live By*. Chicago: 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.

Leitzky, Eva. 1989. (De)nominale Adjektive im heutigen Englisch. Tübingen: Max Niemeyer Verlag.

Levi, Judith. 1978. *The Syntax and Semantics of Complex Nominals*. New York, San Francisco, London: Academic Press.

Lipka, Leonhard. 1988. A rose is a rose is a rose: on simple and dual categorization in natural languages. In Hüllen, W and Schulze, R (eds.), *Understanding the Lexicon*. Tübingen: Niemeyer, 355-366.

Ljung, Magnus.1970. *English Denominal Adjectives*. Gothenburg Studies in English 21.

Nerlich, Brigitte. Forthcoming. Synecdoche: A trope, a whole trope and nothing but a trope? In Buckhardt, Armin and Nerlich, Brigitte (eds.). *The Epistemology of Metaphor and other Tropes*. Amsterdam: John Benjamins.

Nerlich, Brigitte and Clarke, David D. 1999. Synecdoche as a cognitive and communicative strategy. In Blank, Andreas and Koch, Peter (eds.). *Historical Semantics and Cognition*, Berlin/New York: Mouton de Gruyter, 197-214.

Nerlich, Brigitte and Clarke, David D. 2001. Serial metonymy. A study of reference-based polysemisation, *Journal of Historical Pragmatics* 2(2): 245-272.

Niemeier, Suzanne. 2000. Straight from the heart - metonymic and metaphorical explorations. In Barcelona, Antonio (ed.). *Metaphor and Metonymy at the Crossroads*. Berlin and New York: Mouton de Gruyter, 195-213.

Norrick, Neal. 1981. Semeotic Principles in Semantic Theories. Amsterdam: John Benjamins.

Nunberg, Geoffrey. 1979. The nonuniqueness of semantic solutions: polysemy, *Linguistics and Philosophy* 3: 143-194.

Nunberg, Geoffrey. 1996. Transfer of meanings. In Pustejovsky, James and Boguraev, Branimir (eds.). *Lexical Semantics*. Oxford: Clarendon Press, 109-132 and in *Journal of Semantics* 12:109-132.

Panther, Klaus-Uwe and Thornburg, Linda. 1999. The Potentiality for Actuality Metonymy in English and Hungarian. In Panther, Klaus-Uwe and Radden, Günter (eds.). *Metonymy in Language and Thought*. Amsterdam/Philadelphia: John Benjamins Publishing Company, 332-357.

Panther, Klaus-Uwe and Thornburg, Linda. 2002. The roles of metaphor and metonymy in *-er* nominals. In Dirven, René and Pörings, Ralf (eds.). *Metaphor and Metonymy in Comparison and Contrast*. Berlin and New York: Mouton de Gruyter, 280-319.

Panther, Klaus-Uwe and Thornburg, Linda. 2003. Introduction: On thenature of conceptual metonymy. In Panther, Klaus-Uwe and Thornburg,Linda (eds.).Metonymy and Pragmatic Inferencing.Amsterdam/Philadelphia: John Benjamins Publishing Company, 1-20.

Paradis, Carita. 2004. Where does metonymy stop? Senses, facets and active zones, *Metaphor and Symbol* 19 (4), 245-264.

Pauwels, Paul. 1999. Putting metonymy in its place. In Panther, Klaus-Uwe and Radden, Günter (eds.). *Metonymy in Language and Thought*. Amsterdam/Philadelphia: John Benjamins Publishing Company, 255-273.

Pitt, David. and Katz, Jerrold J. 2000. Compositional idioms, *Language* 76(2): 409-432.

Pustejovsky, James. 1996. The Generative Lexicon. The MIT Press.

Queller, Kurt. 2003. Metonymic sense shifts: Its origins in hearers' abductive construal of usage in context. In Cuyckens, Hubert, Dirven, René and Taylor, John (eds.). *Cognitive Approaches to Lexical Semantics*. Berlin/New York: Mouton de Gruyter, 211-241.

Radden, Günter. 2002. How metonymic are metaphors? In Dirven, René and Pörings, Ralf (eds.). *Metaphor and Metonymy in Comparison and Contrast*. Berlin and New York: Mouton de Gruyter, 407-434.

Radden, Günter and Kövecses, Zoltán. 1999. Towards a theory of metonymy. In Panther, Klaus-Uwe and Radden, Günter (eds.). *Metonymy in Language and Thought*. Amsterdam/Philadelphia: John Benjamins Publishing Company.

Radden, Günter and Seto, Ken-ichi. 2003. Metonymic construals of shopping requests in HAVE- and BE-languages. In Panther, Klaus-Uwe and Thornburg, Linda.(eds.). *Metonymy and Pragmatic Inferencing*. Amsterdam/Philadelphia: John Benjamins Publishing Company, 223-241.

Reddy, Michael. 1979. The conduit metaphor. In Ortony, Andrew (ed.). *Metaphor and Thought*. Cambridge University Press, 284-324.

Richards, I.A. 1965 (first published in 1936). *Realism and Reason, Philosophical Papers, Volume 3.* Cambridge University Press.

Riemer, Nick. 2002. When is metonymy no longer metonymy? In Dirven, René and Pörings, Ralf (eds.). *Metaphor and Metonymy in Comparison and Contrast*. Berlin and New York: Mouton de Gruyter, 379-406.

Ruiz de Mendoza Ibánez, Francisco J. 2000. The role of mappings and domains in understanding metonymy. In Barcelona, Antonio (ed.). *Metaphor and Metonymy at the Crossroads*. Berlin and New York: Mouton de Gruyter, 109-132.

Ruiz de Mendoza Ibánez, Francisco J. and Díez Velasco, Olga I. 2002. Patterns of conceptual interaction. In Dirven, René and Pörings, Ralf (eds.). *Metaphor and Metonymy in Comparison and Contrast*. Berlin - New York: Mouton de Gruyter, 489-532

Ruiz de Mendoza Ibáñez, F. J. and Díez Velasco, O. 2004. Metonymic motivation in anaphoric reference. In Radden, Günter and Panther, Klaus-Uwe (eds.). *Studies in Linguistic Motivation* (Cognitive Linguistics Research). Berlin and New York: Mouton de Gruyter; 293-320.

Ryder, Mary Ellen. 1999. "Bankers and blue-chippers: an account of *-er* formations in present-day English", *English Language and Linguistics* 3(2): 269-297.

Stallard, David. 1993. Two kinds of metonymy. In *Proceedings of the 31st* Annual Meeting of the Association for Computational Linguistics (ACL-93), Ohio State University, Columbus, OH, pp 87-94.

Seto, Ken-ichi. 1999. Distinguishing metonymy from synecdoche. In Panther, Klaus-Uwe and Radden, Günter (eds.). *Metonymy in Language and Thought*. Amsterdam/Philadelphia: John Benjamins Publishing Company, 77-120. Stefanowitsch, Anatol. 2003. A construction-based approach to indirect speech acts. In Panther, Klaus-Uwe and Thornburg, Linda (eds.). *Metonymy and Pragmatic Inferencing*. Amsterdam/Philadelphia: John Benjamins Publishing Company, 105-126.

Stern, Gustaf. 1965 (first published 1931). *Meaning and the Change of Meaning*. Bloomington: Indiana University Press.

Taylor, R. John. 2002. Category extension by metonymy and metaphor. In Dirven, René and Pörings, Ralf (eds.). *Metaphor and Metonymy in Comparison and Contrast*. Berlin and New York: Mouton de Gruyter, 323-347.

Viberg, Åke. 1999. Polysemy and differentiation in the lexicon. Verbs of physical contact in Swedish. In Allwood, Jens and Gärdenfors, Peter (eds.). *Cognitive Semantics. Meaning and Cognition*. Amsterdam/Philadelphia: John Benjamins Publishing Company, 87-129.

Voßhagen, Chistian. 1999. Opposition as a metonymic principle. In Panther, Klaus-Uwe and Radden, Günter (eds.). *Metonymy in Language and Thought*. Amsterdam/Philadelphia: John Benjamins Publishing Company, 289-308.

Warren, Beatrice. 1978. *Semantic Patterns of Noun-Noun Compounds*. Gothenburg Studies in English 41.

Warren, Beatrice. 1984. *Classifying Adjectives*. Gothenburg Studies in English 56.

Warren, Beatrice. 1985. Types, distribution and functions of covert semantic relations in complex lexical items and in combinations of lexical items. In Hoppenbrouwers, G., Seuren, P. and Weiters, A. (eds.). *Meaning and the Lexicon*. Dordrecht: Foris Publication, 55-62.

Warren, Beatrice. 1992. Sense Developments. Stockholm: Almqvist & Wiksell International.

Warren, Beatrice. 1995. Distinguishing between metaphor and metonymy. In Melchers, Gunnel and Warren, Beatrice (eds.). *Studies in Anglistics*. Stockholm: Almqvist & Wiksell International, 137-150.

Warren, Beatrice. 1998. What *is* metonymy? In Hogg, Richard and van Bergen, Linda (eds.). *Historical Linguistics* 1995, Amsterdam/ Philadelphia: John Benjamins, 301-310.

Warren, Beatrice. 1999a. Aspects of referential metonymy. In Panther, Klaus-Uwe och Radden, Günter (eds.). *Metonymy in Language and Thought* Amsterdam: John Benjamins, 121-135.

Warren, Beatrice. 1999b. Laws of thought, knowledge and lexical change. In Blank, Andreas and Koch, Peter (eds.). *Historical Semantics and Cognition*. Berlin/New York: Mouton de Gruyter, 215-234.

Warren, Beatrice. 2002. An alternative account of the interpretation of referential metonymy and metaphor. In Dirven, René and Pörings, Ralf (eds.). *Metaphor and Metonymy in Comparison and Contrast*. Berlin/New York: Mouton de Gruyter. 113-133.

Warren, Beatrice. 2003. The role of links and/or qualia in modifier-head constructions. In Nerlich et al (ed.). *Polysemy: Flexible Patterns of Meaning in Mind and Language*. Berlin/New York: Mouton de Gruyter, 233-251.

Warren, Beatrice. 2004. Anaphoric pronouns of metonymic expressions. In on-line journal *metaphorik.de*, 07/2004.

Wundt, Wilhelm. 1900 Völkerpsychologie II, Leipzig. Verlag von Wilhelm Engelmann..