METONYMY, GRAMMAR, AND COMMUNICATION

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INTRODUCTION

For a long time the study of metonymy has rated second best in comparison to the amount of effort devoted to the understanding of the closely related phenomenon of metaphor. This was the case in the work of ancient rhetoricians who thought of metonymy as a 'trope' or figure of speech. And it is also the general feeling that arises from a quick look at the literature produced by cognitive linguists about this topic. Within the cognitivist tradition, metonymy has been promoted from being regarded as a mere rhetorical figure to the status of a mental mechanism underlying many aspects of human conceptualization. In this, the relevance of metonymy as a cognitive strategy of knowledge organization is comparable to that of metaphor. Nevertheless, while metaphor has been discussed at length by cognitive linguists,[1] metonymy has attracted a considerably smaller amount of attention. This phenomenon is treated rather briefly in Lakoff and Johnson (1980), Lakoff and Turner (1989), Lakoff (1987), and Taylor (1995), where metonymy is set apart from metaphor, only to devote the largest part of the discussion to the latter. It is only in the 1990s, and particularly in the late 1990s, that metonymy has gradually started to awaken the interest of cognitive linguists, as is evidenced by the growing number of publications on the topic in those years. Among others, we may refer to the studies by Goossens (1990), Croft (1993), and Dirven

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[1] Seminal studies on metaphor include Lakoff and Johnson (1980, 1999), Lakoff and Turner (1989), Kövecses (1990), and Lakoff (1987, 1993, 1996).

(1993), and the collections of articles in Panther and Radden (1999), and in Barcelona (2000a). Little by little, metonymy has ceased to be the marginal topic that it once was. The pervasiveness of metonymic phenomena has even led some authors to postulate that it is often at the basis of metaphoric thinking (see Goossens, 1990; Taylor 1995; Barcelona, 2000b; and Niemeier, 2000). This is in agreement with the claims of some scholars who argue that metonymy occupies a more central role in our conceptual apparatus than granted so far. In this connection, Koch's (1999: 139) words are representative of the general interest raised by this topic in recent years:

> [...] I am convinced that metonymy occurs much more frequently than metaphor and tells us a great deal about our cognitive equipment. So it is worthwhile studying its cognitive bases in some detail.

Nevertheless, as will become apparent below, many aspects of metonymy remain unexplained or have been only partially and/or unsatisfactorily accounted for. This book is an attempt to provide answers to some of the questions about the nature and functions of metonymy which still remain. A description of our precise research goals, some notes on methodological decisions and an outline of chapter content are presented in detail in the last three sections of this introduction. Before that, we shall offer a brief historical overview of the character and orientation of the different approaches to the study of metonymy, from its original conception as a trope to the present-day interpretation of this phenomenon as a cognitive operation. This is followed by a succinct description of the main weaknesses of present-day theories of metonymy and a summary of those aspects of the study of metonymy which are in need of further research.

0.1. Metonymy: From 'trope' to 'cognitive tool'

Etymologically, the word 'metonymy' comes from classical Greek and means 'change of meaning'. One of the first occurrences of this term is found in Plato's debate about the arbitrariness or naturalness of signs. Thus, Democritus (as quoted in Proclus' comentary on the *Cratylus 16*) offers four arguments in favour of arbitrariness: 'homonymy' or 'polysemy', 'polyonymy', 'nonymy', and 'metonymy' (see

Householder, 1995 for details). The most widespread view of metonymy in classical times, however, originated in Aristotle, who subsumed this phenomenon under metaphor. In chapter 21 of his *Poetics*, Aristotle put forward a classification of metaphor into four different kinds, one of which was metonymy.[2]

The first recorded definition of 'metonymy', however, is anonymous and was included in a treatise on rhetorics entitled *Rhetorica ad Herenium:*

> Denominatio est, quae ab rebus propinquis et finitimis trahit orationem, qua possit intellegi res, quae non suo vocabulo sit appellata.[3] (Her. IV: 32, 43= Anonymous 1894: 337).

As is evident from this definition, the classical rhetorical interpretation of metonymy is based on the notions of 'closeness' or 'contiguity': a thing which holds a relation of proximity with another may take its name from it. This way of understanding metonymy is found in the works of the most well-known rhetoricians of that time, including Cicero. The motivation underlying the use of metonymy during this period is simply the principle of decorum: 'ornandi causa propium commutatum'[4] (Cicero, *De Oratore, III, XLII*, in LeGuern, 1973). In other words, metonymy is just a type of trope, a figure of speech which is used to make discourse more attractive and/or persuasive.

A similar conception of metonymy as a trope or the use of a word to name a different, but connected, entity is still accepted today by contemporary rhetoricians, as the following quotes illustrate:

> [...] *désignation d'un objet par le nom d'un autre objet* qui fait comme lui un tout absolument à part, mais qui lui doit ou à qui il doit lui-même plus ou

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[2] The debate as to whether metonymy is a subclass of metaphor was brought back to the fore during the seventies and early eighties. Some scholars hold the view that metonymy is in fact a subtype of metaphor (Levin, 1977; Lodge, 1977; Genette, 1980; Searle, 1979), while others take it to be a different kind of phenomenon deriving from different principles (Jakobson, 1971; Bredin, 1984).

[3] 'Denomination [i.e. 'metonymy'] is a trope that takes its linguistic form from near and close things and by which we can understand something that is not named by its own word' [our translation]

[4] 'In order to improve the style, the proper word is changed' [our translation]

moins, ou pour son existence, ou pour sa manière d'être[5]. (Fontanier 1968: 79; our italics).

Die Metonymie verwendet [...] *ein Wort in der Bedeutung eines anderen Wortes*, das semantisch mit dem verwendeten Wort in einer realen Beziehung steht[6] (Lausberg 1960: §565; our italics).

[...] *entità qualsiasi mediante il nome di un'altra entità* che stia alla prima come la causa sta all'effetto e viceversa, oppure che le corrisponda per legami di reciproca dipendenza[7]. (Mortara Garavelli, 1988: 149; our italics).

The Aristotelian view of metonymy as a subsidiary phenomenon is maintained in modern rhetorics. The *Groupe de Liège* or *Groupe μ* contends that synecdoche is the primary trope and that both metonymy and metaphor are by-products resulting from the combination of two synecdoches (see Schofer and Rice, 1977; Dubois et al. 1970). Within this school, metonymy is seen as the substitution of a word form for another in cases where there exists a close association between them. Such an association may be of two types:

(1) The referents of the two expressions involved in the metonymic mapping are part of the same 'spatio-temporal totality'.

(2) The two entities involved in the metonymic mapping are connected not through their referents, but through their meaning. In other words, they belong to the same 'semantic whole'.

Just as was the case in the classical tradition, the import and ubiquity of metonymy as a conceptualizing mechanism is ignored in this account in favour of a view of metonymy as a mere linguistic tool. However, metaphor and metonymy have

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[5] '*Designation of an object by the name of another object* which, like the first, makes a separate whole, but which is more or less dependent on, or is depended on by, that object, either for its existence or for its nature' [our translation]

[6] 'Metonymy makes use of one word with the meaning of another word which from a semantic perspective holds a real relationship with the used word' [our translation]

[7] .- '[...]*any entity by means of the name of another entity* which holds the same relationship to the former as the cause holds to the effect, or viceversa, or which corresponds to it because of reciprocal dependence' [our translation].

long been recognized as basic phenomena (cf. Jakobson, 1971a). Also, the notion of 'semantic closeness' as licensing metonymic assotiations is not without its problems. 'Semantic closeness' has been treated in terms of operations on sets of semantic features. As has been pointed out by Koch (1999: 145), this means that, in order to understand the use of the word *bar* ('counter') as standing metonymically for 'public house', "we need to posit a semantic feature [counter] as figuring in the set of features that form the sememe 'public house' of the word Eng. *bar*". Nevertheless, as Koch (1999: 145) rightly adds, this account of metonymy is neither realistic nor conclusive. On the one hand, the understanding of Eng. *bar* as 'public house' is made possible by our knowledge of public houses and not by our knowledge of the word *bar*. On the other hand, this type of explanation would lead to the inclusion in our description of a given lexical item of all the information necessary to account for whatever metonymy may occur in this lexical item in the course of -even future- language history. And this task is, of course, far from practicable.[8]

This brief discussion of the bar-counter metonymy seems to point to a different type of contiguity relation between the two elements connected by means of a metonymy, namely, a relationship of 'conceptual' contiguity or closeness. This idea is not new. As we will show presently, some of its proponents date back to the first decades of the 20th century. Let us stress first, however, the relevance of this shift in the conception of the nature of the contiguity relation underlying metonymy. It is thanks to the understanding of this contiguity relation as 'conceptual', rather than 'linguistic' or 'semantic', that the door opens to a broader and richer view of metonymy, not only as a linguistic tool, but also as a mental strategy for conceptualisation.

As noted in Koch (1999: 142), the first time a definition of metonymy includes the notion of conceptual contiguity is in the following quotation by Roudet (1921: 690):

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[8] This intralinguistic explanation of metonymy based on the contiguity of 'linguistic meanings' or 'semantic features' is also held by Ullmann (1962), who defines metonymy in terms of 'contiguity of senses', and Jakobson (1956, 1971), whose conception of metonymy is based on his two-axes theory of signs. In Jakobson's account, metonymy is associated with combinations of signs on the syntagmatic axis. The relation of contiguity is, therefore, between linguistic signs, rather than between concepts, contrary to what is held by modern cognitive linguists.

Changements résultant d'une association par contiguïte entre les idées. Tous les changements que l'on a appelés changements par connexité ou par métonymie (devenue inconsciente) appartiennent à cette catégorie[9]. [our italics]

Nevertheless, for a long time, Roudet's contribution was not paid too much attention, most discussions in his time evolving around Jakobson's popular two-axes theory and his treatment of metonymy as a phenomenon based on a relation of contiguity between 'semantic features' on the syntagmatic axis.[10] Some decades later, however, in the 1970s and 1980s, new findings regarding the nature of human conceptualization made by cognitive scientists and experimental psychologists provided the necessary atmosphere for a shift of thought regarding the nature of metonymy. Within this trend, Roudet's definition in terms of associations between ideas started to appear as more plausible than the previous conception of metonymy as based on 'contiguity of senses'.

Against both the classical and the more recent views (Group Liège, Jakobson, Ullmann, and modern rhetoricians), a new conception of metonymy arose from the seminal work of George Lakoff and his associates within the framework provided by Cognitive Linguistics. Although research by cognitive linguists was initially centred on the study of metaphor, neither the latter nor metonymy is relegated to rhetorical purposes anymore. A new vision of these phenomena is sketched out in which both are given a higher status as two of the mental strategies involved in human reasoning and the use of language. Metonymy was first described in cognitive terms by Lakoff and

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[9] '*Changes which result from an association based on contiguity of ideas*. Every change which has been labelled change by connection or by metonymy (which takes place unconsciously) belongs to this category' [our translation].

[10] Jakobson's (1956, 1971) considerations regarding metonymy have recently been taken up and elaborated by Dirven (1993) in an attempt to put forward a typology of metonymies which should substantiate the existence of a continuum from metaphor to metonymy. Thus, Dirven distinguishes three main types of metonymic mapping: *linear* (whenever a metonymic mapping does not carry a systematic change in the meaning of a term), *conjuctive* (which involves a semantic widening towards the inclusion of sociocultural facts), and *inclusive* (which always has a figurative interpretation). These three metonymic types form a continuum from less to more paradigmatic in such a way that inclusive metonymies are closer to the metaphoric pole than conjuctive metonymies which, in turn, are nearer to metaphor than linear metonymies. Dirven's typology is especially useful in order to account for the different degrees of conventionalization of metonymy; see our discussion on Dirven's account in section 1.3.

Johnson (1980: 39) as a process which 'allows us to conceptualize one thing by means of its relation to something else'. Another still largely programmatic definition of this phenomenon may be found in Lakoff and Turner (1989), where metonymy is regarded as a type of conceptual mapping. A mapping is a set of correspondences between two conceptual domains; in metaphor the domains involved are separate; in metonymy the mapping is domain-internal. These authors also set metonymy apart from metaphor in relation to two other aspects:

> (1) While metaphor is mainly predicative, metonymy is primarily referential.
>
> (2) While metaphor involves an 'is like' relationship between two conceptual domains, metonymy is based on a 'stands for' relationship.

These purported characteristics of metonymy will be discussed in depth in the following chapter (section 1.5). For the time being, let us focus our attention on what may be considered the fundamental achievement of the cognitivist contribution to the study of metonymy: the emphasis placed on its nature as a cognitive mechanism of conceptualisation or, in other words, on its ability to shape much of thinking and speaking in every day life.

Evidence supporting the understanding of metonymy as a mental strategy and as a cognitive structuring principle of knowledge organization has been drawn from the most diverse sources, including, among others, work in experimental psychology, and studies on cognitive models, systematic polysemy, discourse processing techniques, and the mechanisms involved in the human capacity to draw inferences.[11] Let us consider these arguments in turn.

As mentioned earlier, research carried out within experimental psychology (Rosch, 1977, 1978) has led to a widely accepted empirical model of categorisation known as Prototype Theory. According to this theory, members of a given category, far

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[11] An accessible and thorough overview of most arguments and experiments in support of the cognitive nature of metonymy may be found in Gibbs (1999: 66-73), to which the ensuing presentation is very much indebted.

from having equal status, show different degrees of membership: some category members have a special cognitive salience that makes them 'stand out' as better examples of their category than others. Such asymmetries are known as 'prototype effects'. The best example of a given category is called its 'prototype' and it usually represents the whole category in everyday reasoning. Rosch herself (1978: 40-41) was careful to stress the fact that prototype effects in themselves do not constitute a theory of mental representation. On the contrary, prototypicality should be understood as a mere by-product of the actual structures that are involved in the organization of our knowledge about the world.

A classical attempt to provide the foundations for such a theory of mental representation is that of Lakoff (1987: chapters four to six), who identifies four possible sources of prototype effects according to the kind of structuring principle involved in the representation. Lakoff argues that there are four such principles:

-Propositional structure, as in Fillmore's (1985) 'frames'. Frames are sets of semantic conditions described propositionally, i.e. in terms of predicates and their associated arguments.

-Image-schematic structure, as origianlly discussed by Johnson (1987). Image-schemas are abstract, topological, and pre-conceptual patterns of experience, such as spatial orientations ('up', 'down', 'front', 'back'), and the 'container', 'path', and 'part-whole' conceptual configurations.

-Metaphoric mappings. These are sets of correspondences across different conceptual domains.

-Metonymic mappings. A metonymy is seen as a domain-internal conceptual mapping.

Each of these principles gives rise to one form of *idealized cognitive model* (or ICM). Although Lakoff does not provide us with a definition of this construct, we may describe an ICM as a conventionalized mental representation of reality as perceived and interpreted by our senses or as determined by culture.

In Lakoff's account, metonymy has a conceptual status and is regarded as one possible source of prototype effects. The classical Lakoffian example of the conceptual nature of metonymy is related to the prototype effects of the 'mother' category. For many people in our western culture, 'housewife-mothers' are generally seen as the more central and clear members of the 'mother' category. Thus, 'housewife-mothers', which are just one of all possible classes of mother, generally function as the default representatives of the whole category. As a result, other types of mother, like 'working-mothers', are not perceived as good examples of the category. These prototype effects within the 'mother' category originate in the metonymic operation that makes a culturally salient member, like 'housewife-mothers', stand for or represent the whole category.

In this connection, Lakoff (1993: 110-111) has also provided additional evidence in favour of the cognitive nature of metaphor in relation to the phenomenon of systematic polysemy. Thus, metaphor is shown to be a mental, rather than a mere linguistic strategy allowing words that have different senses in the source domain of a mapping to have corresponding senses in the target domain. Lakoff gives the example of words referring to the vertical spatial dimension (e.g. 'up', 'down', 'rise', 'fall', etc.) which are used to express quantity, according to the mapping MORE-IS-UP, LESS-IS-DOWN (e.g. *Prices are rising, Prices are going down,* etc.). Such systematicity cannot be just the result of a figurative use of language (trope) for creative or artistic purposes. On the contrary, it is more plausible to think of it as the by-product of an underlying cognitive operation that licenses the understanding of an abstract concept (quantity) in terms of an experiential one (verticality). The same arguments can be put forward in order to support the cognitive nature of metonymy. Thus, words that have related senses in the source domain can stand for corresponding senses in the target. For example, different but related body parts (e.g. 'head', 'hand', 'eye', etc.) may be used to refer to their functions on the basis of the metonymy BODY PART FOR ACTION PERFORMED BY MEANS OF IT, as in *Use your brain/head* 'think', *Give me a hand* 'do something for me', *Run your eye over these documents* 'look at these documents'. Furthermore, the fact that this metonymy is part of our conceptual makeup explains why speakers are capable of producing and interpreting new and imaginative instances of it.

Thus, in *I footed it to school yesterday*, a plausible default interpretation would map 'foot' onto the action of walking.

Additional evidence supporting the conceptual nature of metonymy comes from work in discourse. Gibbs (1999: 66-67) refers, for instance, to the analysis of everyday dialogues. He gives the following example:

> A: How did you get to the airport?
> B: I waved down a taxi.

Upon hearing B's utterance, A easily infers that for B to get to the airport he first had to hail a taxi and make it stop, then have it pick him up and take him to the airport. The question is how is it possible for A to infer all this information from B's brief statement. Gibbs notes that travelling involves a sequence of actions, which may be organized in a systematic way to facilitate their storage in long term memory. In terms of Lakoff's (1987) idealized cognitive models, our knowledge about travelling includes at least the following sequence of events:

> Travelling Scenario
> Preconditions: You have access to the vehicle.
> Embarkation: You get into the vehicle and start it up.
> Centre: You drive (row, fly, etc.) to your destination.
> Finish: You park and get out.
> End point: You are at your destination.

This cognitive model is shared by every speaker of a linguistic community, including A and B. Thus, the expression of an element of this idealized cognitive model of travelling through overt linguistic means is enough to activate the whole cognitive model in the addressee's mind. In the dialogue between A and B above, B's utterance instantiates a precondition (i.e. getting access to a taxi by hailing one) and, in so doing, he succeeds in evoking the whole scenario[12]. This type of production and interpretation

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[12] In this connection, Panther and Thornburg (1998, 1999) have explained indirect speech acts by means of metonymic mappings within illocutionary scenarios.

mechanisms and our ability to draw conversational implicatures are clearly based on metonymic reasoning.[13]

Finally, metonymy, as a conceptual mechanism, has also been shown to play a role in deriving explicatures, which in turn are the basis on which to construct possible implicatures (Ruiz de Mendoza, 1999a).[14] Consider the following pair of utterances:

(1) Freud is tough to read.

(2) Hamlet has given a remarkable performance.

The propositional form of these examples can be developed in order to produce the two following explicatures:

(1') Freud's writings are tough to read.

(2') The actor playing Hamlet has given a remarkable performance.

As can be observed, (1') and (2') are explicatures obtained by means of metonymic mappings from which various implicatures can be derived. For instance, (1) may be used as a warning to the hearer who is eager to read all of Freud's writings; and (2) may be used by the speaker to show his admiration for the actor playing Hamlet.

All the arguments put forward so far support the understanding of metonymy as a mechanism of thought and reasoning as is claimed by cognitive linguists nowadays. This cognitive conception of metonymy, as pointed out at the beginning of this introduction, is relatively new and, although some interesting research has already been carried out, there are still many questions that remain unanswered. The following

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[13] The notion of idealized cognitive model is fairly comprehensive. It deals not only with scenarios but with all the other types of knowledge construct postulated in the context of work in artificial intelligence (Minsky's 1975 frames; Rumelhart's 1975 schemas; Schank and Abelson's 1977 scripts). These constructs also enable metonymic processes. The linguistic expression of one salient element of any of these knowledge organizing models may metonymically lead to the activation of the whole model.

[14] Sperber and Wilson (1986) have made an interesting distinction between two levels of inferencing: 'explicatures' (which involve the production of explicated meaning by fully developing the propositional form of a linguistic expression) and 'implicatures' (which involve the production of implicated meaning by the additional consideration of contextual information). According to Sperber and Wilson (1986), the identification of explicatures involves three subtasks: reference assignment, disambiguation, and enrichment (see Blakemore, 1987, 1988, 1992; Carston, 1988, 1993; Recanati, 1989; and Wilson and

section is an attempt to determine those aspects which are still in need of further study within the contemporary theory of metonymy.

0.2. Lacunae in contemporary accounts of metonymy and the need for further research

In Cognitive Linguistics most of the emphasis has been on the study of metonymy as a conceptual phenomenon. Other relevant aspects of metonymy, such as its ability to motivate some grammatical phenomena and the question of its communicative import, have been largely neglected. In fact, the literature on metonymy -if compared with the large amount of studies devoted to metaphor- is scarce. The first detailed studies have focused on defining the phenomenon, either in contrast to metaphor (Dirven, 1993) or to different polysemy phenomena (Croft, 1993) (cf. Ruiz de Mendoza, 1999b). Current debate focuses upon the interaction between metaphor and metonymy (Goossens, 1990; Turner and Fauconnier, 2000), upon finding the metonymic motivation of metaphoric mappings (Barcelona, 2000b; Radden, 2000), and upon the role of metonymy in inferential activity and understanding (Gibbs, 1994; Thornburg and Panther, 1997; Panther and Thornburg, 1998, 1999; Ruiz de Mendoza, 1999a).

Unfortunately, perhaps with the exception of Ruiz de Mendoza (1999a), no study attempts to offer a sufficiently comprehensive explanation of metonymy. In addition to this, many aspects of metonymy remain unexplained or have been only partially and/or unsatisfactorily dealt with. Here is a brief sketch of some relevant issues which are still in need of further - even new- research.

First of all, it is essential to draw attention to the fact that no agreement has yet been reached about something as basic as a definition of metonymy. For example, the contributions to Panther and Radden's (1999) volume include at least five different definitions. All of them share the central assumption that metonymy is a domain-internal mapping. At the same time, however, they show subtle differences as to the nature of the notion of 'domain' (which is variously intepreted as an idealized cognitive

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Sperber, 1993). We shall offer a detailed analysis of all these concepts and of their role in metonymy in section 3.1.

model, a frame, a scenario, or a domain matrix), the type of 'contiguity' which licenses a metonymic mapping (spatio-temporal closeness, conceptual contiguity), or the kind of mapping involved (referential transfer, conceptual transfer).

In view of the considerable definitional variation that exists within the literature on metonymy, there is a pressing need to deal with this issue in a more systematic and comprehensive way. In our view, a solid definition of metonymy needs to meet at least two requirements: (1) it has to be capable of distinguishing metonymy clearly from related notions such as metaphor as well as from so-called literal uses of language; and (2) it needs to take into consideration not only the cognitive aspects of this phenomenon but also its grammatical and communicative import.

Most contemporary studies on metonymy have neglected to deal with the two aspects of the second of these two requirements. Consider first the communicative issue. It is not very reasonable to study the nature of a knowledge system without making reference to its use potential (cf. Ruiz de Mendoza, 1997: 162). A similar reflection was also made by Widdowson (1984), at a time when the implications of the theories of knowledge organization for linguistic production and understanding were beginning to be explored within Discourse Analysis and Applied Linguistics. Nevertheless, the attention paid to this aspect of metonymy has not gone beyond pointing to its role in some aspects of text processing (see Gibbs, 1999: 66-69). Furthermore, this type of finding is generally valued more as evidence in support of the conceptual nature of metonymy than as a sign of its communicative potential. With respect to the second aspect, it is true that cognitive linguists recognize the existence of so-called 'grammaticalized' metonymies, that is, metonymic expressions which are no longer felt as such. For example, in expressions like *play football/basketball, marbles,* etc., the playing piece has become the name of the game itself; in others like *at work* the name of an activity is used to refer to the location where the activity takes place. But this is only a trivial aspect of the issue, which metonymy shares with other figures of speech, especially with metaphor. More recently, Waltereit (1999: 233-255) has considered the relationship between metonymy and grammar from the point of view of the limitations that the latter imposes on metonymic mappings. He poses the question of whether there are arguments which are particularly suited to metonymic phenomena and

concludes that the 'direct object' is privileged in this respect.[15] Nevertheless, the relationship between metonymy and grammar remains to be considered in the opposite direction. To the best of our knowledge, little attention has been paid so far to whether metonymy imposes constraints on grammatical phenomena, whether it determines grammatical choices, and whether it may be found to underlie the conventional value of some grammatical constructions.[16]

Finally, some attempts to apply metonymy to the explanation of inference and illocutionary phenomena have been carried out lately. It has been suggested that problematic aspects of traditional speech act theory, such as indirect speech acts, can be economically and elegantly dealt with in terms of metonymic operations on illocutionary scenarios, where one element of a particular speech act scenario may stand for the whole associated speech act category (Thornburg and Panther, 1997; Panther and Thornbug, 1998, 1999). This proposal, revealing and thought-provoking though it certainly is, remains at a highly programmatic stage. As will be shown in detail in section 3.2., the characterisation of speech act categories in terms of scenarios runs short of being capable of accounting for all the nuances and subtle shades of meaning in illocutionary performance. This problem is just a direct consequence of the lack of a proper solid definition of metonymy and of the concept of 'domain' in relation to which it is understood. A broader definition of 'domain' based on the notion of 'idealized cognitive model', such as the one we shall argue for in chapter 1 of this book, may provide a more precise and detailed characterization of illocutionary categories and, in turn, a more adequate account of indirect speech acts as metonymic processes operating on illocutionary cognitive models.

0.3. Research Objectives

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[15] According to Waltereit (1999: 233-255), this privileged status is due to three characteristics of the 'direct object' argument: (1) it is opaque and may take several different thematic roles; (2) its referential potential is reduced by its proximity to the verb; and (3) in comparison to other arguments, it is still somewhat close to the subject position.

[16] Dirven (1999: 275-289) analyzes the phenomenon of noun to verb conversion which, he argues, consists in a metonymic process in which one element of an event schema is hightlighted. Goossens (1999: 193-211) regards the shift of the English modal 'must' from a deontic to an epistemic use as a gradual metonymic process.

In view of the needs of contemporary metonymy theory, as spelled out in the previous section, we have set ourselves the following goals:

1. First, we need to characterise metonymy. We need to find a set of reliable criteria which allows us to distinguish metonymy from other related semantic phenomena. More specifically, it is necessary to determine the boundaries between metaphor and metonymy, and between metonymy and non-figurative uses of language. This initial characterization of metonymy is based on the clearest examples of the category, but since, as could be expected, there are borderline cases, we shall provide a characterization which enables us to find the motivation behind them.

2. A well-founded definition of metonymy paves the way for more ambitious incursions into the relationship between metonymy and language. In this respect, we shall consider the connections between metonymy and some grammatical phenomena, on the one hand, and between metonymy and so-called pragmatic inference (including illocutionary activity), on the other hand.

Connections between metonymy and grammar.

In this book it is our intention to show that metonymy imposes constraints on grammatical phenomena on at least two non-trivial levels:

(i) First, we shall give evidence that metonymy has worked its way into the use of grammatical resources at various levels of description, thereby determining the nature of some grammatical choices.

(ii) Second, we shall argue for the existence of evidence that metonymy lies at the base of the conventional value of some grammatical constructions (i.e. form-meaning pairings, such as those discussed in Lakoff, 1987; and Goldberg, 1995).

Conversely, we shall also observe that the grammar is capable of placing constraints on the nature of some metonymic operations, thus showing that there exists full interaction between metonymy as a conceptual device and the grammar.

Once we have a carefully worked out a characterization of metonymy, our next step will be to find out (i) on what levels of linguistic structure and language use metonymy plays a significant role and (ii) what kinds of metonymy are able to impose constraints on linguistic structure. Regarding the former, the idea here is to see to what extent metonymy places constraints on and/or interacts with other linguistic phenomena. In order to achieve this goal, it is necessary to have at least some expectations as to where metonymy may be particularly active in grammar. First, since metonymy usually involves shifts of reference in connection to noun phrases in the complementation patterns of verbs, some grammatical constructions asssociated with such patterns may have a metonymic basis. Second, we may expect metonymy to underlie some recategorization processes including subcategorial conversion. This is due to the fact that not all the subdomains of a given concept attain linguistic expression by means of the same category. There are still other expectations pertaining to the nature of the domains which take part in metonymic mappings. Thus, a typology of mappings will be given in section 2.1. This will allow us to ascertain the metonymic basis of some grammatical constructions.

Connections between metonymy, inferences, and illocution.

As mentioned in the previous section, cognitive linguists have been largely concerned with the conceptual nature of metonymy, but, in contrast, they have not placed much emphasis on the communicative effect of this type of conceptual mapping. In this connection, we have examined two significant areas of language use in which metonymy is observed to be closely linked to the achievement of successful communication:

(1) The role of metonymy in the derivation of inferences.

(2) The essential function of metonymic mappings in the production and interpretation of indirect illocutions.

With respect to the first area, it is our intention to explore the Cognitive Linguistics approach to metonymy as a way of understanding and reasoning about the world in relation to the relevance-theoretic treatment of inference and, more specifically, to the distinction between implicatures and explicatures (cf. Sperber and Wilson, 1995). It will be shown that metonymy lies at the base of the production of explicatures, which, in turn, enable the speaker to draw further weak and strong implicatures. More specifically, it is argued that explicatures can sometimes be obtained through the modification of an assumption schema by means of a conceptual mapping, either metaphoric or metonymic.

As regards the relation between metonymy and illocutionary activity, the second area mentioned above, it is commonly accepted by cognitive linguists that metonymy is crucial to the derivation of illocutionary meaning. In this theoretical context, our intention is to elaborate and develop the existing scenario-based theories of indirect illocutions in order to increase their explanatory power. We shall systematically describe the propositional idealized cognitive models of a group of directive and commissive illocutions in relation to a number of relevant variables, such as cost-benefit, optionality, directivity, social power, mitigation, and social distance. On the basis of this type of illocutionary cognitive model, it will be shown how the activation of a variable number of attributes accounts for the production of illocutionary acts with different degrees of conventionalization and for subtle differences in meaning.

Finally, together with the main goals specified in 2, this book also addresses several other matters of importance within the current debate on metonymy such as its boundaries with literal uses of language, the problem of distinguishing metonymy from synecdoche, the interaction between metonymy and metaphor, and the complex issue of building a systematic taxonomy of metonymy types.

0.4. A note on methodology

Lakoff and Johnson (1980) have sometimes been criticised for founding all their analyses on their own intuition and not testing their findings against a wide sample of data (see Partington, 1998). Maybe as a reaction against the lack of real data in the initial studies, the last few years have witnessed an increase in the amount of corpus-based research within the cognitive paradigm (cf. Goossens, 1990; Partington, 1998; Deignan, 1999; Díez, 2000a). Nevertheless, the use of large computerized corpora as a source of data for studying metonymy is still rather scarce. The reason for this is easy to determine. Unlike other aspects of semantic structure, such as collocations (also termed lexical solidarities; cf. Lipka, 1992), it is difficult to explore metonymic expressions with the help of a computerized corpus. This is so because concordance programs only give the researcher access to word indexes and collocation patterns, and in many cases words may be used metonymically -whatever the word class they belong to- depending on the context of use.

So, a systematic study of the phenomenon needs to proceed in a different way, where the use of computer software may simply provide us with incidental corroborative evidence about native speaker judgements. This is what has been referred to as a 'corpus-based analysis' (cf. Ooi, 1998), which is to be contrasted to 'corpus-driven analysis', where only evidence from real language corpora is taken as valid and no previous assumptions are made. Corpus-based studies, on the other hand, allow the researcher to use the data in the corpus to refine and strengthen his theoretical postulates. With this aim in mind, we have made use of a collection of examples from various sources. Special use has been made of the *Master Metonymy List,* a compilation of over 100 metonymies, carried out by Naomi Leite on the basis of references found in the cognitive linguistics literature or obtained from homework assignments in Lakoff's classes. Also, we have considered in our study numerous instances of metonymy classified or explained in Lakoff and Johnson (1980), Fauconnier (1985), Lakoff (1987), Croft (1993), Dirven (1993), Thornburg and Panther (1997), Kövecses and Radden (1998), and Panther and Thornburg (1998), among others. Finally, we have made occasional use of examples from the *British National Corpus* where appropriate to further illustrate and/or substantiate some of our views.

In sum, our corpus tends to fall into a weak version of Sinclair's (1991) notion of 'monitor corpus', at least in the sense that we have not worked with a fixed collection of examples, but that we have continued to enrich it according to the needs of our research. It should be noted that a corpus of variable size is not compatible with quantitative analyses. However, it is very useful for a qualitative analysis like the one presented in this book.

CHAPTER ONE

DEFINING METONYMY

In Cognitive Linguistics there have so far been few formal attempts to characterize metonymy in a rigorous way. The definitions given by many authors are more working definitions than exhaustive ones based on well-argued criteria. This is the problem, as will be shown presently, with the initial characterizations provided by Lakoff (1987), Lakoff and Johnson (1980), and Lakoff and Turner (1989). More recent definitions of metonymy, such as those which appear in some of the papers included in Panther and Radden (1999), draw on the original attempts to a great extent. They are valuable contributions in that they recognize the importance of determining the nature and scope of the notion of 'domain', upon which the definition of metonymy hinges. They are all the more valuable in that they have posed the right questions in relation to the phenomenon under consideration and have, therefore, opened the present-day on-going debate on the nature and scope of metonymy. Nevertheless, we intend to demonstrate that all of them have important limitations. Sections 1.1 to 1.4 offer a detailed summary of the main issues that have been treated so far in relation to metonymy. They present a critical review of the main accounts on those issues and they bring to the fore those aspects of metonymy which are still in need of further research. In section 1.5 we present our own view of metonymy. We shall attempt to demonstrate that a definition of metonymy which takes into account formal criteria, i.e. which is based not only on the nature of the domains involved but also of the mapping process itself, such as the one we pursue here, is capable of overcoming most of the shortcomings of previous accounts in this area.

1.1. Distinguishing metaphor from metonymy

Lakoff and Turner (1989: 103) consider metonymy in contrast with metaphor. For them, both phenomena are explained as conceptual mappings, since there is a

connection or correspondence between two things, and both can be conventionalized. However, as we mentioned earlier, they also point to some important differences:

(a) In metaphor there are two conceptual domains, while metonymy involves only one.

(b) In metaphor a whole schematic structure (with its logic), called the source domain, is mapped onto another whole schematic structure (with its logic), called the target domain; the function of the mapping is to allow us to understand and reason about the target in terms of the source. One classical example of this is the metaphor ARGUMENT IS WAR (Lakoff and Johnson, 1980: 4-9), where we see arguing as engaging in battle with an enemy. In an argument, as in a battle, we attack the enemy's positions and defend our own, we plan strategies, we gain or lose ground, and we either defeat or are defeated by our opponents. Metonymy, on the other hand, is primarily used for reference: we refer to an entity in a schema (or cognitive model) by referring to another entity in the same schema.

(c) Finally, metonymies, but not metaphors, involve a 'stands for' relationship between the source and target domains. For example, if I say *I have bought a Ford* the name of the car-making company stands for one of its characteristic products (this is labelled the PRODUCER FOR PRODUCT metonymy). An oft-quoted example of metonymy is *The ham sandwich is waiting for his check* (Lakoff and Johnson, 1980: 35), in which a waitress conveniently uses 'ham sandwich' to refer to the 'customer who has ordered a ham sandwich' in the context of a restaurant.

In Ruiz de Mendoza (1997: 164) it is noted that this characterization of metonymy is not very accurate and is faced with some fundamental problems. First, it seems pointless to describe metonymy as 'primarily' referential -as Lakoff and Turner do- unless it is explained why this is so. In this respect, note that it is possible to use metaphor referentially. Consider the following example:

(1) The pig is waiting for his check.

Imagine (1) as uttered by a waitress who is sick of a male customer who is too fond of her. Here "the pig" refers to and suggests that he behaves in an immoral or somehow abusive fashion; the same meaning would be conveyed by the metaphorical expression *That customer is a pig*, where the metaphor is not used referentially but predicatively. Second, it is possible to use a metonymy non-referentially, as in (2) and (3) below:

(2) She is a real brain.

(3) She's (just) a pretty face.

In these two examples, different parts of a person tell us something about her characteristics. Interestingly enough, in these metonymies neither the brain nor the face refers to the whole person. Additionally, these observations suggest that there is a connection between the referential use of metonymy (and of metaphor) and the 'stands for' relationship. In (1) the metaphoric term "the pig" stands for the abusive customer because it refers to him. On the other hand, in (2) and (3) where the metonymy is not referential, the body parts do not stand for the person who has them. However, it is true that the predicative use of metonymies is not very productive and that the strongest impact of metaphor is precisely based on its non-referential use while referential uses of metaphor are very context-specific and hard to come by. This is a fact that has to be explained and we shall come back to it in section 1.5.

Another working definition of metonymy is the one provided by Kövecses and Radden (1998: 39):

> Metonymy is a cognitive process in which one conceptual entity, the vehicle, provides mental access to another conceptual entity, the target, within the same domain or ICM.

What is interesting about this definition is the fact that it makes no mention of either the referential use of metonymy or the 'stands for' relationship between entities within a domain. Instead, the authors incorporate into their definition Langacker's suggestion that "the entity that is normally designated by a metonymic expression serves as a reference point affording mental access to the desired target (i.e. the entity

actually being referred to)" (Langacker, 1993: 30). The resulting definition is more subtle, but it does not avoid one of the problems of Lakoff and Turner's characterization. It cannot account for non-referential metonymies, such as *Mary's just a pretty face*, where the lexical item *face* does not provide conceptual access to another entity within the same ICM but to a feature of the item itself.

This is precisely what happens with some metaphors, like PEOPLE ARE ANIMALS (see Ruiz de Mendoza, 1998: 262-263):

(4) John is a pig.

(5) John is a lion.

In (4) John is presented as being dirty, nasty or immoral; in (5) the relevant feature is John's courage. The difference between non-referential metonymies like *Mary's just a pretty face* and metaphors like *John is a lion* is that in the latter the mapping involves different conceptual domains (people and animals), while in the former there is only one domain. When we say that Mary has a pretty face we think of Mary as having beautiful, attractive facial features so we are still dealing with the face ICM. Of course, in the final interpretation there is a strong implication, reinforced by the use of the adverb *just*, that there is nothing else in Mary which deserves attention apart from her beauty (i.e. she may not be very intelligent or she may lack other qualities which one would want to find in a woman). However, this goes beyond the meaning potential of the metonymic mapping itself. In any case, there is strong agreement that metonymies differ from metaphors in that the former involve just domain internal mappings. The notion of 'domain', therefore, appears as crucial in the tasks of defining metonymy and of distinguishing it from metaphor. The following subsection considers the different ways in which the concept of 'domain' has been understood in several contemporary accounts of metonymy.

1.2. Metonymy and the notion of domain

The importance of defining the notion of 'domain' in relation to metonymy is recognized in several studies. However, the conclusions reached by different authors on

this topic vary greatly. Furthermore, the overall impression, after close consideration of the different proposals, is that the notion of 'domain', in spite of being central to the understanding of metonymy, has not yet been delineated in detail. Let us consider the most influential views on this issue.

Domains as cognitive models. An advantage of Kövecses and Radden's account of metonymy is that it represents an attempt to determine the nature of the notion of 'domain', on which the concept of metonymy is based. The idea that metonymy is possible whenever there is a relation of 'contiguity' within a 'conceptual domain' is at the core of most cognitive definitions of this phenomenon. Following Lakoff (1987: 288), Kövecses and Radden understand those domains within which metonymic mappings may take place as idealized cognitive models or ICMs, which are meant to include not only people's encyclopedic knowledge of a particular domain but also the cultural models they are part of:

> A first question we need to ask is where do we find metonymy? According to the above definition, metonymy may occur wherever we have idealized cognitive models. We have ICMs of everything that is conceptualised, which includes the conceptualization of things and events, word forms and their meanings, and things and events in the real world (Radden and Kövecses, 1999: 21).

According to them, the fact that metonymy is based on ICMs is what makes this phenomenon so pervasive in language, since it cuts across different ontological realms. Besides, they claim that, as we develop ICMs in different areas of experience, including language, we can find metonymy at all these levels. With this idea in mind, they have set up a taxonomy where metonymic mappings are classified according to the ICM they belong to (for a more detailed description of the categories they distinguish see section 2.3.). These authors, however, do not make explicit the parameters chosen for the selection of the ICMs, which makes their taxonomy somewhat unreliable. In addition, Kövecses and Radden (1998) lack accuracy in delimiting the scope of the notion of ICM and do not make clear the way we obtain domains from ICMs (we shall deal with

the relationship that exists between them in section 1.4). By way of illustration, consider the following sentence:

(1) Nixon bombed Hanoi.

This example contains a metonymy in which by saying "Nixon" we refer to 'the US army'. However, we do not employ all our knowledge about Nixon (i.e. the whole ICM) to perform the metonymic operation, but only our knowledge concerning the control relationship that holds between him and the US air force. This activation requires a specific reference domain different from the one that is needed for undestanding *I can't understand Nixon*, where 'Nixon' stands for his way of acting in politics. All this suggests that no adequate definiton of metonymy can be made if we do not first distinguish the notion of domain from that of ICM (cf. 1.4).

Domains as frames or schemata. The proposal in Koch (1999) hinges on a frame-theoretical approach to metonymy. The conceptual knowledge structure within which metonymic mappings are said to take place is conceived in the form of a frame. The notion of frame is understood as a "specific unified framework of knowledge" (Fillmore, 1985: 223) or, in Koch's (1999: 146) words as a "non-linguistic conceptual whole" made up of a variable number of elements.[17]

In turn, Koch (1999: 154) defines metonymy as a "contiguity-based figure/ground effect between elements of a conceptual frame or between the frame as a whole and one of its elements (or vice versa)". The choice of frames rather than other kinds of knowledge structure as the basis of Koch's account of metonymy appears to be largely an *ad hoc* decision. No specific reason is given why frames should be preferred over other types of construct such as idealized cognitive models, scenarios, domain matrices, or encyclopedic networks. It would be unfair to object to this account on these grounds,

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[17] The frame model of knowledge organization has its origin in studies carried out within artificial intelligence (Minsky, 1975) and developmental psychology (Piaget, 1952; Barlett, 1932). Minsky (1975: 212) defined a 'frame' as "a data structure for representing a stereotyped situation, like being in a certain kind of living room, or going to a child's birthday party". The notion of 'schema' as developed by Rumelhart and Ortony (1977), Rumelhart and Norman (1981), and Rumelhart (1975), is consistent with Minsky's work. The notion of 'frame' was introduced into linguistics in two ways. In Europe, it was used within text linguistics in the study of discourse comprehension phenomena (Van Dijk, 1977). In the USA, it was applied to the study of word meaning in order to overcome some of the weaknesses of feature semantics (Fillmore, 1982, 1985).

however, since the same criticism would hold for those other theories of metonymy based on different types of conceptual structure (see discussions on Croft, 1993; Langacker, 1993; Thornburg and Panther, 1997; and Radden and Kövecses, 1999 in this section). Nevertheless, Koch's proposal is in need of a thorough, solidly-argued description of the nature and scope of the notion of 'knowledge domain' upon which his definition of metonymy rests.

Frequently, the use of well-known concepts like 'frame', 'cognitive model', 'scenario', etc. provides us with a false sense of security in dealing with knowledge organization. In most cases the meaning of these constructs has not been clearly delineated. Using familiar terminology (frames, schemas, ICMs and the like) when referring to the knowledge domain underlying metonymies is just a convenient and widely accepted way of dodging the issue. Thus, most linguists would agree that metonymy consists in a domain-internal mapping. However, this definition is useless unless the limits of the domain involved are neatly drawn. It is true that within an encyclopedic view of meaning, delimiting the boundaries of a knowledge domain becomes a difficult, if not impossible, task. We shall return to this issue n section 1.5. We shall argue that, like most concepts, a 'knowledge domain' need not be neatly bounded. It may be structured around a core of crucial knowledge attributes and, at the same time, it may include also peripheral information *ad infinitum* (cf. Ruiz de Mendoza and Otal, 1992, 1994a; Otal et al. 1993). This characterization of the notion of 'domain' will be useful in explaining the existence of more or less prototypical instances of metonymy.

Going back to Koch's account of metonymy, there is still another problematic aspect, namely, his claim that only prototypical frames or frame elements may be involved in metonymic processes. Let us consider Koch's argument in detail. He analyzes the literal and figurative (metonymic) senses of a polysemous word like *bar*:

(2)

(a) literal sense: "bar_1" = 'counter'

(b) figurative sense (through metonymic shift): "bar_2" = 'public house'

According to Koch (1999: 146), 'public houses' constitute a frame, one of whose elements is the 'counter'. By virtue of the contiguity of these two concepts, which arises from the fact that one of them (i.e. 'counter') belongs to the frame represented by the other (i.e. 'public house'), 'bar' may metonymically stand for the whole frame. Koch (1999: 149-150) further observes that it is necessary to admit that there may be public houses without a counter, which we would nevertheless call 'bars'. Therefore, he concludes that metonymic shifts based on contiguity relationships only hold for 'prototypical' members of the conceptual categories involved. A prototypical public house has a counter, which licenses the metonymy BAR FOR PUBLIC HOUSE. In sum, according to Koch, it is on the basis of prototypical frames and contiguity that metonymy works.

Now, consider the following examples:

(3) The fur coat is waiting for her bill.

(4) ?The sweater is waiting for her bill.

(5) The striped sweater is waiting for her bill.

In these sentences, 'fur coat', 'sweater', and 'striped sweater' are used metonymically to stand for the customer who is waiting for her bill. Let us first consider again sentence (3) in relation to Koch's claim about metonymic mappings holding only between elements of 'prototypical' frames. It is clear that prototypical restaurants are not characterised in relation to their customers' dressing habits. The prototypicality of the restaurant frame is established in relation to other variables like 'place where food is served on tables', 'place for cooks, waiters, and customers', etc. Moreover, if the customer's outfit, following the dictates of encyclopedic semantics, is to be considered an element of the restaurant frame at all, it is indeed an extremely peripheral one. Its inclusion, despite its nature, would explain the metonymic interpretation of (3) and (5). However, it cannot account for the anomalous character of (4), in spite of the fact that a piece of the customer's outfit is the vehicle of the mapping. From these examples, we conclude that it is not contiguity within the restaurant frame that licenses the metonymic shift. As illustrated by (3) and (5), metonymy is possible without postulating the

existence of a prototypical restaurant frame since we can use vehicles which are highly peripheral members of a given frame provided that they are members of it. And finally, (4) shows that the same type of peripheral element (i.e. 'sweater') may not always be suitable to carry out a metonymic operation. This suggests that we need to seek other criteria for defining metonymy. What (3) and (5) have in common, in contrast to (4), is that they are highly specific descriptions of a customer's outfit and, by virtue of this, they provide a quick economic identification of a particular customer. This is why they are better examples of metonymy than (4), which is an infelicitous example of metonymy in unmarked contexts (it could be possible in a marked context in which only one person in the restaurant is wearing a sweater).

It could be argued that in these examples the relevant underlying domain of reference is based not on the restaurant frame, but on the 'people' frame, the customer's clothes being one of the elements included in it. So, the metonymy would not be OUTFIT FOR CUSTOMER, but OUTFIT FOR PERSON. This, however, would only provide a stronger argument against Koch's suggestion that metonymy works in relation to prototypical frames. Thus, the less prototypical the outfit that a person is wearing, the better it will serve the identification function underlying the use of a metonymy like OUTFIT FOR PERSON and the better it will function as the source domain of a metonymic expression. Compare the following sentences:

(6) ?The sweater is waiting for his bill.

(7) The red sweater is waiting for his bill.

(8) ??The pair of pyjamas is waiting for his bill.

(9) ???The towel is waiting for his bill.

(10) ?*The oak barrel is waiting for his bill.

The source domain in (6), 'sweater', is a prototypical type of outfit. When used metonymically to refer to the person wearing it, its prototypicality renders the resulting metonymy useless or, at least, less powerful in the task of identifying a referent. This is why the metonymic expression in this example sounds strange. This oddity is overcome

in (7) through the use of the modifier 'red', which reduces the number of possible referents, and therefore, yields a more useful instance of metonymy.

Consider now the oddity of examples, (8), (9), and (10) in the context of a resturant. Their strange character is related to the fact that we do not expect a restaurant customer to wear a pair of pyjamas, to be wrapped into a towel, or to be covered with an oak barrel. However, it is possible to find other contexts where it would not be so strange to find a person dressed in any of the ways mentioned, but where each of the outfits would still preserve its exceptionally low degree of prototypicality. In these contexts, the metonymies in sentences (8), (9), and (10) would be effective ways of identifying the individuals referred to. This suggests that there are two ways in which prototypicality is to be considered in order to determine the degree of felicity of a metonymic expression used to refer. One is internal and the other external to the linguistic expression. Thus, in (8), (9), and (10), there is low internal prototypicality. External prototypicality, on the other hand, varies with the context. It is low in the context of a restaurant, but it may be high in other contexts (for example think of a peculiar party where participants, who have been invited to dress in whimsical fashions, are expected to pay for their drinks). It is when internal prototypicality is low and external prototypicality is high that metonymic noun phrases seem to be more felicitous.

Domains as encyclopedic networks. A similar problem seems to haunt the proposal made by Langacker (1987, 1993), who relates metonymy to "our capacity to invoke the conception of one entity as a cognitive reference point for purposes of establishing mental contact with another" (Langacker 1993: 1). The notion of metonymy as a 'conceptual mapping' loses importance in this definition in favour of the conception of metonymy as a 'reference-point' phenomenon.[18] Even though Langacker's view of metonymy as a point providing mental access to other entities is extremely original, it is still necessary to explain what makes an entity salient enough to function as a metonymic reference point to another entity. That is to say, it would be

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[18] Langacker (1993: 1-2) regards 'reference point' as a wider cognitive phenomenon which underlies both linguistic and cognitive organization. Metonymy is regarded as just one manifestation of this phenomenon together with possessive constructions, topic and topic-like constructions, pronoun-antecedent relationships, etc.

necessary to determine what principles regulate the use of some entities rather than others in this capacity. Langacker (1993: 30) acknowledges that there is a need to carry out this task and puts forward a number of such principles:

> Other things being equal, various principles of relative salience generally hold: human > non-human; whole > part; concrete > abstract; visible > non-visible, etc.

Unfortunately, he does not provide a consistent description of how these principles work or under what circumstances they may or may not apply. Some of the principles are easily overridden by others. By way of illustration, human > non-human is overridden by visible > non-visible in an expression like *The buses are on strike*. As a matter of fact, Langacker (1993: 30) himself states that every one of these principles may be overridden if the necessary motivation exists. This amounts to saying that there are hardly any constraints on metonymic phenomena, which is not a plausible position since not all metonymic mappings are possible. In our view, the constraints that underlie metonymic mappings stem from the nature of the 'domain' within which the metonymic shift takes place. As will be argued in section 1.5., an entity cannot function as a reference point to other entities which do not belong to the same domain matrix. It is crucial, therefore, to determine the scope and the limits of the domains involved in metonymic mappings.

Domain highlighting. Another major contribution to the delimitation of the notion of 'domain' in relation to metonymic mappings is that of Croft (1993). In his well-known paper entitled "The role of domains in the interpretation of metaphors and metonymies", this author offers a lengthy discussion of the role of 'domains' in the definition of both metaphoric and metonymic mappings. Drawing on Langacker (1987), Croft (1993: 339) defines 'domain' as "a semantic structure that functions as the base for at least one concept profile (typically, many profiles)". Moreover, since a concept may presuppose several different domains, Croft (1993: 340) uses the term "domain matrix" to refer to "the combination of domains simultaneously presupposed by a concept". By way of illustration, in Croft's account, the concept of 'human being' would be profiled in relation to a domain matrix which includes the domains of physical objects, living things, and volitional agents, among others. In turn, metonymy is defined

as a "mapping [which] occurs within a single domain matrix" (Croft, 1993: 348). Thus, it is possible for metonymy to occur across domains as long as these domains belong to the same matrix. On the other hand, metaphoric mappings take place between two domains that are not part of the same domain matrix.

In a further and deeper attempt to distinguish metonymies from metaphors, Croft claims that only the former involve a process of 'domain highlighting'. Croft's (1993: 348) examples illustrating this notion are the following:

(11) Proust spent most of his time in bed.

(12) Proust is tough to read.

Sentence (11) is interpreted literally, while sentence (12) is understood as involving a conceptual metonymy. Croft explains that in (11), it is the idea of Proust as a human being that is highlighted. In contrast, (12) highlights another aspect of the domain matrix for Proust, namely, that of creative activity. That is to say, the metonymy that shifts reference from 'Proust' to 'Proust's works', also shifts domains from Proust [human being] to Proust [creator/author]. Additionally, in the understanding of example (11), the metonymy makes primary a domain which is secondary in the literal interpretation of (12). Croft further notices that 'domain highlighting' (1) is not a sufficient condition for metonymy, which also involves a shift of reference, and (2) is not a unique characteristic of metonymy, since it is shared by other types of lexical ambiguity. To borrow two of Croft's examples in this respect, contrast:

(13) This book is heavy.

(14) This book is a history of Iraq.

In these examples, the concept 'book' is profiled in two different primary domains: physical objects in (13) and semantic content in (14). The highlighting of each of these domains is activated by the requirements of the predicates 'heavy' and 'a history of Iraq' respectively. Although (13) and (14) highlight different domains of the concept 'book', these expressions are not to be treated as metonymic since, according to Croft, the elements profiled in each of those domains are highly intrinsic, in

Langacker's (1987: 160) sense of the word *intrinsic*. That is to say, they do not involve a shift of domains within the domain matrix. We shall return to these examples in section 1.5 where we shall argue for centrality rather than intrinsicness as the fundamental criterion.

In sum, Croft (1993) characterises metonymy as a shift of reference across two domains included in a larger domain matrix, which involves at the same time the highlighting of a domain that would otherwise be secondary. While we may agree to some extent with Croft's views and especially with the significance of the highlighting process for the understanding of metonymy, his account is faced with two essential difficulties. First, it does not fully distinguish metonymy from metaphor. Second, it only accounts for referential uses of metonymy, thereby excluding instances of predicative metonymy. Let us discuss each of these problems in turn.

According to Croft, 'domain highlighting' is an essential ingredient of metonymy. Nevertheless, Croft himself acknowledges that this is not a defining feature of metonymy, since it is shared by other types of lexical ambiguity. In addition to this, it should be pointed out that 'domain highlighting' is also relevant in some cases of metaphor. Thus, in metaphorical expressions like *John is a pig, John is a lion,* and the like, one feature of the source domain is highlighted and mapped onto the target (e.g. the filthiness of pigs, the braveness of lions, etc.). Other aspects of the domain matrices for 'pigs' and 'lions' respectively, such as the fact that pigs eat a lot and that lions have long hair, are not equally brought to the fore by the metaphoric mapping. Since metaphors of this kind also involve a process of 'domain highlighting' this is not a unique feature of metonymy. Once more, the necessity of looking for a different set of definitional criteria for metonymy becomes apparent. Moreover, Croft makes passing reference to the fact that 'domain highlighting' may not always be involved in the description of metonymy (see Croft, 1993: 350). However, he fails to explain under what circumstances this would be the case. Our interpretation of metonymy, which will later be spelled out in detail, will make it possible to determine in which cases 'domain hightlighting' is relevant in the production of metonymic mappings.

It has already been mentioned that Croft's characterisation of metonymy is somehow incomplete in the sense that it only accounts for cases of referential metonymy. This is a direct consequence of the second part of his definition of metonymy as a 'shift of referent'. In contrast to Croft's claim, in predicative metonymies, like *Mary's just a pretty face*, the lexical item *face* does not shift referent with another entity within the same ICM. The function of the metonymy is rather that of providing access to a specific feature (i.e. beauty) of the item *face*. So, a solid definition of metonymy should be broad enough to encompass both referential and predicative uses.[19]

Domains as scenarios. Another proposal regards the 'domains' involved in some metonymic processes as scenarios (see Thornburg and Panther, 1997, and Panther and Thornburg, 1998, 1999, 2000).[20] In an attempt to explain indirect speech acts as instances of illocutionary metonymies, these authors have described illocutionary categories in terms of scenarios. In their account, indirect illocutions are produced by making one element of the corresponding speech act scenario stand for the whole of it or for its central element (i.e. the 'core' in Panther and Thornburg's terminology). By way of illustration, their description of the scenario for requests is the following (Thornburg and Panther, 1997):

(i) The BEFORE: H can do A, S wants H to do A

(ii) The CORE: S puts H under a (more or less strong) obligation to do A.

The RESULT: H is under an obligation to do A (H must/should/ought to do A).

(iii) The AFTER: H will do A

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[19] A requirement which will be taken into account in the formulation of our own definition of this cognitive phenomenon in section 1.5.

[20] 'Scenarios', like 'frames' are a kind of knowledge organization structure. The notion of 'scenario' stems from Schank and Abelson's (1977) concept of 'script', which differs from 'frames' and 'schemas' in its dynamic nature. A script or scenario can be thought of as a schema for a recurring sequence of events. Like frames and schemas, scripts have a number of variables which, according to Schank and Abelson (1977), can be divided roughly into two categories: thosefilled by persons ('roles') and those filled by objects ('props'). Furthermore, each script contains a series of 'entry conditions', a sequence of 'scenes', and a set of 'results'. Schank and Abelson suggest that there exist scripts for many social events such as a visit to a restaurant, a trip, a visit to the doctor, etc.

According to Panther and Thornburg, different parts of this scenario for requests may stand for the whole illocutionary category that it describes. This explains why the following sentences can be used as requests:

(15) Can you hold this?

(16) Will you hold this?

(17) You will hold this

(18) Would you mind holding this?

(15) activates one of the BEFORE components of the scenario, namely, the addressee's capacity to perform the requested action. In (16) and (17) the AFTER component is the one that stands for the whole illocutionary category of requesting. And finally, in (18) it is the willingness element of the BEFORE component that is activated by means of a different expression.

More recently, Panther and Thornburg (2000) have extended this notion of scenario to account for metonymies related to non-actional states of affairs as well. They claim that the State of Affairs Scenario can be metonymically exploited in ways similar to the Speech Act Scenario.

While we agree with Panther and Thornburg on the necessity of formalising the information that makes up the domain upon which a metonymic shift may take place, there is one crucial aspect of their account which is in need of refinement: the fact that scenarios are not capable of accommodating all the relevant knowledge that may be involved in the production of a metonymy. Considering again their description of requests in terms of metonymic mappings within the corresponding illocutionary scenario, let us discuss these other examples of the act of requesting:

(19)

(a) Could you hold this?

(b) Can you hold this?

(20)

(a) Can you hold this for a second?

(b) Can you hold this?

(21)

(a) Hold this, please.

(b) Hold this!

Panther and Thornburg's proposal explains why all these pairs of sentences may function as requests. Each of them activates at least one variable of the request scenario. (19) and (20) refer to the ability condition of the BEFORE component. The sentences in (21) place the addressee under some obligation, therefore, instantiating the CORE component of the request scenario. Nevertheless, this is as far as Panther and Thornburg's account goes in the explanation of requests by means of metonymies. They cannot explain why the sentences (a) of each pair are better examples of requests than their counterparts. The reason for this lies in the fact that the former activate some other features relevant to the characterisation of requests, such as the notions of cost-benefit, optionality, and politeness, which have not been included in Panther and Thornburg's scenario[21]. Thus, the use of the oblique modals ("could", "would") or the adverb "please" increase the optionality of the addressee to decide whether he wants to perform the action or not. This increase in the optionality of the addressee results in a higher degree of politeness of the speech act, which is an essential element of requests, as will be explained in section 3.2. The prepositional phrase "for a second" in (20a) counts as an attempt to minimise or disguise the cost of the requested action. Minimization of cost also results in a greater degree of politeness, thus favouring the interpretation of the sentence as a request. Notions like these combine with some of the conditions of Panther and Thornburg's scenario to activate further defining variables of requests; this results in the higher degree of prototypicality of sentences containing these elements as members of the category of requests. The main problem with Panther and Thornburg's

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[21] These notion have alsready been discussed in the literature. See, Leech (1983).

account, however, is not that these significant variables are not included in their scenario, but rather that it is difficult to imagine how a scenario, with its focus on dynamism and temporal sequencing, may be able to accommodate such information. In the light of the present discussion, understanding a 'scenario' as structuring a domain does not appear to be a fully reliable solution.

1.3. The metaphor-metonymy continuum

The difficulty in drawing a neat boundary between the phenomena of metaphor and metonymy (see discussion in section 1.1) has led some authors to posit the existence of a continuum between them. Evidence for this continuum has been provided by Dirven (1993) who claims that the metaphor-metonymy continuum hinges on the notion of 'conceptual distance'; in this view the greater the conceptual distance between the source and the target domain of a mapping, the closer it will be to the metaphoric pole and vice versa. In this section, we revise Dirven's account and we further argue that it is also possible to show the existence of a continuum between metaphor and metonymy from the point of view of the formal aspects of the mappings involved.

Dirven (1993), following Jakobson (1971a), believes that the distinction between the syntagmatic and the paradigmatic potential of language lies at the basis of the metonymic and the metaphoric poles. In Jakobson's account, metaphor is defined as a paradigmatic operation based on selection, substitution, the exploitation of similarity, and contrast, whereas metonymy is linked to the syntagmatic axis and is, therefore, based on combination and the exploitation of contiguity.

Taking this definition of metonymy as a starting point, Dirven puts forward a taxonomy of metonymies in terms of three different types of syntagm:

1. *Linear metonymies* are based on the traditional linguistic syntagm. For example, in the sentence *Different parts of the country don't necessarily mean the same thing when they use the same word,* 'different parts of the country' stands for the inhabitants of those territories. This type of metonymy does not involve a significant shift of meaning. In other words, the conceptual distance

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between the two domains involved in the mapping (i.e. 'parts of the country' and 'inhabitants') is small.

2. *Conjunctive metonymies* entail a necessary and systematic change in meaning. In *Tea was a large meal for the Wicksteeds,* 'tea' stands for the meal that is associated with the drink 'tea'. The conceptual distance between the two domains is larger than in the case of linear metonymies. The form "tea" has gradually extended its meaning from denoting a 'plant' to its 'leaves', and from the 'leaves' to the 'drink' which is elaborated with them, and finally to the 'meal' that is traditionally associated with the consumption of tea (i.e. main evening meal). The syntagm involved in the extension of the meaning of 'tea' is not of a linguistic, but of a sociocultural nature. What is important about conjunctive metonymies is that different extensions of a word are still connected via a natural link. No figurative process has yet taken place.

3. *Inclusive metonymies* differ from the two previous categories in invariably exhibiting a figurative interpretation. In other words, the conceptual distance between source and target domains is larger than in the case of linear and conjunctive metonymies. In *I don't doubt but he's got a good head on him*, Dirven argues that "to have a good head" is to be figuratively interpreted with the meaning of 'to be intelligent'. He further notes that "the distance between the sense (physical image) and the reference (mental reality) is so great that we can no longer speak of juxtaposition, but that there is a conceptual 'leap' from one world to another world" (Dirven, 1993: 9).

These three types of metonymy form a continuum from more to less syntagmatic. Linear metonymies are the most clearly syntagmatic of the three and they are central members of their category. At the opposite end of the continuum, inclusive metonymies are the less syntagmatic and, therefore, closer to the metaphoric pole. Conjunctive metonymies lie somewhere in the middle.

We find two main difficulties with Dirven's account, both in relation to his typology of metonymies, and also regarding his criteria for the description of the

metaphor-metonymy continuum. Let us consider his three examples of metonymic types again:

(1) Different parts of the country don't necessarily mean the same thing when they use the same word.

(2) Tea was a large meal for the Wicksteeds.

(3) I don't doubt but he's got a good head on him.

While Dirven argues that what differentiates these metonymic mappings is the 'conceptual distance' between domains, a closer look at the examples reveals that this may not be the case. If we compare examples (1) and (2), we observe that while both of them stem from a conventional metonymic mapping (i.e. LOCALITY FOR INHABITANTS and PART FOR WHOLE respectively), only the second one involves a lexicalization of the metonymy in a particular expression. The word *tea* has lexicalized the meaning 'evening meal' as one of its senses. The same degree of lexical conventionality has been achieved by "have a good head", meaning, 'to be intelligent'. On the contrary, *different parts of the country* has not undergone this process of lexicalisation. In this case, only the underlying metonymic mapping, but not the expression itself, may be regarded as conventional.

Now, if we compare examples (1) and (2) in detail, we may argue that Dirven's criterion of 'conceptual distance' fails to distinguish them in a definite way. Consider the conceptual chain involved in the understanding of each of these examples:

(1) *Conceptual chain of metonymic links underlying the understanding of 'tea' as 'evening meal':* 'tea'-plant stands for 'tea'-leaves; 'tea'-leaves for 'tea'-drink; 'tea'-drink for 'tea'-meal during which 'tea'-drink is consumed; 'tea'-meal for 'tea'-meal even in those cases in which 'tea'-drink is not consumed. The motivation for this chain has been already given above.

(2) *Conceptual chain of metonymic links underlying the understanding of 'head' as 'intelligence':* 'head' stands for 'brain'; 'brain' for 'mind'; 'mind' for 'intelligence'. This chain is motivated by the fact that the 'head' is the part of

the body where the brain is found; and the brain is conceived of as the site of the mind, which, in turn, is the location for 'intelligence'.

The two chains involve the same number of steps, and therefore a similar conceptual distance.

In the light of the above discussion, it can be concluded that Dirven's typology is useful in accounting for the different degrees of conventionalization and lexicalization of metonymy. In order to describe the continuum between metaphor and metonymy, however, it is necessary to look for other criteria. In our opinion, these criteria should be of a formal nature. Consider the following examples:

(4) Our relationship has hit a dead end.

(5) Achilles is a lion.

(6) The pig is waiting for his check.

(7) John is a brain.

(8) The ham sandwich is waiting for his check.

Sentence (4) is an example of the well-known conceptual metaphor LOVE IS A JOURNEY (Lakoff, 1987, 1993). In it we have a set of correspondences between the domain of 'journeys' and the domain of 'love', where the former helps us to structure, understand and reason about the latter.

(5) is also a conceptual metaphor (i.e. PEOPLE ARE ANIMALS). According to Lakoff and Turner (1989: 170-171), this metaphorical expression involves at least three conceptual mappings: the lion is mapped onto Achilles, the structural relation between the lion and its 'courage' is mapped onto the structural relation between Achilles and his courage, and finally, the lion's 'courage' is mapped onto Achilles' courage. Ruiz de Mendoza (2000: 111-112) has argued that rather than these three correspondences what we have is just one correspondence where a central attributed feature of lions, i.e. courage, is mapped onto the corresponding feature in humans. The lion's courage is understood in terms of its relation to its appearance and instinctual behaviour. This

conceptual structure, which serves as a base domain, is preserved in the mapping in such a way that we understand Achilles' courage as being somehow instinctual and associated to his impressive appearance. In order to contrast metaphors of this kind with others, like (4) above, where there is a fully-fledged system of correspondences, Ruiz de Mendoza (1997, 2000) has referred to the former as *one-correspondence metaphors* and to the latter as *many-correspondence metaphors*.[22]

Example (6) would qualify as another instance of *one-correspondence metaphor* where the notion of 'pig' allows us to interpret a person's behaviour as abusive. It differs from other one-correspondence metaphors, like (5), in that it has a referential function. In contrast, the metaphor in (5) is predicative in nature.

The last two examples illustrate two instances of metonymic mapping. In (8), 'ham sandwich' stands for the customer and in (7), 'brain' stands for 'intelligence'. In both cases we have just one-correspondence mappings, which differ from one-correspondence metaphors in being domain internal mappings. While in LOVE IS A JOURNEY or PEOPLE ARE ANIMALS the correspondences hold between two discrete domains, in the case of CUSTOMER FOR ORDER or BODY PART FOR ONE OF ITS ATTRIBUTES, there is only one domain involved. (7) and (8) differ in that the former is predicative, whereas the latter represents a referential use of metonymy.

From the examples given, it is apparent that metonymies are cases of one-correspondence mapping within a domain. Metaphors can be of two types: either many-correspondence or one-correspondence. But they always involve two distinct domains. Although both metaphors and metonymies can be used either predicatively or referentially, it is true that the predicative use of metonymy is not very productive and that the strongest impact of metaphor is precisely based on its non-referential use. It is possible, then, to argue for the existence of a continuum from many-correspondence mappings, with mainly a predicative function (i.e. central members of the 'metaphor' category), to one-correspondence mappings, which take place within a single domain and have a basic referential function (i.e. they are central members of the 'metonymy'

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[22] The distinction between 'many-correspondence' and 'one-correspondence' metaphors is dealt with in

category). In between these two extremes, we find a fuzzy area of less prototypical instances of both metaphor and metonymy, where there are cases of one-correspondence mappings, either between two domains or within a single domain, and with either a predicative or a referential function.[23]

Before concluding one final remark should be made regarding the typology of metaphors proposed above. The distinction between one-correspondence and many-correspondence metaphors, although useful in laying bare the grounds on which the continuum between metaphor and metonymy is established, is not the only classification of metaphor types which exists in the literature. Apart from the criterion concerning the number of correspondences, taxonomies can be built according to other criteria such as the nature of the source domain or the level of specificity. Each of them profiles a different aspect of metaphor. In the following section we shall review the most interesting proposals which have been offered in Cognitive Linguistics and try to determine the degree of compatibility that holds among them.

1.4. Classifying metaphor from different perspectives

As was mentioned in the previous section, Ruiz de Mendoza (1997) has put forward a distinction between metaphor types based on the number of correspondences that hold between the source and target domains of the mapping. Metaphors can also be classified according to the nature of the source domain. This criterion was chosen by Lakoff and Johson (1980) to develop their taxonomy of conceptual metaphor; they distinguished three main types: structural, orientational, and ontological. In structural metaphors, one concept is structured and understood in terms of another concept (e.g. LOVE IS A JOURNEY; ARGUMENT IS WAR). Regarding orientational metaphors, these are related to spatial orientations (e.g. GOOD IS UP; MORE IS UP). Within this type not only a concept but a whole system of concepts is structured with respect to another (Lakoff and Johnson, 1980: 14). Finally, ontological metaphors allow us to deal

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more detail in section 1.4.

[23] Section 1.5. provides arguments for the preferred predicative and referential character of metaphor and metonymy respectively, from the point of view of the type of mapping involved in each of them.

with abstract entities as if they were physical objects or substances (e.g. INFLATION IS AN ENTITY; THE MIND IS A MACHINE).

Later on, this typology was refined in Lakoff and Turner (1989) so as to make it include cases of metaphor which were not considered in Lakoff and Johnson's (1980) proposal. In this new light, the orientational group is broadened in order to encompass any kind of image-schema. This new group which subsumes both spatial orientations and topological constructs is labelled *image-schema metaphors*. In this fashion, the concept of 'container' -originally conceived as a source for ontological metaphors in examples such as *He is in love*, where 'states' are viewed as 'containers'- is now regarded as a source for an image-schema metaphor. Another innovation of Lakoff and Turner's (1989) classification is the treatment of ontological metaphors as an exploitation of a folk model which they label the Great Chain of Being. In this model, different kinds of entities are arranged in a hierarchy where human beings represent the higher order and natural physical things are located in the lower position. The items in the hierarchy are arranged in the following way:

humans > animals > plants > complex objects > natural physical things

The Great Chain of Being determines the relationships that exist between the different orders of the hierarchy. Thus, each level bears the properties attributed to the lower ones but also incorporates an additional distinctive feature. By means of this metaphor, we are able to understand human attributes in terms of corresponding animal attributes as in *He is a rat*, *John is a lion*, or *Mary is a cow*. All these expressions are instantiations of the PEOPLE ARE ANIMALS metaphor. In them, a culturally attributed behavioural feature of rats (i.e. meanness), lions (i.e. courage), and cows (i.e. stupidity) is used to describe people. In this respect Ruiz de Mendoza (1997) has noted that metaphors based on the Great Chain of Being are invariably cases of one-correspondence metaphor. According to him, in this kind of metaphor a singular aspect of the source domain is singled out and mapped onto the target domain. For example, in *John is a lion*, the courage typically ascribed to lions serves to describe John's behaviour.

Finally, Lakoff and Turner (1989) posit the existence of a fourth type of conceptual metaphor, which they call *image metaphor*. In these metaphors, a mental image and its structure is mapped onto another mental image with its structure; that is why metaphors of this kind are regarded by these authors as *one-shot metaphors*. These metaphors are very rich in visual imagery, which makes them less usual in ordinary language but more typical of poetic or literary language than the other metaphor types. An example of this metaphor type, drawn from Lakoff and Turner (1989: 92), is found in the sentence *My horse with a mane made of short rainbows*, where the image of a rainbow (with its curved lines) is mapped onto the image of the mane of a horse (with its arcs of curved hair). The classification which arises from the combination of Lakoff and Johnson (1980) and Lakoff and Turner's (1989) proposal is diagrammed below:

Structural metaphors

Image-schema metaphors

Ontological metaphors

Image metaphors
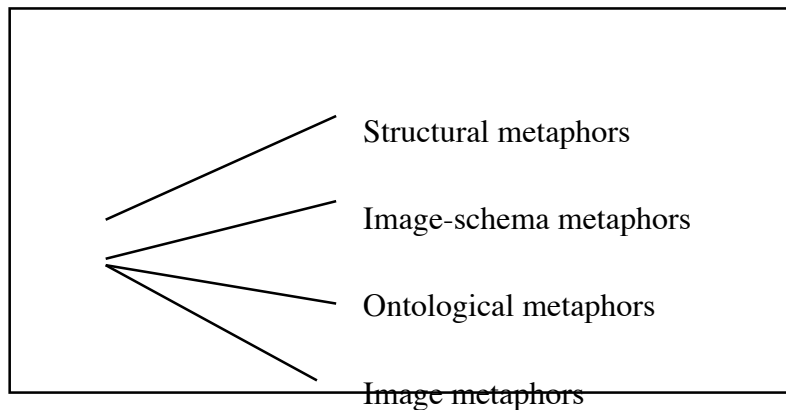
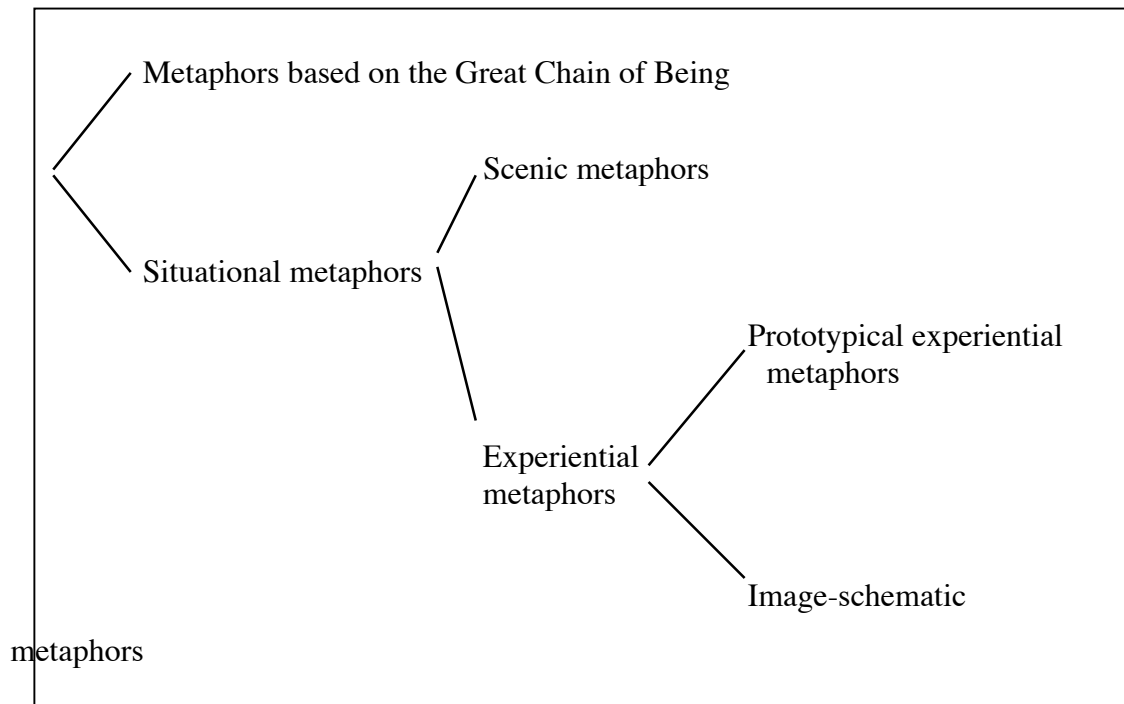**Figure 1:** Metaphor types according to the nature of the source domain

This metaphor classification has been refined by Ruiz de Mendoza (1999a) and Santibáñez (1999). First, Ruiz de Mendoza has argued for the existence of one type of metaphor, not included in Lakoff and Johnson (1980) or in Lakoff and Turner (1989), which he labels *situational metaphor*. Situational metaphors work on the basis of deriving generalizations from a conventional situation. This metaphor type usually appears in combination with a metonymic mapping, which has the function of mapping a concrete picture onto a wider situation. An example of this type is found in the expression *To get up on one's hind legs* (cf. section 1.3). In this case the actual action of an animal rearing up on its hind legs stands for the whole situation in which an animal shows this kind of behaviour, usually out of fear, as if to attack. The complete scene is

the source domain of the metaphor which is mapped onto the target domain. Second, Santibáñez (1999) has offered an alternative classification of metaphors which incorporates Ruiz de Mendoza's findings into Lakoff and Turner's (1989) version. According to this author, metaphors can be divided into three main groups regarding the nature of the domain involved: *structural metaphors*, which encompass Lakoff and Turner's (1989) structural, image, and image-schematic metaphors; *ontological metaphors*, which fully correspond to Lakoff and Turner's (1989) Great Chain of Being metaphors; and finally, *situational metaphors*, which occupy a middle position between the two previous ones and shares some features with both of them.

More recently, Peña (2001) has offered a very interesting classification which combines the two criteria described so far, namely the number of corrrespondences of the mapping and the nature of the domains involved. In her classification we can find two main types of metaphor: *situational metaphors* and *metaphors based on the Great Chain of Being*. The former correspond to structural and image-schematic metaphors and are many-correspondence mappings, whereas the latter coincide with ontological metaphors and are one-correspondence metaphors. Peña (2001) has further subdivided situational metaphors into *experiential* and *scenic metaphors*. Experiential metaphors are used to reason and talk about an event which is hard to describe because it belongs to the realm of inner, subjective experience. This metaphor type is instantiated by sentences such as *He fell in love again after his wife's death* or *She is in a good mood*; both sentences portray situations which affect the person involved in them. Scenic metaphors, on the other hand, are used to deal with situations which pertain to the outer world of observable experience. This metaphoric type makes invariable use of metonymic development of its source domain (i.e. the situation to be represented metaphorically is only partially invoked by the linguistic expression). In addition, Peña (2001: 7) has noted that "in scenic metaphors an external observer of the state of affairs can become aware of some external sign", which is not the case with experiential metaphors. An example of a scenic metaphor is found in *You make my blood boil*. In this sentence the metaphor correlates the visible physiological effects of anger (sweat, redness, etc.) with the visible effects of a liquid boiling inside a container. These physiological effects are also the source domain of a metonymic mapping whose target domain is anger or wrath. Finally, experiential metaphors may also incorporate a

metonymic component depending on whether or not they need a metonymy for their full understanding. Peña (2001) further distinguishes between *prototypical experiential metaphors*, which involve a metonymic mapping, as in *Her heart sank*, and *image-schematic metaphors* (e.g. *He is in love*). Peña's (2001) taxonomy is diagrammed in figure 2 below:

Metaphors based on the Great Chain of Being

Scenic metaphors

Situational metaphors

Prototypical experiential metaphors

Experiential metaphors

Image-schematic

metaphors

Figure 2: Peña's (2001) taxonomy of metaphor types.

Peña's classification introduces considerable refinement into former proposals. However, we believe that it misses two points. First, it proposes a basic division between situational and ontological (or Great Chain) metaphors, but not all non-ontological metaphors are situational. Second, it considers image-schemas as experiential. While it is true that image-schemas are pre-conceptual structures that arise directly from our sensory-motor experience, it is also true that these constructs have a fundamentally topological nature. Thus, we believe that metaphors based on image-schemas pattern more naturally with image metaphors. We further claim that the basic parameter in setting up a classification of metaphor types is the presence or absence of a well-developed system of correspondences in the source domain. In terms of this

criterion, we distinguish two broad groups: *structural* and *non-structural metaphors*. Structural metaphors are always many-correspondence mappings while non-structural metaphors involve only one correspondence from the perspective of the formal features of the mapping process. Within the non-structural group we find two subgroups: orientational (e.g. HAPPY IS UP) and ontological (e.g. PEOPLE ARE ANIMALS), both of which coincide with Lakoff and Johnson's (1980) groups.

The structural group, on the other hand, can be divided into two subgroups: *situational* and *non-situational metaphors*, which are in turn further subdivided into three metaphor types: *image-schematic, image, and propositional metaphors*. As its name suggests, in image-schematic metaphors one or various image-schemas are crucial for the construction of the source domain of the metaphor. For example, in *To be in trouble*, the structure and logic of the CONTAINER image-schema provides all the information necessary for the creation of the source domain of the metaphor. Image metaphors are the result of mapping two images which in a certain way share a common topology. As has been pointed out above, one of the main features of this metaphor is that the target domain is not necessarily more abstract in nature than the source domain. For example, consider the following extract from *The Tempest*:

> (1) The fringed curtains of thine eyes advance
>   and say what thou see'st yond
>   *(William Shakespeare, The Tempest, I, ii)*

This expression compares the curtains of a theatre to the eyelids of a person. The metaphor is based on a singular experience; in them, the two images which form the source and target domains of the metaphor have an overall common shape. Thus, the pupil corresponds to the stage, the people reflected in the pupil are mapped onto the actors on stage, the eyelid is the curtain and the eyelashes correspond to the fringes of the curtain. Besides, as the previous set of correspondences show, the source and target domains also share the same level of abstraction.

Propositional metaphors include mappings such as ARGUMENT IS WAR or LOVE IS A DISEASE, where the source is a non-situational, non-topological construct and the target domain is a concept which, because of its abstractness, is sometimes

difficult to comprehend and deal with. By means of this metaphor type, the conceptual structure of the source domain is used to reason and talk about the target domain. Consider in this respect the classical example LOVE IS A JOURNEY:
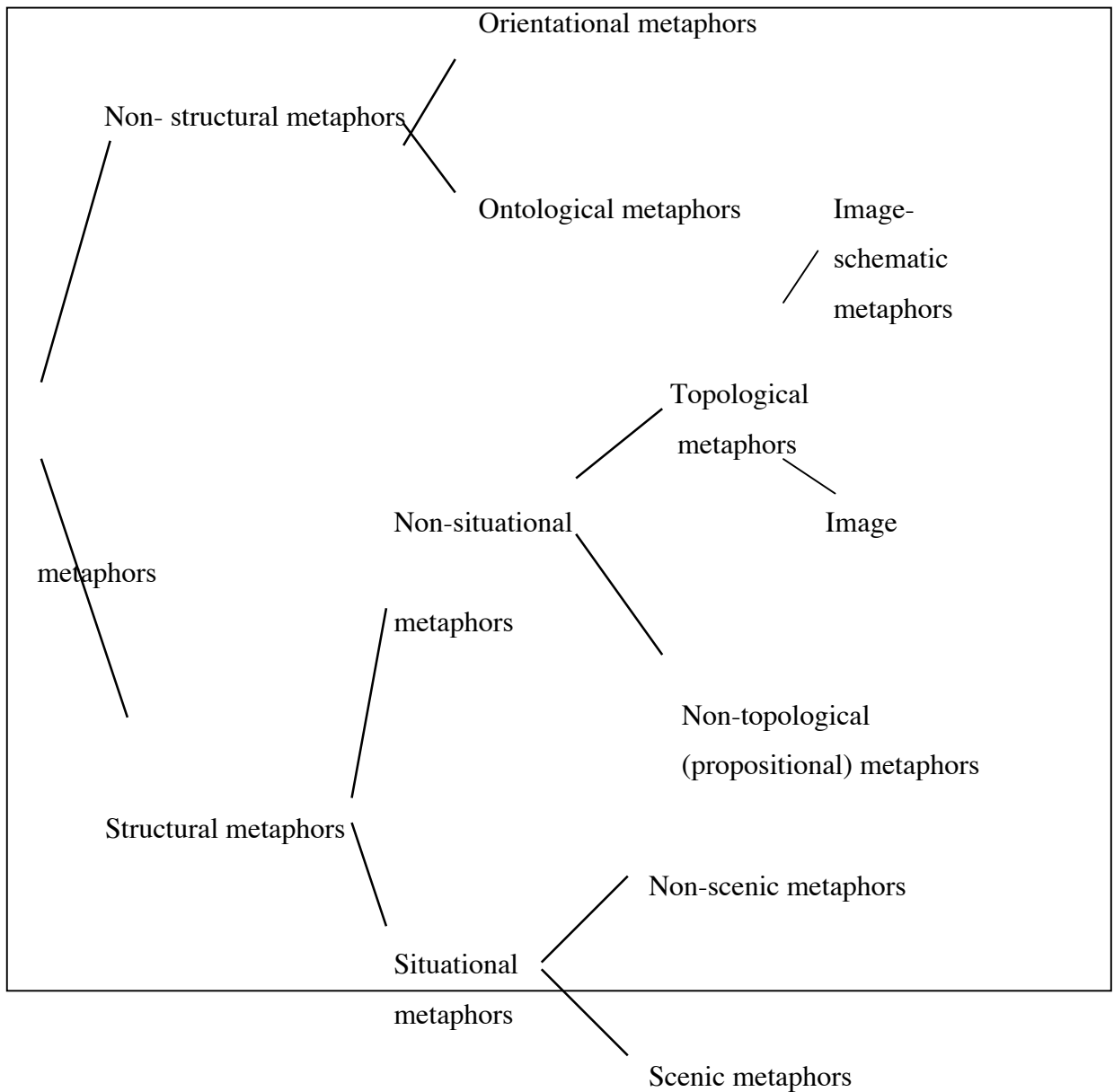
Travellers map onto lovers.

The vehicle maps onto the love relationship.

Travellers' common destinations map onto lovers' common goals.

Impediments to travel map onto difficulties in the relationship.

Subsequently, this system of correspondences underlies several expressions about love which we can only understand with reference to this metaphor (e.g. *Our marriage is on the rocks*; *Our relationship is going nowhere*; *We are spinning our wheels*).

Finally, situational metaphors present a fragment of a scene which needs to be metonymically developed so as to invoke the complete situation, which is then metaphorically mapped onto the target domain. Consider the expression *To beat one's breast*, as used to indicate that a person openly shows his anger or sorrow. This expression is based on a real-life situation in which the actual beating of one's breast involves the idea of remorse or wrath. However, in the target domain of the metaphor no real beating takes place. Situational metaphors are further subdivided into *non-scenic* and *scenic metaphors*. Scenic metaphors are those which invoke an observable situation. By way of illustration, consider the expression *He left with his tail between his legs*, which allows us to picture a situation in which a person is humiliated in terms of the corresponding situation in which a dog is beaten and runs away with its tail between its legs. By contrast, non-scenic metaphors involve situations which cannot be observed. For example, *Her heart was in her mouth*, where there is not any external feature of the situation referred to by the metaphor. The classification offered above is summarized in the following diagram.

Orientational metaphors

Non- structural metaphors

Ontological metaphors

Image-
schematic
metaphors

Topological
metaphors

Non-situational

Image

metaphors

metaphors

Non-topological
(propositional) metaphors

Structural metaphors

Non-scenic metaphors

Situational

metaphors

Scenic metaphors

Figure 3: Metaphor types according to the nature of the source domain.

Another classificatory criterion for metaphor is based on the kind of correspondence which holds between the source and target domains. This possibility has been studied by Grady (1999), who has distinguished between *correlation and resemblance metaphors*. The former "involve a correlation between distinct dimensions

of experience" (Grady, 1999:86) such as MORE IS UP. *Resemblance metaphors*, in turn, take place when the source and target domains share some features, which prompt the metaphoric mapping. For example, in *John is a lion*, the shared feature is 'courage'. Grady's (1999) taxonomy is very interesting in that it makes evident the different groundings for metaphor and in that it bridges the gap between the classical -now discredited- similarity theory and Lakoff & Turner's (1989) more recent resemblance hypothesis. While the former is based on full literal similarity, the latter focuses on the non-literal perception of some shared features.

Metaphors can also be classified according to the degree of complexity of the metaphoric operation. Thus, Grady (1997, 1998) has distinguished *primary metaphors* from *compound metaphors*[24]. The former, which are the direct product of correlations which arise from our experience, frequently combine among them to create compound metaphors. For example, Grady (1998) shows how the CONDUIT metaphor is the result of the combination of the following primary metaphors:

CONSTITUENTS ARE CONTENTS (e.g. *The main idea in what he said*)

BECOMING ACCESSIBLE IS EMERGING (e.g. *His innermost musings finally surfaced*)

TRANSMISSION OF ENERGY IS TRANSFER (e.g. *Give a speech*)

ACHIEVING A PURPOSE IS ACQUIRING A DESIRED OBJECT (e.g. *I can't grasp that argument*).

The source domain of primary metaphors comes directly from our sensory-motor experience. In consequence, the source domain of these metaphors shows a lower degree of abstraction than their target domain. Nonetheless, the source domain of primary metaphors is still more abstract in nature than the source domain of ontological and situational metaphors. It is worth remembering that the source and target domains can only share the same level of genericity when we are dealing with reference point phenomena (i.e. metonymy) or when there is only one correspondence in the mapping.

On the other hand, the source domain of a primary metaphor must be more abstract than the source domain of an ontological or situational metaphor because they are metaphors with different ontological status and different communicative purposes. In primary metaphors we correlate experience whereas in non-primary metaphors we are linking different aspects of the domains involved by resemblance. Finally, it follows from the previous discussion that primary metaphors always work on the basis of correlation.

A final parameter which can be chosen to classify metaphors is the nature of the mapping system. Thus, we have seen that metaphors may be either *one-correspondence* or *many-correspondence* mappings. Since the main features of this distinction have already been expounded in the previous section, we shall not repeat them again. In the next section we shall study its special importance for a correct definition of metonymy.

In this section we have discussed four different criteria which may be followed in developing taxonomies of metaphor types. Each of them has been shown to profile a different aspect of the phenomenon in such a way that all of them prove to be compatible among themselves. By way of illustration, the expression *John is a lion*, which is an instantiation of the metaphoric mapping PEOPLE ARE ANIMALS, can be classified simultaneously as ontological, based on resemblance, and one-correspondence; or MORE IS UP can be classified as non-situational, orientational, correlational, and one-correspondence.

1.5. Criteria for a definition of metonymy

The review of some contemporary accounts of metonymy in the previous four sections has raised several important questions:

(1) If both metonymy and metaphor can be found in 'stands for' relationships and both can be used predicatively and referentially (see section 1.1), what are the truly definitional criteria for these two phenomena?

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[24] Primary metaphors are sometimes referred to in the literature as *primitive metaphors*. Similarly, compound metaphors may be called *complex metaphors*.

(2) Why is the predicative function primary in metaphor and the referential function primary in metonymy? (see section 1.3)

(3) If metonymy is defined as a contiguity relation within a conceptual domain, what are the limits of the domain involved? How much information does it contain? Should 'fur coats', for instance, be included within the restaurant domain? (see section 1.2)

(4) When is the notion of domain highlighting NOT relevant in the production of metonymic mappings? (see section 1.2)

In this section we attempt to offer some plausible answers to these questions and, at the same time, to put forward an alternative definition of metonymy in terms of its formal constituents.

1.5.1. Distinguishing metonymy from metaphor

In section 1.1, it was pointed out that neither the 'stands for' nor the 'referential' criteria are definitional of metonymy, since they may also be found in some cases of metaphor. These similarities between metaphor and metonymy seem to require a different definitional treatment for both phenomena. In Ruiz de Mendoza (1997) this problem has been solved by distinguishing between two types of metaphor from the point of view of the formal nature of the mapping process. On the one hand, we have one-correspondence metaphors and, on the other hand, we have many-correspondence metaphors. The difference is very simple. As a conceptual mapping a metaphor consists of a number of correspondences between its source and target domains. In some metaphors, there may be just one correspondence between source and target while others may have a fully-fledged system. One case of many-correspondence metaphor would be ARGUMENT IS WAR, which is characterized by several correspondences, as we have seen above. This mapping system lies at the base of metaphoric expressions like *I was attacked on all sides*, *I won the debate*, and *He shot down all my arguments*, among many others. Consider now this example:

(1) We've got to keep exploring this problem but I don't really know if we're close to the solution, even though the evidence all seems to point in the same direction.

In this example, a problem is seen as a region (e.g. a landscape) which has to be explored. The solution to the problem is thought to be concealed somewhere in the region and there are clues (i.e. the evidence) as to where the solution may be found. We have several types of relevant correspondences:

- A solution to a problem is an object hidden somewhere.

- Investigating the problem is exploring the region where we expect the object to be hidden.

- Finding the solution to the problem is discovering the place where the object is hidden.

- Evidence is a guide in the search.

The examples given are clear indications that the function of many-correspondence metaphors is to structure and reason about as many aspects as possible of abstract notions like war or a problem.

A good example of one-correspondence metaphor is the PEOPLE ARE ANIMALS system, which we have discussed above. In this system, as we have seen, human behaviour is interpreted in terms of (culturally attributed or observable) animal behaviour. For example, lions are thought to be courageous, which explains the meaning of *John is a lion*. The function of one-correspondence metaphors is to bring into focus one aspect of the target domain which is then applied to the source. In the case of PEOPLE ARE ANIMALS, this aspect is the attributed animal behaviour. The metaphor may also have to do with physical attributes as in *He has an eagle eye for details* and even, through less frequently, with physical appearance. Thus, when we think of John as a lion his braveness may be partially associated with his appearance. In the one-correspondence metaphor PEOPLE ARE PLANTS, appearance seems to play a more important role. Consider *She was blooming with health* and *She is a tender rose*.

In these examples behaviour is not relevant possibly because it is difficult to attribute behaviour to plants. Finally, consider the metaphor PEOPLE ARE MACHINES and its converse MACHINES ARE PEOPLE. Machines are functional objects which do a certain type of work. This makes it easy to interpret certain forms of human behaviour in terms of the way a machine works: for example, we may think of a person working untiringly as a machine (e.g. *That judge is a deciding machine*) or of a person who ceases to behave in a normal way (or who simply stops doing things because of some difficulty) as having a functional problem (e.g. *He has had a breakdown*). In the case of MACHINES ARE PEOPLE we attribute intentionality to the actions of a machine, as in *My phone is playing up again* or *My computer is spewing garbage at me*.

Metonymies are, like the metaphors PEOPLE ARE ANIMALS, PEOPLE ARE PLANTS, and PEOPLE ARE MACHINES, cases of one-correspondence mappings. Consider the following examples:

(2) I have bought a Ford.

(3) The ham sandwich is waiting for his check.

(4) She's just a pretty face (cf. example (3) in section 1.1 above).

In (2) the mapping is from the company to the type of car produced by the company. In (3) there is only one correspondence between the customer and his order. In (4) the correspondence is between one attribute of Mary's face and Mary. On the other hand, the following examples illustrate that one-correspondence metaphors may also be used referentially, whereas many-correspondence metaphors may not:

(5) The pig is waiting for his check.

(6) Look boys, here is the chicken.

(7) There goes the damned rat who betrayed me.

(8) My tender rose abandoned me.

This suggests that the preferred referential use of metonymies is closely connected to the fact that they cannot be anything but one-correspondence mappings. Let us consider why.

In a one-correspondence mapping one attribute of the source is highlighted and made to correspond with one attribute of the target. Highlighting an attribute serves the same function as providing a relevant description of the entity we are talking about. In this sense, the target is enriched conceptually and as a result gains referential potential, which makes it readily available for referential use. This is very similar to what happens with definite descriptions; the greater the number of adjectives and modifying noun phrases we add to them, the greater their capability to refer (cf. *The tall man* vs. *The tall, strong man wearing a brown hat and carrying an umbrella*).

Since there are one-correspondence metaphors, and both metaphor and metonymy may be used referentially and predicatively, the sole (and crucial) distinguishing feature between metaphor and metonymy is to be found in the domain-internal nature of metonymic mappings which contrasts with the domain-external nature of metaphoric mappings. In this connection, we argue that there are two types of metonymy.

(1) *Source-in-target metonymies:* those in which the source domain is a subdomain of the target domain, as in *We are always in need of some new hands in the farm*, where by 'hands' the speaker refers to the labourers who are going to do hard physical (usually manual) work. Figure 4 illustrates this type of metonymic mapping:
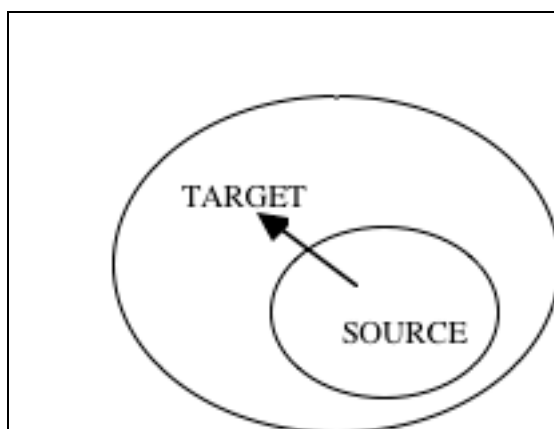
Figure 4: Source-in-target metonymy

(2) *Target-in-source metonymies:* those in which the target domain is a subdomain of the source, as in *She's learning to tie her shoes* where 'shoes' means 'shoelaces':
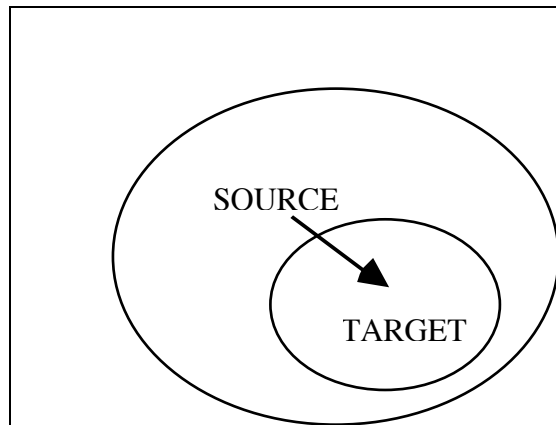
Figure 5: Target-in-source metonymy

It has been traditionally assumed that metonymy involves an additional part-for-part relationship (i.e. one subdomain within a domain stands for another subdomain within the same domain). Examples of this metonymy would be *Nixon bombed Hanoi* and *Napoleon lost at Waterloo* (Lakoff and Johnson, 1980: 38), where the ruler stands for the army under his command within the frame of war. Other examples would be based on other frames: the product frame, as in *The company hired a new editor, I have been reading a lot of Plato lately*; the location frame, as in *The White House isn't saying anything*; and others. However, we argue that all these are simply instances of target-in-source metonymy. There are several linguistic phenomena which are better accounted for if we adopt this view and which help us understand why this is a more elegant solution (see Ruiz de Mendoza, 2000: 115-120). However, we will not deal with them at this point. For the time being, we shall simply point out that it is possible to think of the armies under Nixon and Napoleon's command as part of our knowledge of

them. We know that both rulers were in control of their armies. In a similar way, we know that it is not the whole company but someone already working for it that is in charge of employing new people. In this view, Plato's work is part of the conceptual domain for Plato, and the White House refers to some officials who work in the White House, which makes it reasonable to think of them as a subdomain of the White House. One further example will make this evident. Compare:

(9) The ham sandwich has left without paying.

(10) The fur coat has left without paying.

Proponents of the existence of part-for-part metonymies, such Taylor (1995: 123), consider (9) as an example of this kind of mapping within the restaurant frame or ICM. And of course both the ham sandwich and the customer belong to this frame. The question is whether, for the purpose of the metonymic operation to be carried out, we can or cannot consider the ham sandwich to belong to the customer domain. Sentence (10) provides us with an interesting clue. Imagine that the customer is a lady who wears an expensive fur coat and leaves without paying. The fur coat is not part of the restaurant ICM any more than a pair of sandals or any other article of clothing (cf. the analysis of the 'striped sweater' and related examples in section 1.2). It is rather part of the customer ICM, but it serves the same referential function as the ham sandwich. It is only a contextual reason that makes it more relevant to identify the customer by her clothing than by what she has ordered. Thus, (10) is more appropriate as an expression of surprise that an apparently wealthy person did not pay the bill than a sentence like *The chicken salad has left without paying*.

In the light of our discussion, we find it reasonable to reduce metonymic types to cases where the target is a subdomain of the source (target-in-source metonymies) and to those where the source is a subdomain of the target (source-in-target metonymies). We shall further refer to the main domain by the label *matrix domain*.

Now it is possible for us to answer our question as to why metaphors lend themselves more readily to predicative uses than metonymies, and viceversa, metonymies are primarily used referentially:

(i) Many-correspondence mappings have no referential potential since they are used to structure a conceptual domain. They can only be used predicatively.

(ii) Metaphoric one-correspondence mappings (i.e. those carried out across different domains) have weak referential potential, as the scarcity of examples and their strong dependence on the context (i.e. their low degree of conventionalization) shows. Their preferred use is to highlight one specific quintessential characteristic of the source which will then be applied to the target. On occasions, this characteristic, given the right context, will serve the purpose of providing the language user with a densely packed description which can be safely used to uniquely identify a referent.

(iii) In contrast, metonymic mappings, which are, by definition, one-correspondence mappings, have a strong referential potential, but at the same time their predicative potential is weak. This is related to the fact that the metonymies are constructed on the basis of just one conceptual domain, which makes it difficult to map the structural relation between source and target onto the target since one of its domains is already part of the other. It is only in grammatical constructions which force the language user to bring out a quintessential characteristic of the source to map onto the target that we can have a predicative use of a metonymy.

It is interesting to note that the only predicative uses of metonymy which we find need to fulfil two conditions: (i) the source has to be a clear subdomain of the target; (ii) if no quintessential feature has been determined by convention in the source, it has to be possible to use some linguistic mechanism which brings out such a feature. For example, compare:

(11) ??That customer is a ham sandwich.

(12) That customer is a brain.

(13)

(a) ?She is a face.

(b) ?She is her face.

(c) She is a pretty face.

Condition (i) rules out the ham sandwich example but licenses sentence (12), where there is a quintessential feature ('intelligence') established by convention. The use of the attributive adjective "pretty" in (13c), which singles out the relevant feature which the speaker finds relavant, makes it possible to perform the mapping. This is in fulfilment of condition (ii). Condition (i) is also observed since the face (the source) is a clear subdomain of the concept of person.

It might be argued that sentences like *John is a brain* or *Mary is a pretty face* are not metonymic but metaphorical, or that they are borderline cases. However, if this were so, there would be a strange asymmetry in postulating the possibility of using one-correspondence metaphoric mappings both predicatively and referentially, while one-correspondence metonymic mappings would only be referential. Also, when a speaker says that Mary is a pretty face he is thinking of the beauty of her face. The same holds for *John is a brain*. We think of the excellent intellectual faculties of John's brain.

If our observations are correct, this provides further evidence (see section 1.3) in favour of the existence of a continuum from metaphor to metonymy, with cases of many-correspondence mappings at the metaphoric end, and clear cases of referential metonymy at the other end. Referential uses of metaphor and predicative uses of metonymy would be in the middle. Second, we may separate metaphor from metonymy simply by looking into the nature of the relationship between the domains involved in the mapping. A metaphor is a mapping across different domains, while a metonymic mapping is domain-internal.

1.5.2. The boundary between metonymy and literal uses of language

The analysis carried out above has allowed us to distinguish metonymy from metaphor. However, we still need to draw the boundaries between metonymic and literal uses of language. Consider the sentences:

(14)

(a) Neanderthal man's brain was larger than that of modern man, if less well developed.

(b) His damaged brain does not allow him to move half of his body any longer.

(c) Your brain allows you to think and talk.

(d) Her brain was full of ideas.

(e) He has an excellent brain, sir.

As a bodily organ a brain has a number of physical characteristics in terms of shape, size, weight, and function. Examples (14a-c) are based on this understanding of the concept of 'brain'. If we use Langacker's (1987) terminology we would say that in these sentences the concept of 'brain' is profiled in the domains of size and function. However, in (14d) and (14e) the word "brain" is used in a different way. In (14d), the concept of 'brain' is used metaphorically as a container for ideas which are also seen metaphorically as physical entities. Ideas are the stereotypical result of brain activity: culturally, the quintessential feature of a brain, the characteristic which we are better aware of, is that it allows us to think. This stereotypical feature plays an essential role in the preferred interpretation of (14e). Here the brain is seen, like in (14b) and (14c), in terms of one of its functions, but there is a crucial difference. In (14e) the function is not mentioned explicitly but is left for the speaker to infer. The adjective "excellent" applies by default to the stereotypical quality of the brain as the organ that allows us to think. The expression "an excellent brain", however, could be taken to apply, in the right context, to one of the physical qualities of brains. For example, imagine that a butcher is selling brains to eat; in this context, the adjective "excellent" would apply to the quality of a brain as an edible part of an animal. Or in a (still) fictional situation in which a physician is capable of carrying out a brain transplant the adjective "excellent" would apply to the organ as a whole. So, only in the stereotypical interpretation can (14e) be said to have a metonymic reading where we go from the concept of 'brain' (the matrix domain) to the subdomain of its ability to think. If this is so, we need to find what allows the metonymic shift to take place in this situation. It may be suggested that the

crucial parameter is the degree of centrality of the different subdomains of 'brain'[25]. As a physical organ, it is impossible to conceive of a brain without shape, size, and weight; it is also difficult to think of a brain which cannot be eaten (however disgusting this may be for some people). But it is possible to think of a non-functional brain (e.g. one which is dead). The ability to think and understand (i.e., intelligence) is not a central characterization of the concept of 'brain'. This is the reason why, in the default interpretation, there is a metonymy in (14e). Consider now the following sentences (see also our discussion of the related examples in section 1.5.4 below):

(15)

(a) The burglar broke the ground-floor window.

(b) The burglar came in through the ground-floor window.

In (15a) we typically understand that what the burglar broke was the window pane, not the frame or the handle. When we think of a window we picture in our minds an opening in a wall which has glass in it so that light can come in and we can see out, and which protects us from the wind, the rain, or bad weather in general. Windows usually have frames inside which the glass pane is fitted and often a handle to help us open and close them. However, we can think of a window without a pane, or without a frame or a handle, so these are not central characterizations of the concept. But we cannot think of a window if there is no opening. This is the central characterization which allows us to understand (15b) non-metonymically, while (15a) requires a metonymic shift.

Let us add one final example to reinforce our view:

(16)

(a) She threw a bottle at me.

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[25] As discussed in section 1.2, Croft (1993) has attempted an explanation of metonymy in terms of 'intrinsicness', one of the four criteria which -together with conventionality, genericity, and uniqueness- have been put forward by Langacker (1987: 160) in order to determine the centrality of a semantic specification. Ruiz de Mendoza (1997, 2000) discusses some of the weaknesses in Croft's account and proposes centrality, not just one of its properties, as the relevant criterion to determine whether there is a case of figurative or literal use of language.

(b) He opened ('uncorked') a bottle of good wine.

(c) John drank a whole bottle.

(d) John smashed the bottle.

A bottle is a container, shaped like a cylinder with a narrow top, and is used for keeping liquids in. It is usually made of glass or plastic and is closed with a cap, top or cork. The central characterization of a bottle is provided by the fact that it is a container which can be opened or closed. The rest of the features which we have mentioned are secondary. This makes us understand (16a) and (16b) as non-metonymic, while the other two sentences require a metonymic shift: in (16c) the shift is from 'bottle' to the liquid in it, and from 'bottle' to the (typically) glass material which it is made of in (16d).

Taking into consideration all of our previous observations, we are now in a position to refine our initial definition of metonymy. Thus, we may define metonymy as a domain-internal one-correspondence conceptual mapping where the matrix domain can be either the source or the target of the mapping and where the target domain is a non-central characterization of the source. This latter requirement is immaterial in the case of source-in-target metonymies, since in them the target will always be the matrix domain.

Finally, we must note that there is an essential difference between the two metonymy types which we have postulated. Source-in-target metonymies (like the ham sandwich example) involve domain expansion (i.e., by mentioning part of a domain we invoke it fully), while target-in-source metonymies (like the bottle example) involve conceptual reduction and the consequent highlighting of part of a domain. It is very often the case that a speaker makes use of a target-in-source metonymy when he wants to refer to an entity whose description he is unable to pin down accurately. This is typical of the INSTITUTION/COMPANY FOR PEOPLE RESPONSIBLE metonymy. Institutions are usually complex, which makes it difficult for people little acquainted with them to know well all the details about their organizational structure. But the institution is ultimately responsible for what the people who work in it do. This

facilitates the metonymic shift which may vary depending on the knowledge the person has. For example, the sentence *Sears approved our credit card application* would be meaningful both for someone who knows the internal procedures of the company and for the person who does not know them, but in a different way. For the former it may invoke the specific department or committee inside Sears, while for the latter it may be enough to bring up a rather vague specification like 'the people in charge of credit card applications'.

1.5.3. Nature and scope ofthe notion of 'matrix domain'

In section 1.2, it was amply shown that the notion of 'domain' is understood in different accounts of metonymy in terms of a variety of specific models of knowledge organization, including cognitive models, frames, scenarios, or domains. It was further argued that some of these principles of knowledge organization (particularly scenarios) are not broad enough to include all the necessary information to explain certain types of metonymic mappings (e.g. illocutionary metonymies). It was also pointed out that there is an urgent need to provide a solid definition of 'domain' (something which to the best of our knowledge has not yet been attempted) as a preliminary step on the way to reach a better understanding of metonymic mappings. We have defined metonymy as a one-correspondence conceptual mapping within one matrix domain. Since this definition relies heavily upon the notion of 'matrix domain', it is necessary to devote some space to an explanation of the nature and scope of this concept in terms of our account. Otherwise, the definition would be void.

Within the encyclopedic view of meaning, Langacker (1997: 235) regards 'domains' as quite open conceptual structures which may include information from the context of situation and/or from the previous discourse. This description may lead us to believe that the notion of cognitive domain is very close to that of 'idealized cognitive model' (Lakoff, 1987). The similarities between the two concepts have been spelled out in Taylor (1995: 86 ff). Langacker (1987: 147) further defines a 'domain' as a conceptual structure which functions as the background (i.e. a 'base') against which other concepts can be understood or "profiled". By way of illustration, the notion of 'arch' is profiled against the concept of 'circle', which functions as its base. One

concept can be profiled in relation to more than one base domain. 'Finger', for instance, can take the domains of 'hand', 'shape', or 'physical object' as its base. The sum of all the domains underlying a concept has been labelled 'domain matrix' (Langacker, 1987: 147). As Taylor (1995: 86) remarks, the notions of 'profile' and 'base' are implicit in Lakoff's (1987: 74 ff) account of meaning. In his analysis of the concept 'mother', this author claims that five propositional cognitive models are required in its understanding: the 'birth' model (the woman who gives birth to the child is the 'mother'), the 'nurturance' model (the woman who nurtures and brings up the child is the 'mother'), the 'marital' model (the woman who is married to the child's father is the 'mother'), the 'genetic' model (the woman who contributes the genetic material is the 'mother'), and the 'genealogical' model (the closest female ancestor is the 'mother'). These models converge into what Lakoff (1987: 74) calls a "cluster model", which, in principle, appears to correspond closely to Langacker's notion of 'domain matrix'. Thus, each of the converging models would correspond to a base domain against which the concept of mother can be profiled.

Nevertheless, in spite of this apparent similarity, a crucial difference can be observed between Langacker's 'domains' and Lakoff's 'cognitive models'. If we follow Langacker, we would have to understand each of the converging cognitive models as having its own inner structure, an assumption which is not present in Lakoff's account. The 'birth' model, for example, would be profiled against a number of base domains, including (i) the 'procreation' domain characterized by the existence of sexual interaction, partners, etc.; (ii) the 'pregnancy' domain which includes nine months pregnancy, cravings, a foetus, etc.; and (iii) the 'birth' domain with a hospital, birth wards, the midwife, going into labour, etc. Each of these domains functions as a frame of reference for the activation of part of the information (i.e. only relevant information) contained in a cognitive model (cf. Santibañez, 1999).

In view of the above comparison between cognitive models and domains, it becomes apparent that both notions, in spite of their apparent similarity, are quite distinct. Moreover, they need to be kept distinct, since they are both useful in explaining the way in which we organize and access our knowledge. Our own notion of 'matrix domain' makes use of both. We understand a cognitive model as a conventionally

structured semantic configuration and a domain as a frame of reference for the activation of part of the information of a cognitive model. Thus, going back to the concept 'mother', the different converging models are to be regarded as the base against which this concept is understood and, in this sense, each of them constitutes a matrix domain. But, at the same time, the conceptual structure of each of the converging models needs to be profiled against other base domains, whose activation is determined by the notion of 'mother'. This description refines the notion of cognitive model, in such a way that it is understood, not just as a base domain, but also as internally structured by a number of subdomains, which are profiled in relation to other domains external to the cognitive model.

1.5.4. Domains and subdomains: the relevance of 'domain highlighting'

Metonymy involves a domain-subdomain relationship in which a given subdomain may have either primary or secondary status (i.e. it may be more or less central). As pointed out by Croft (1993), metonymy makes primary a domain which is secondary in the literal interpretation of an expression. Nevertheless, 'domain highlighting' has also been shown to be involved in some cases of lexical ambiguity and in one-correspondence metaphors (see section 1.2). In addition, Croft (1993: 350) also points to the possibility of 'domain highlighting' not being relevant in all cases of metonymy. He does not, however, pursue this matter any further. In this section we attempt to provide an answer to this question. The following two examples are taken from Croft (1993):

(1) I broke the window.

(2) She came in through the bathroom window.

Borrowing Langacker's terminology, Croft argues that in order to have a metonymy, the element which is profiled cannot be an intrinsic attribute of the domain involved. The examples above highlight the 'shape' and the 'physical object' domains for 'window' respectively. According to Croft, while the interpretation of a window as an opening in the shape domain makes reference to what is around it, which makes it extrinsic, being a physical object is intrinsic to the concept. Therefore, for Croft (1993),

while (2) is metonymic, (1) is not. Ruiz de Mendoza (1997, 2000) has reanalyzed these examples in terms of 'centrality' instead of 'intrinsicness' and, in this way, he has succeeded in pinpointing some of the shortcomings in Croft's proposal.

Langacker (1987: 160) defines a property as 'intrinsic' if it does not make reference to external entities. Thus, Langacker regards the shape of objects as an intrinsic property, as opposed to their size, which is understood by comparison with other objects, and is, therefore, extrinsic. Interestingly enough, in his application of Langacker's definition to the window examples in (1) and (2), Croft has reached the opposite conclusion. This may be due to the fact that shape may also be considered an extrinsic property in those cases in which it is used to single one entity out from others. This seems to be the case in Croft's example, where he uses 'window' to describe a physical object in contrast to other objects in a hardware store showroom. However, if we think of a window in a wall, a roof, or the side of a vehicle –the places where one would normally expect to find it- its shape is an intrinsic property.

Another problem with Croft's analysis, as pointed out by Ruiz de Mendoza (1997: 168), is that it can be argued that it is not (2) but (1), that may be a case of metonymy, since breaking a window is normally understood not as breaking all of its constituting elements, but just one of them, the window-pane. In this view, (1) focuses on a non-central aspect of a window, but (2) focuses on one central aspect; that is to say, it is possible to have a window without a pane, but not a window without an opening. Hence, the possibility of understanding (1), but not (2), as metonymic. We may thus refine our definition of metonymy by adding that when the target of the metonymy is a subdomain of the source (target-in-source metonymies), such a target needs to be a non-central subdomain. Centrality is understood here as defined by Langacker (1987) in terms of a combination of criteria: it correlates with the extent to which a specification is conventional (shared by a community), generic (not idiosyncratic with a particular item), intrinsic (making no reference to external entitites), and characteristic (unique to the class of items concerned).

In Croft's account, metonymy is characterised by the fact that a secondary domain is highlighted and made primary. Nevertheless, it should be noted that only target-in-

source metonymies are affected by the phenomenon of domain highlighting. In contrast, source-in-target metonymies, like the HAM SANDWICH FOR CUSTOMER example, do not require the highlighting of a secondary domain but only its conceptual development into its corresponding matrix. As a matter of fact, in the use of source-in-target metonymies, since there is no domain highlighting, it is irrelevant whether the primary or the secondary status of the source is used as a defining criterion. In addition to this, Ruiz de Mendoza further argues that domain highlighting is also irrelevant in the case of predicative metonymy. In *John is a brain*, for instance, 'brain' stands for 'a person with good intellectual abilities'. Part of the domain of 'person' stands for the whole domain and at the same time highlights a feature which is conventionally associated with brains: intelligence. Therefore, in this case, interpretation does not proceed by making a secondary domain primary, but rather by singling out a very central feature of brains which is then attributed to John.

Finally, we would like to add that the fact that there are cases of metonymy where highlighting plays no role does not invalidate the relevance of the notion of 'domain highlighting' for the description of metonymy, but rather places it in a different perspective: domain highlighting may also occur in the metaphor; and its operativeness is limited to target-in-source metonymies.

1.6. Conceptual interaction between metaphor and metonymy

The role of metonymy in its interaction with metaphor has received some attention in cognitive linguistics (cf. Goossens, 1990; Ruiz de Mendoza, 1999a, 2000; Radden, 2000; Barcelona, 2000b), whereas the study of the interactional possibilities that emerge from the interplay of two or more metonymies has often been neglected. In this section we aim to offer a detailed analysis of these two issues. First, we shall deal with the different patterns that arise when two metonymies work in combination, a phenomenon which we shall call "double metonymy". Second, we shall focus our attention on the patterns of interaction between metaphor and metonymy, and the theoretical implications this brings about. Regarding double metonymy we have found evidence of the existence of three basic patterns. Let us take the following examples:

(1)

(a) Copies of the final report must be provided for the head and the committee.

(b) Aoun had been appointed to head an interim military government.

In (1a) 'head' metonymically stands for the person who is in charge, that is, the leader or boss. This metonymy, which may be labelled HEAD FOR LEADER belongs to the source-in-target type and, like all source-in-target metonymies, it involves domain expansion. Note that the choice of 'head' as the source domain is motivated by the ease with which this concept activates the models of intelligence and control. Both of them are prototypical features of a leader, the target domain. In (1b) there is another 'head' metonymy where this body part metonymically refers to the action of governing or ruling. It is evident that this metonymic mapping is a further development of the HEAD FOR LEADER metonymy. Let us explain this is some detail. First, we have noted that (1a) refers to a person that is in charge. The prototypical activity that such a person carries out is ruling or governing. This means that the relationship between 'head' as a body part and the action of ruling is not a direct one. On the contrary, it is mediated. To put it another way, we need two metonymic mappings to fully develop it, as is illustrated in figure 1. It should be noted that the first metonymic mapping is a pre-requisite for the existence of the second one.
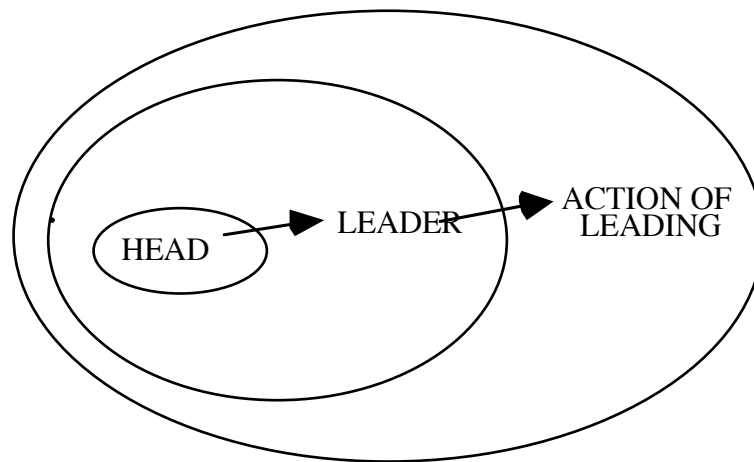
Figure 6: HEAD FOR LEADER FOR ACTION OF LEADING metonymy.

In this pattern, there are two source-in-target metonymies which are linked in such a way that the target domain of the first source-in-target metonymy works as the source of the second source-in-target metonymy. Hence, there is a double process of domain expansion in which the role of 'head' in the first metonymy and of the agent of the action in the second one are highlighted (see figure 1).

The second type of double metonymy we have found is illustrated in (2):

(2)

(a) Wall Street reached their second highest level today.

(b) Wall Street is in panic.

Non-figuratively, Wall Street is the name of a street located in the southern section of the borough of Manhattan in New York city (cf. *I've bought an apartment in Wall Street*). Nevertheles, it usually refers metonymically to the most important financial institution of the United States as exemplified in (2a). It is a case of the PLACE FOR INSTITUTION metonymy, which is of the target-in-source type since the financial institution located in Wall Street is an especially relevant subdomain of this street. Sentence (2b) goes a step further; in it there is a second domain reduction as a consequence of another metonymic mapping. Thus, the institution, which is the target domain of the first mapping, metonymically refers to the people that work there or that are somehow related to it (cf. figure 7). If we compare figures 6 and 7 we observe that the latter is the converse of the former and vice versa. In this second pattern of double metonymy there are two subsequent reductions of the source domain, i.e. the target domain of the first target-in-source metonymy becomes the source of the second target-in-source metonymy. As a result of this mapping we are dealing with a subdomain which is rather unspecific in nature and thereby hard to determine with accuracy. Note that the institution, the target of the first mapping, is much more clearly delineated than the second target, where the exact relation of the people to this financial institution is not specified at all. They could be stock brokers, private investors or any other kind of professional associated with the financial aspects of the stock market (certainly, it would not refer to the janitors, the security guards, or the cleaners).
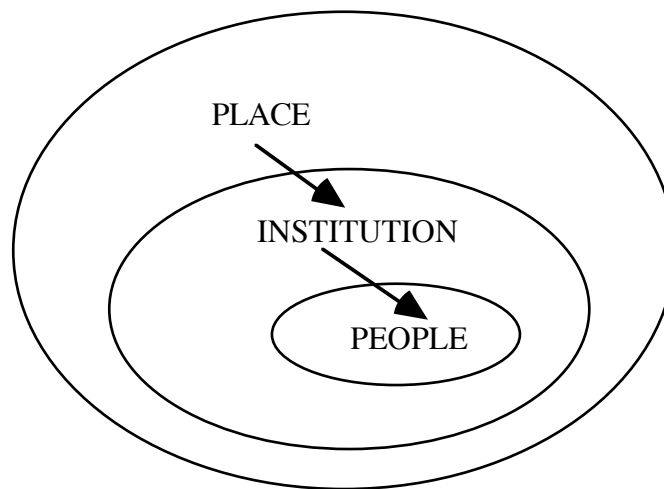
Figure 7: PLACE FOR INSTITUTION FOR PEOPLE (RELATED TO THE INSTITUTION) metonymy

The last metonymic type we have distinguished combines a source-in-target and a target-in-source metonymy. Take the following short exchange:

(3) A: What's that picture?
    B: It's Rome.

Imagine (3) is uttered while looking at a picture of the coliseum. The first metonymic mapping, which is of the target-in-source type, has 'picture' as its source domain and the image of the Coliseum that appears in the picture as its target. In the second metonymic mapping, the target of the first mapping becomes the source of a source-in-target metonymy, whose target domain is Rome. This double metonymy is represented in figure 8:
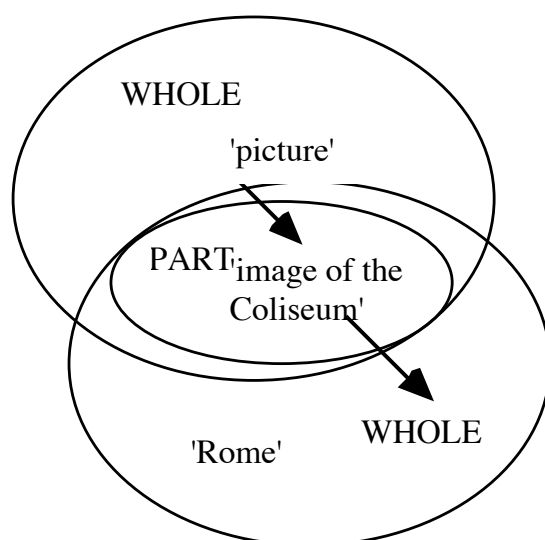
Figure 8: WHOLE FOR PART FOR WHOLE metonymy

In this type of double metonymy we have two matrix domains (i.e. 'picture' and 'Rome') whose presence is necessary to account for some phenomena of anaphoric reference, as will be discussed in the next chapter.

With respect to the interactional possibilities between metaphor and metonymy, there are two major views: (1) metaphor is subsidiary to metonymy; that is to say, metaphors have a metonymic basis (see Taylor, 1995; Barcelona, 2000b; Niemeier, 2000; Radden, 2000); (2) metaphor and metonymy interact with each other in a variety of ways, being cognitive strategies of equal importance (see Goossens, 1990). In contrast to these views and following the insights in Ruiz de Mendoza (1999a), we would like to argue that, first, whenever metaphor and metonymy interact, it is the latter which is dependent on the former and not vice versa; and second, while there is ample evidence that a great number of metaphors have a strong metonymic grounding, it is also possible to find instances of metonymy which require a previous underlying metaphor.

Goossens (1990) distinguishes four patterns of interaction between metaphor and metonymy:

1. *Metaphor from metonymy*. In this pattern a metonymic expression loses its metonymic import and develops into a metaphor, as "to close one's eyes to the

facts". This qualifies as an instance of the PART OF THE BODY FOR ITS FUNCTION metonymy whenever the physical action of seeing actually takes place. On the contrary, when no action of seeing is involved it turns into a metaphor with the meaning 'to ignore the fact'.

2. *Metonymy within metaphor*. Here, we find a metaphor with a built-in metonymy, either as part of the source or of the target domain. An example of this type of interaction is the idiom "to bite one's tongue off", where tongue stands for the person's speaking capacity.

3. *Demetonymization inside a metaphor*. This pattern of interaction is illustrated by the expression "to pay lip service", where 'lip service', which metonymically stands for 'speaking', has to be dissociated from its metonymic meaning in order for the expression to make sense.

4. *Metaphor within metonymy*. This pattern occurs whenever a metaphor is used to add expressiveness to a metonymy, as in "to be on one's hind legs".

Goossens's typology of interaction patterns between metaphor and metonymy has been reanalyzed by Ruiz de Mendoza (1999a), who provides ample evidence that, at least from a structural perspective, metonymy is always subsidiary to metaphor in conceptual interaction. That is to say, whenever a metaphor and a metonymy interact, it is necessary for the metonymy to be accommodated within either the source or the target domain of the metaphor. This is a logical consequence of the nature of these two types of mapping. While in metaphor we find two discrete domains, metonymy only involves one conceptual domain. Therefore, we cannot expect to find the two distinct domains of a metaphor within the single domain of a metonymy. The opposite, however, is perfectly feasible. Accordingly, all the possibilities of metaphoric and metonymic interaction can be explained in terms of two parameters: first, the place where the metonymic mapping develops, which can be either the source or the target domain of the metaphor with which it interacts; second, the scope of the metonymy, that is to say, whether it works on one domain of the metaphor or on one of its correspondences. These two parameters yield four possible patterns of interaction of possibilities between metonymy and metaphor: *metonymic expansion of a metaphoric*

source, metonymic expansion of a metaphoric target, metonymic reduction of a correspondence of a metaphoric target and, *metonymic reduction of a correspondence of a metaphoric source*. Let us show in detail how these four patterns provide a systematic and economical explanation of the interactional possibilities between metaphor and metonymy. Each of them is considered in relation to the corresponding alternative explanation provided by Goossens.

The first of the interaction patterns (i.e. metaphor from metonymy) described by Goossens includes instances of metaphor which are built on a previous metonymic mapping, as in "to close one's eyes to the facts". This metaphor portrays a situation in which a person does not want to accept or understand something and therefore ignores it. Goossens would argue that this metaphor is based on a previous metonymic mapping in which the action of closing one's eyes stands for the effect of this action, namely, the avoidance of an undesired sight. This metonymy is then metaphorically developed to refer to those states of affairs in which someone refuses to consider a fact. Goossens's account puts all the emphasis on the metonymic origin of the metaphor. In contrast to this, we would like to shift the focus of attention from the notion of 'origin' to that of 'functionality'. What is of crucial importance here is not the fact that this metaphor has its origin in a previous metonymy, but rather that such a metonymy serves to structure the source domain of the metaphor in such a way that it provides all the necessary conceptual elements needed for its interpretation. The following figure illustrates this observation:
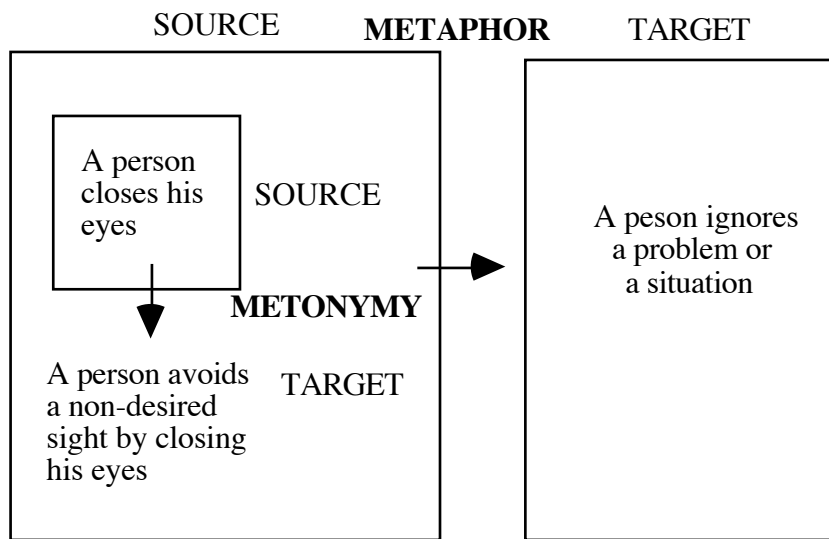
Figure 9: Metaphor-metonymy interaction in the understanding of "close one's eyes to the facts".

As figure 9 shows, this is a case of *metonymic expansion of a metaphoric source*. It should be noted that in the example under consideration, the metonymic mapping comprehends the whole source domain of the metaphor. Thus, the output of the metonymic mapping is the input to the metaphor. There are other cases of conceptual interaction between metaphor and metonymy in which more than one metonymic mapping may be found to structure the source domain of the metaphor. In these cases, it is not accurate to state that the metaphor is based on one previous metonymy, since the outputs of the different metonymies involved may function as the source domains of different metaphors. The analysis of the expression "to finger someone" as a case of *metonymic expansion of a metaphoric source* illustrates this:
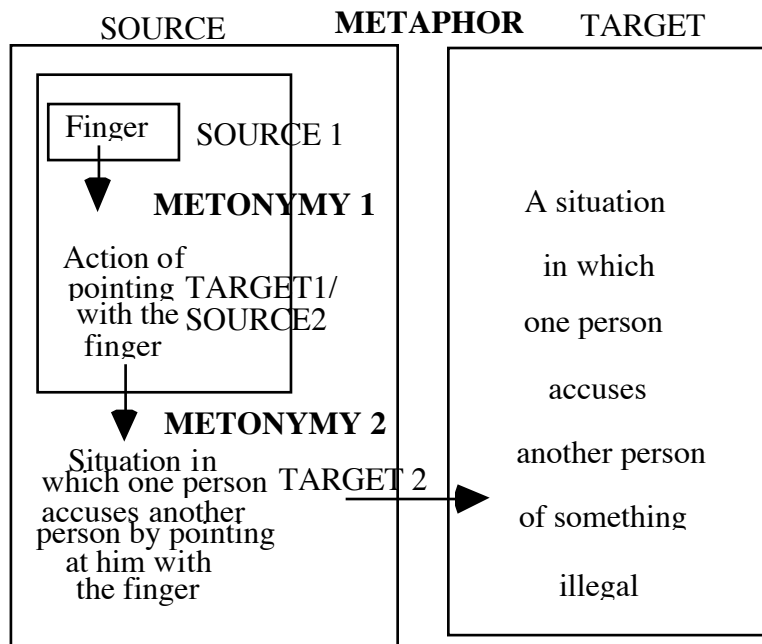
Figure 10: Metaphor-metonymy interaction in the interpretation of the expression "to finger someone"

As shown in figure 10, two metonymic mappings are found to structure the source domain of the metaphorical interpretation of "to finger someone" with the meaning of 'to accuse someone of organizing or doing something illegal'. However, it is only the target of the second metonymy that functions as the source domain of the metaphor. This metonymic target contains one essential ingredient for the interpretation of the expression: we point fingers at people as a form of accusing them of doing something wrong. We may point with our fingers for a wide variety of reasons other than accusing someone (e.g. in order to ask for something, to express surprise, etc.). In principle, in all these cases, 'to finger' could stand metonymically for those actions. But this is not the case. Consider, for instance, the rather implausible sentence *Stop fingering that poor old man*, uttered by a mother to his young son who keeps pointing at an ugly old man with his finger in order to draw his mother's attention to the man's ugliness. This metonymic interpretation is hardly likely simply because it violates the conventional semantic development of the expression as represented in figure 10. Hence the importance of developing the full metonymic mapping or mappings which structure the source domain of the metaphor.

The metonymic expansion of a metaphoric source accounts for those cases of interaction which can be depicted according to the following schematic figure. It should be taken into account that the number of metonymic mappings involved in the expansion of the source domain of the metaphor is immaterial:

SOURCE **METAPHOR** TARGET
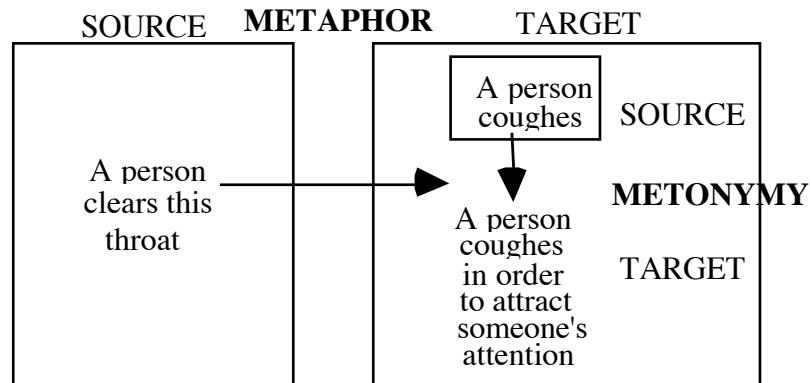
METONYMY
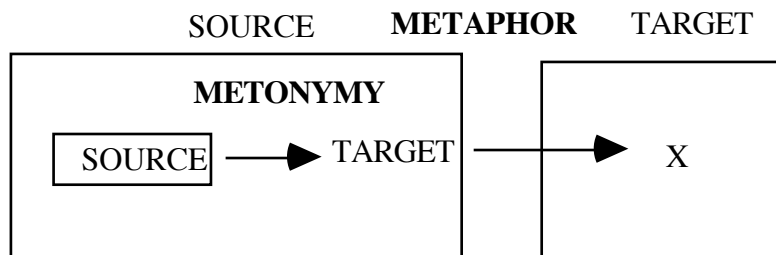
SOURCE ⟶ TARGET ⟶ X

Figure 11: Interaction pattern - type 1: metonymic expansion of a metaphoric source.

A related type of interactional possibility includes those expressions where the metonymic expansion affects the target, rather than the source, of the metaphor. Consider the following example:

(4) Cross cleared his throat and spoke in low, polite tones

By means of this utterance, the speaker suggests that Cross coughed. In the context of giving a speech in front of an audience, the action of coughing is also traditionally understood as an intentional act directed to catch people's attention. We contend that in order to obtain this full interpretation of (4), it is necessary to expand the target domain of the metaphoric mapping by means of a metonymy. This piece of interaction could be illustrated in the following fashion:

<figure>
SOURCE   **METAPHOR**   TARGET

A person
clears this
throat

A person
coughes   SOURCE

METONYMY

A person
coughes
in order
to attract
someone's
attention   TARGET
</figure>

Figure 12: Metaphor-metonymy interaction in the interpretation of "clear one's throat"

The act of clearing one's throat is only a figurative indication that one is trying to remove everything that may obstruct the flowing of the air out of the lungs. Obviously, we do this by coughing. Nevertheless, in a situation previous to the delivery of a speech, coughing is also conventionally understood as a sign directed to attract the audience's attention. This metonymic mapping needs to be performed in order to expand the output of the metaphoric operation and to yield a fully-fledged interpretation of "to clear one's throat". This second interaction type is captured in the following figure:

<figure>
SOURCE   **METAPHOR**   TARGET
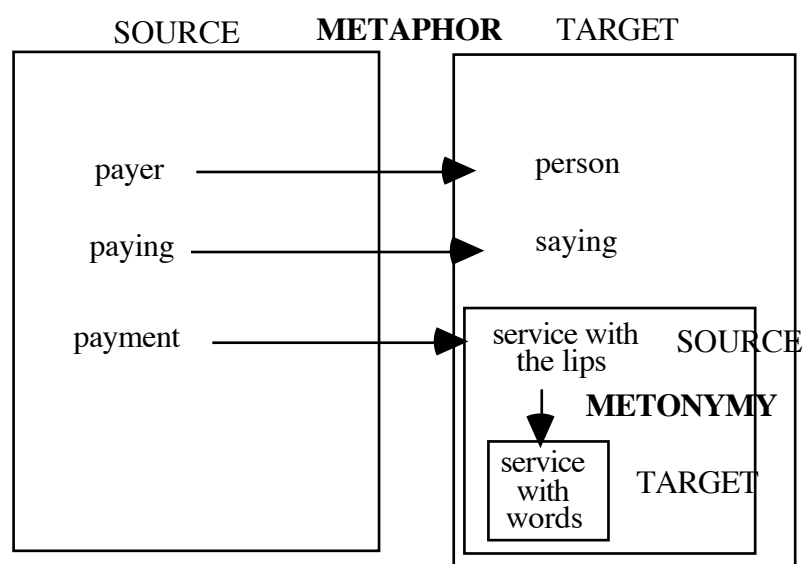
METONYMY

X   SOURCE   TARGET
</figure>
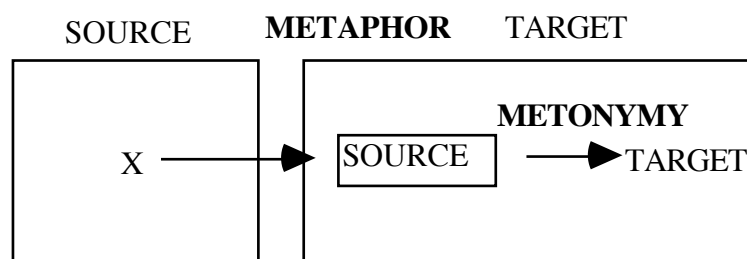
Figure 13: Interaction pattern - type 2: Metonymic expansion of a metaphoric target

Let us now consider the third type of interaction proposed by Goossens (1990). It is labelled *demetonymization inside a metaphor* and it involves a metonymy, built into one of the domains of a metaphor, which has to be dissociated from its metonymic

meaning in order for the expression to make sense. Goossens illustrates this type of interaction with the idiom "to pay lip service". In his account, "lip service" is 'service with the lip(s)', where 'lip(s)' metonymically stands for 'speaking'. However, Goossens argues that in order to make sense of this figurative expression, it is necessary to expand our paraphrase for 'lip service' into 'service as if with the lips only'. Thus the part is dissociated from the whole for which it was made to stand in the earlier processing stage, that is to say, it is 'demetonymized'. In contrast to this explanation, we would like to contend that no 'demetonymization' needs to be postulated and that this is just a case of a metonymy within the target domain of a metaphor. Unlike the type of interaction illustrated in figure 13, which also involved a metonymy inside a metaphoric target, in the case under consideration the metonymic mapping does not exclude the whole target domain, but just one of its correspondences. This is, therefore, an instance of *metonymic reduction of one of the correspondences of a metaphoric target*. The representation in figure 14 captures the interaction underlying the expression "to pay lip service":

Figure 14: Metaphor-metonymy interaction in the interpretation of "to pay lip service".

As Goossens rightly states, 'to pay' suggests a scene of financial transaction; that scene is the 'embedding metaphor'. In contrast to Goossens' claim, however, no

'demetonymization' is required if the target domain in the last correspondence of the metaphoric mapping is reduced by means of a metonymy. The expression "lip service" invokes the idea of 'providing help or support'. Literally, that support is said to be provided with the 'lips', which, metonymically, stand for the speaking capacity. The implication is that, if help is provided only with the lips (i.e. verbally, just by making promises), then it is not provided with real acts, which would be the proper way to do it. This is the reason why this expression can be used to refer to those situations in which someone makes a promise which he does not intend to fulfil. This third pattern of interaction between metaphor and metonymy is schematized below:
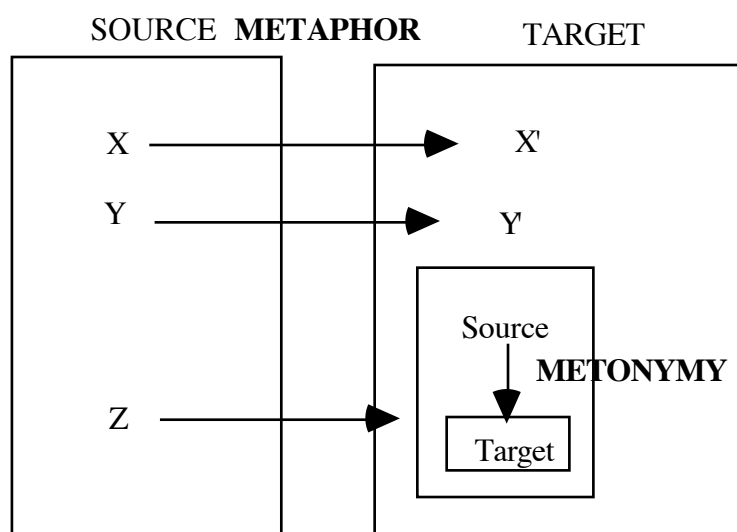
Figure 15: Interaction pattern - type 3: Metonymic reduction of one of the correspondences of the metaphoric target.

Finally, we arrive at the last of the interactional possibilities described by Goossens, namely, *metaphor within metonymy* or the use of a metaphor with the purpose of adding expressiveness to a metonymic expression. Goossens illustrates this type of interaction by means of the idiom "to stand/get on one's hind legs" which is understood as 'to stand up in order to say or argue something, esp. in public'. He points out that it is possible to imagine this expression with the omission of the word "hind" (e.g. *he got up on his legs*), and this would result in a purely metonymic expression (i.e. the action of getting up on one's legs stands for the whole scene of getting up on one's

legs to say something). Goossens goes on to say that the addition of the modifier 'hind' has the effect of forcing a metaphorical reinterpretation in terms of an animal standing up. The addition of the metaphor is optional, but if added, it enriches the initial expression by allowing implicatures such as the manner in which the person stands up (i.e. forcefully, with strength and determination).

Even if we agree with Goossens on the optional character of 'hind', the addition of this element does not seem to have the effect of including a metaphor within a metonymy. On the contrary, the use of 'hind' results in the activation of an embedding metaphor of which the metonymy is only one part. The expression "to stand up on one's hind legs" stands metonymically for the whole scene in which an animal (usually a horse) stands on its hind legs, normally out of fear, as if to attack. This metonymy, however, affects only one of the elements of the source domain which is then projected upon a target domain in which a person stands up briskly to argue something in public. This process is represented by figure 16:
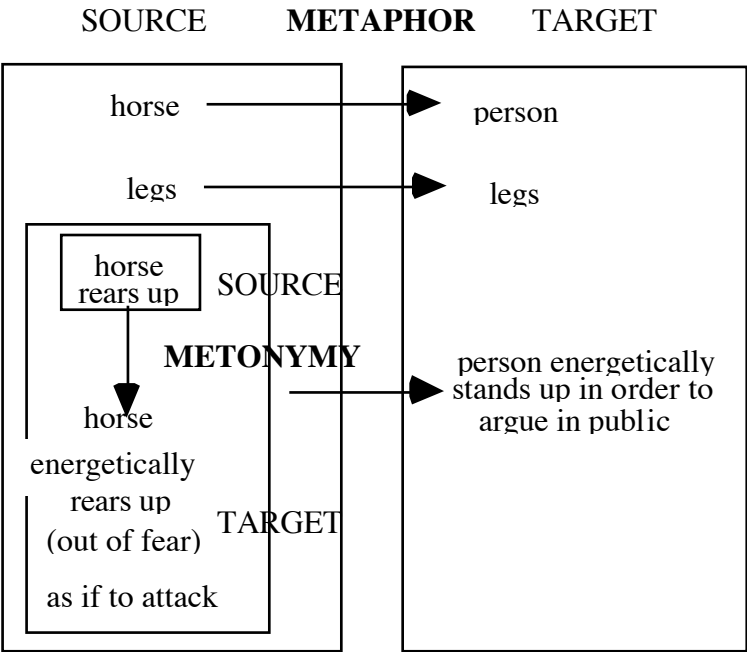
Figure 16: Metaphor-metonymy interaction in the interpretation of "to stand/get up on one's hind legs".

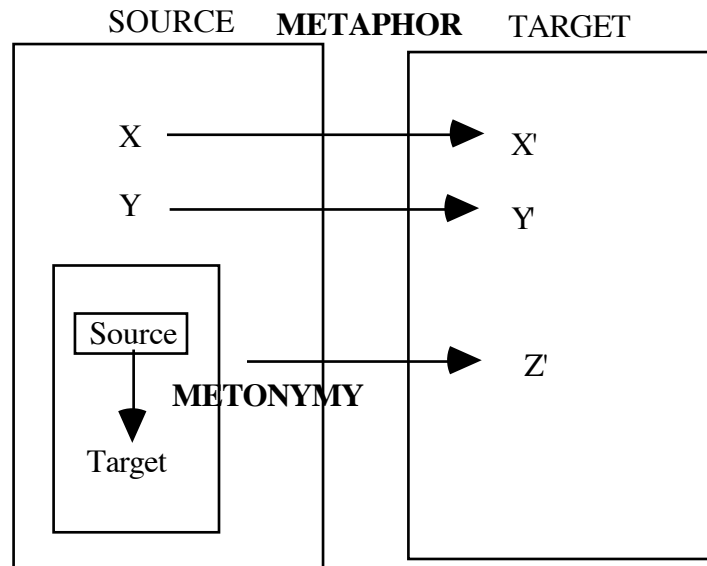This fourth type of interplay between metaphor and metonymy may be schematized as follows:

Figure 17: Interaction pattern- type 4: metonymic reduction of a correspondence of a metaphoric source

So far, the reanalysis of Goossens's examples reveals that it is invariably the metaphor which accommodates metonymy within one of its domains, and not vice versa. We may safely conclude, therefore, that from a structural perspective metonymy is subsidiary to metaphor. Finally, we have distinguished four possible interaction patterns between metaphor and metonymy, which we summarize below:

1. Metonymic expansion of the metaphoric source

2. Metonymic expansion of the metaphoric target

3. Metonymic reduction of one of the correspondences of the metaphoric target

4. Metonymic reduction of one of the correspondences of the metaphoric source

In addition to these patterns, Díez (2000b) has posited the existence of two other intractional possibilities. The first one is illustrated in (5):

(5) Why don't you have a sleep for a couple of hours while I keep an eye on Chris?

In (5) 'eye' metonymically stands for 'vigilance'. This is grounded in the fact that the prototypical way to watch someone is to look at him. Thus, example (5) presents a speaker offering to watch a child. The metonymic mapping EYE FOR VIGILANCE occurs because the body part most directly involved in any visual activity is the eye. Regarding the metaphor, 'keep' is used figuratively. In its literal sense, *keep* means 'to store something in a place'. The metaphor is grounded in the fact that 'keep' involves a controlled action that affects another entity: 'to keep something in a place' entails that you control this entity; likewise, if you keep an eye on someone, you control this activity (i.e. watching). This feature of control is mapped onto the target domain. Thus, the addressee in (5) is conceived as the controller entity that watches over an entity or event. The rest of the correspondences can be observed in figure 18 below. Note that the target domain of one of these correspondences is expanded by means of the source-in-target metonymy EYE FOR VIGILANCE which serves to highlight the instrument of the action:
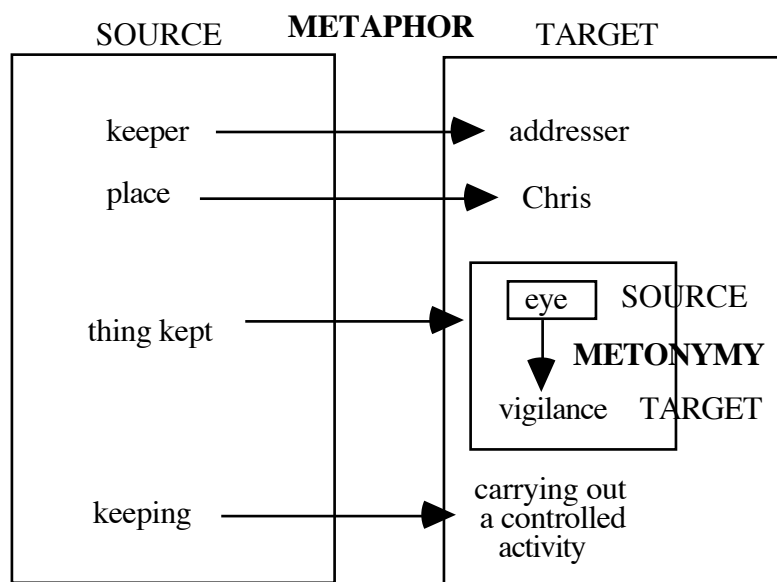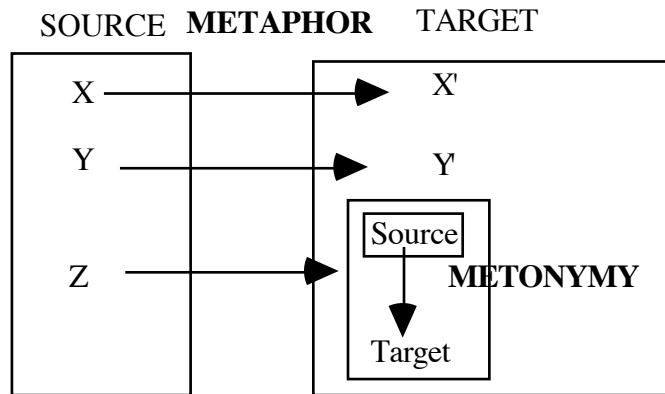

Figure 18: *Keep an eye on someone*

In interactions of this kind, one of the correspondences of the target domain of the metaphor contains a metonymy of the source-in-target type as can be seen in the following figure which is an abstraction of figure 18:

SOURCE **METAPHOR** TARGET

Figure 19: Metonymic expansion of one of the correspondences of the metaphoric target

Through this process, the correspondence where the metonymic mapping takes place is given more prominence than the others so that it becomes the most central correspondence in the metaphor. Besides, the metonymic expansion has a function inside the metonymic mapping, which is to focus on a specific subdomain of the matrix domain (i.e. in these cases, the instrument used for carrying out the action). Therefore, in this case of interaction there exists a double highlighting process: one that is related to the role of the correspondence in the metaphoric mapping and another that has to do with highlighting a relevant feature of the matrix domain of the metonymy.

The last interactional type found in Díez (2000b) can be observed in the following example:

(6) Pagan Platonists could not stomach the Christian notion of incarnation.

(6) is a linguistic realization of the metaphor IDEAS ARE FOOD. As such, this expression forms part of our general understanding about how we experience ideas reflected in other expressions belonging to the same system (cf. *I just can't swallow that claim*; *What he said left a bad taste in my mouth*). Moreover, this expression also includes a metonymic mapping in one of the correspondences of the source domain,

namely STOMACH FOR ACTION OF DIGESTING. In this metonymy, the body part more directly connected with the action metonymically stands for the whole action (e.g. *She can't stomach pork*). As has been mentioned above, IDEAS ARE FOOD exploits part of our knowledge system about food. This includes not only propositional but also metonymic knowledge. Since the metonymy STOMACH FOR ACTION OF DIGESTING forms part of our metonymic ICM for food, it is also included in the metaphor. The way the interaction takes place is shown in figure 20:
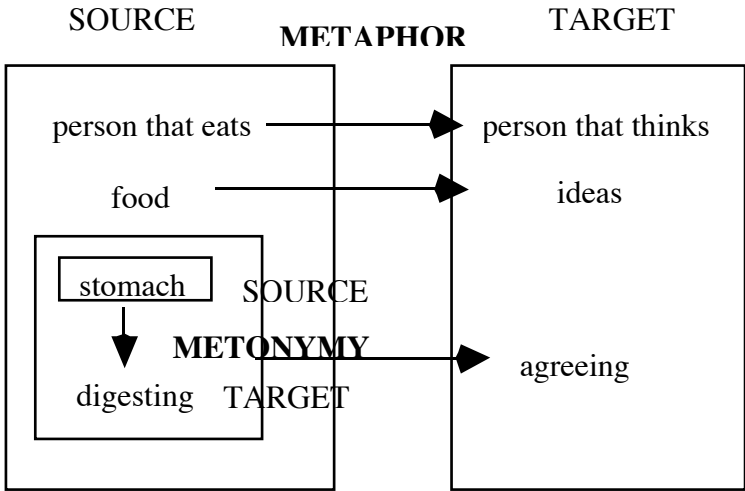
Figure 20: *Stomach an idea.*

The only difference between the pattern found in (6) and the one depicted in figure 20 is that in the latter the metonymy works on the target domain so that the metonymy expands the output of one of the correspondences of the mapping. In contrast, in (6) the metonymy serves to structure the source domain of the metaphor which will later be mapped onto the target domain of the metaphor. This latter pattern is diagrammed in the following figure:

SOURCE **METAPHOR** TARGET
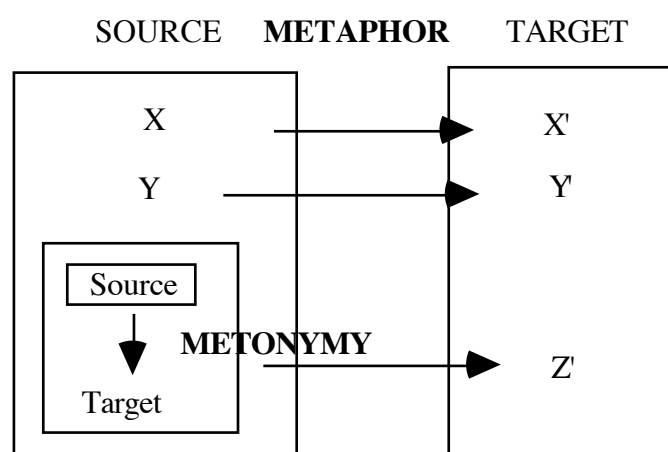
Figure 21: Metonymic expansion of a correspondence of a metaphoric source.

This diagram shows that the source of the metonymic mapping (i.e. '*stomach*') is given special prominence over both the rest of correspondences and the other body parts that may have a role in the activity. Furthermore, the metonymy has an intensifying function in the activation of the source domain of the metaphor (that is, the use of *stomach* stresses the idea that there is strong disagreement and that this belief cannot be accepted).

This taxonomy of interaction possibilities hinges on two criteria. The first is structural and takes into account whether the metonymy is accommodated within the source or target of the metaphor. The second is a functional criterion and considers the role of the metonymy in its interaction with either the source or target domain of the metaphor. Again, we may distinguish two possibilities: (1) the metonymy expands and elaborates the source or target domain in order to facilitate all the necessary mappings; (2) the metonymy reduces or specifies one of the elements of the source or target domain in order to guide the correct interpretation of one of the correspondences.

So far, we have argued that in interaction metonymy is dependent on metaphor at least from a structural point of view; thus, metonymy fits naturally within the source or target of many metaphors, but not the other way around. To end this section, we would also like to discuss some examples in which the dependency of metonymy on metaphor seems to go beyond this structural fact. In doing so, we would like to stress the fact that

our observations do not in any way counter the claims in favour of a metonymic basis of metaphor (cf. Taylor, 1995; Niemeier, 2000; Barcelona, 2000b; Radden, 2000). To give just one example, it is usually accepted that a metaphoric expression like "to stomach ideas" has a metonymic base. The metonymic mapping STOMACH FOR ACTION OF DIGESTING structures the source domain of the metaphor prior to the activation of the latter. Nevertheless, it is necessary to balance the relative import of these two types of conceptual mapping. In this connection, Díez (2000b) has argued that it is not accurate to assert that metaphors are always conceptually dependent on metonymies and that, in some cases, the opposite seems to be the case. She gives the following examples:

(7) The children clapped the acrobats at the end of their performance.

(8) The children gave the acrobats a (big) clap at the end of their performance.

(9) The children gave the acrobats a big hand at the end of their performance.

These three sentences describe basically the same state of affairs, but they differ in their meaning in several respects. The first of them is to be interpreted literally, since the action of applauding is encoded in the verb "clap". The second example differs from the previous one in that the action of clapping is metaphorically conceived as the transfer of a physical object with its associated properties (i.e. size, weight, etc.). In this way, a 'clap' can be 'given' to a person who acts as the recipient and potential beneficiary of the transfer. The metaphor underlying example (8) is schematized in figure 22:

```
          SOURCE      METAPHOR   TARGET
      ┌───────────────┐      ┌───────────────────┐
      │   giver ──────┼──────┼──▶  person applauding │
      │               │      │                   │
      │  giving ──────┼──────┼──▶   applauding     │
      │               │      │                   │
      │ object given ─┼──────┼──▶    applause      │
      │               │      │                   │
      │ recipient ────┼──────┼──▶ person being applauded │
      └───────────────┘      └───────────────────┘
```
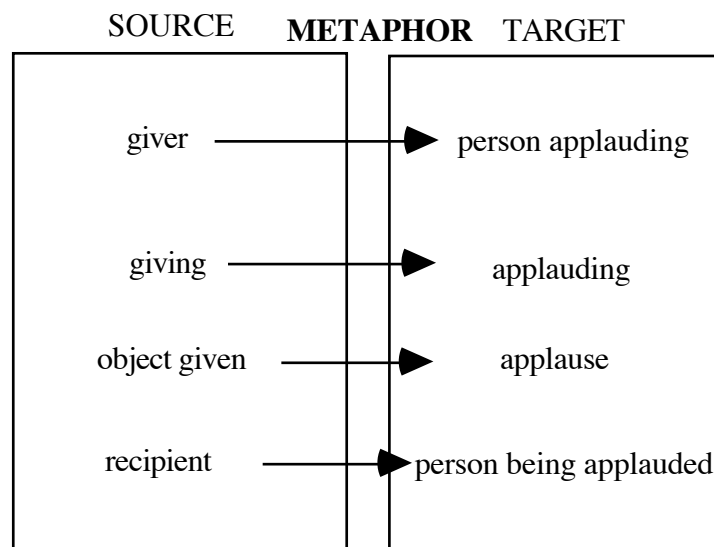
Figure 22: Metaphoric mapping underlying "to give a clap"

Finally, (9) goes one step further and includes an instance of interaction between metaphor and metonymy of the type in which *the metonymy expands one of the correspondences of the metaphoric target*. A hand is used in the action of clapping, which licenses the use of the word "hand" instead of "clap" in this example. This metonymic mapping is experientially grounded in the fact that, in the activity of clapping, hands are more salient than the other body parts involved (e.g. the arms and the different groups of muscles). Note also that in the example under consideration, collocating "hand" with "big" is compulsory, whereas in (8) the use of the modifier "big" is optional. This is due to the fact that in the metaphor in (8), "big" functions simply as an intensifier. On the contrary, in the metonymy in (9), "big" is needed in order to avoid potential ambiguities. The expression "to give someone a hand", on its own, may also be used with the meaning of 'to help someone'. Figure 23 illustrates the interplay between metaphor and metonymy in relation to example (9):
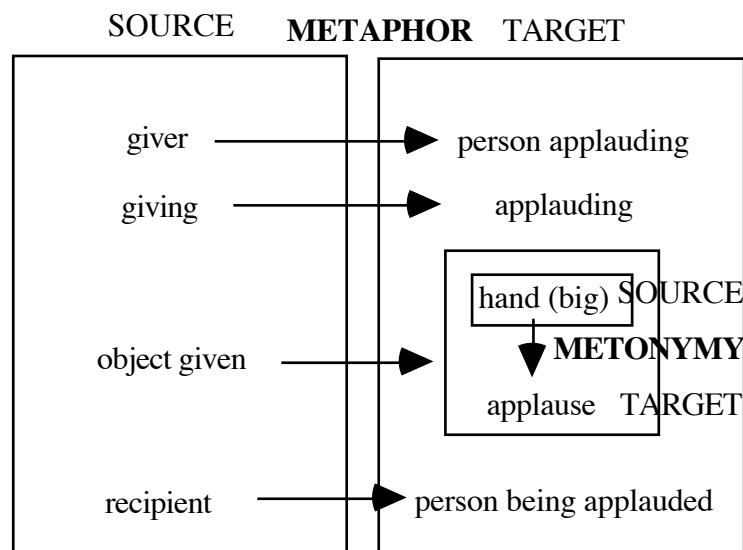
Figure 23: Metaphor-metonymy interaction underlying the expression "to give a big hand".

According to Díez (2000b), there is evidence to believe that in expressions like (9), metaphor is a conceptual prerequisite for metonymy and not the other way around. The metaphor developed first and the metonymic extension followed. First of all, it should be noted that the metaphor in (8) occupies an intermediate position between the literal expression in (7) and the metonymy-based idiom in (9). It seems logical that 'clap' developed metaphorically into 'give a (big) clap', and this in turn evolved into 'give a big hand'. The opposite process (clap > big hand > (big) clap) would be strange and uneconomical. Further evidence supporting the subsidiary role played by metonymy in example (9) comes from cross-linguistic data. Thus, if we look for the Spanish counterparts of the three examples under consideration, we find that only (7) and (8) may be directly translated into Spanish:

(10) Los niños aplaudieron a los acróbatas al final de la actuación.

The children applaudPAST.3SG the acrobatPL at end of the performance

(11) Los niños dieron un fuerte aplauso a los acróbatas al final de la actuación.

The children givePAST a strong applause to the acrobatPL at-the end of the performance

(12) *Los niños dieron una fuerte/gran mano a los acróbatas al final de la actuación.

> The children givePAST a strong/big hand to the acrobatPL at-the end of the performance

> The literal translation of (9) into Spanish is not possible, because the Spanish conceptual system does not include the metonymy HAND FOR CLAP. It can be observed that both Spanish and English follow a similar process of derivation from the literal expression in (7) to the metaphorical extension in (8). Nevertheless, in English the derivation process has gone one step further, yielding the metonymic expression in (9), whereas in Spanish this last step has not taken place. The fact that both languages have undergone the same initial process of metaphorical extension reinforces the assumption that in this specific case the metonymic mapping is secondary and chronologically follows the metaphoric operation.

CHAPTER 2

METONYMY AND LINGUISTIC STRUCTURE

As we have mentioned, metonymy has been studied almost exclusively from a conceptual point of view, with the tacit assumption that it places constraints on linguistic production, but such constraints are merely dealt with at the level of conceptual structure. For example, it would seem a matter of semantic choice or simply of production economy for the speaker to decide whether to say *He broke the window* or *He broke the window pane*, *Napoleon lost at Waterloo* or *Napoleon's army lost at Waterloo*, and so on. Thus, it would seem unnecessary to specify that someone broke the window pane unless we have a context in which the hearer believes that the person broke another part of the window (e.g. the frame). Explicitly saying that it was Napoleon instead of his army that lost at Waterloo places the responsibility for failure on Napoleon. But the problem is not so simple. The pervasive use of metonymy as a conceptual tool has consequences in terms of the semantic and/or experiential grounding of some grammatical phenomena at several levels. In the following sections we shall study the nature of metonymic activity and we shall also analyze some constructions within the grammar which are motivated by metonymic mappings.

2.1. Classifying metonymy

In positing the existence of a set of 'metonymy-producing relationships' or generic principles, Kövecses and Radden (1998) have discovered one of the most basic problems typologies of metonymies pose: the need to describe metonymy on different levels of abstraction. On the basis of Kövecses and Radden's (1998) discussion, Ruiz de Mendoza and Díez (2001) have suggested that a sound typology of metonymic mappings should take into account the inherent nature of the domains involved. In this connection they make a distinction between *low-level metonymies* and *high-level metonymies*. In the former the source and target domains are non-generic idealized cognitive models. Non-generic ICMs can be described as conventional representations based on experience which specify elements and their properties and relations. This group can be further subdivided into: *propositional* and *situational metonymies*. The former include typical cases of metonymy where a concept stands for another in a domain-internal relationship. By way of illustration, consider (1):

(1)

(a) Two had died in infancy, otherwise there could have been nine little mouths to feed.

(b) The addition of subsequent mouths to feed merely compounds the problem.

In sentences (1a) and (1b) we find instantiations of the MOUTH FOR PERSON mapping where 'mouth', which is the source of the metonymy, stands for the person who the mouth belongs to. Since 'mouth' is a subdomain of the matrix domain 'person', we are dealing with a source-in-target metonymy.

In both sentences, the people referred to in the metonymic target are presented as taken care of by another entity (either a parent in sentence (1a) or perhaps the government as in sentence (1b)). This occurs because the mouth is considered the body part which is more closely connected to the notions of 'bringing up' and 'welfare'. The most basic things a person needs to survive are mainly air, water and food, other items (e.g. clothes) being usually seen as commodities. Since air and water are easy to obtain in Western society, food remains the only need that a person may have difficulties in

obtaining. Therefore, a person or organization that looks after people will have to provide nourishment for them. This idea is reinforced by the addition of the infinitive "to feed" in both sentences which helps us make clear the way the metonymy has to be interpreted. This way the mouth, which plays a very prominent role in the domain of feeding[26], becomes the source of the metonymic mapping.

In a situational metonymy, an especially relevant episode of a specific situation stands for the larger event in which it is included. An example of this metonymy is found in (2):

(2) The poor dog left with its tail between its legs.

Imagine that sentence (2) is uttered in a situation in which a man is talking to a friend about the punishment his dog has received. Here, we find a metonymic mapping in which the actual event of a dog leaving with its tail between its legs stands for the whole situation in which a dog after being punished runs away in that manner.

On the other hand, high level metonymies are based on generic ICMs. Generic ICMs are abstractions over a number of non-generic ICMs. Because of their generic character they can work at non-lexical levels and underlie several grammatical phenomena (Ruiz de Mendoza and Pérez, 2001).

High-level metonymies have a strong image-schematic component. This means that the generic models which are used to create their source and target domains can be decomposed into image-schemas. For example, the generic model 'action' is the result of grouping 'force' and 'control'. Consider the sentence, *He hammered the nail into the wall*, which contains the metonymy INSTRUMENT FOR ACTION. In this metonymy, the source domain is an exploitation of the OBJECT image-schema, whereas the target consists of the combination of two basic elements: the FORCE image schema and the propositional model of control. It is worth noting that even though there may be non-image-schematic models involved in the configuration of a generic model, these are in need of image-schemas for their full understanding. By way of illustration, let us take

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[26] On an experiential basis, this is obviously due to the fact that the mouth is the most visible part of the digestive system, where mastication and swallowing take place.

the model of control, which is part of the action ICM. The cognitive model of control has been partially described by Ruiz de Mendoza (1998, 1999). It contains, at least, the following information:

* A person controls an entity or group of entities to the extent that he/she can determine the behaviour of the entity or group of entities.

* A person controls a state of affairs to the extent that he/she can determine the existence of that state of affairs.

* The control a person has over an entity or group of entities increases or decreases depending on the absence or presence of physical barriers between the controller and the controlled entity or entities; in this connection, distance can be understood as a physical barrier.

The first two characteristics mentioned above refer to the internal logic of the model of control and are propositional in nature; the third one, however, relates to the interplay of this model with image-schematic structure. Thus, the existence of barriers is directly connected to the CONTAINER image-schema and entails that control may occur more readily inside a bounded region. Similarly, physical distance has to be understood by means of the FAR-NEAR image schema. Thus, the control model is in need of at least two image-schemas in order to determine its structure appropriately. Moreover, these features are not the only ones that define this model, which can be completed by incorporating the logic of the VERTICALITY and UP-DOWN image-schemas. Note that a person that is in control of an entity or group of entities is normally on a higher position than the controlled entity or group of entities; and that a person who controls an entity or situation is normally in an upright position[27]. It follows that even our understanding of propositional models is in many ways dependent on a wide range of image-schemas.

High-level metonymies can also be classified into propositional and situational metonymies. The former are found in most cases of what Ruiz de Mendoza and Pérez

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[27] The clearest experiential basis for this is that sleeping involves lack of control and a non-vertical position.

(2001) have called *grammatical metonymy*, i.e., a metonymy which has consequences in terms of linguistic structure. For example, in (3) we find the metonymy INSTRUMENT FOR ACTION. As a consequence of the metonymy, a change of category takes place from noun to verb, which, in turn, brings about the reorganization of the clause:

(3) I elbowed Karen unceremoniously aside.

Situational high-level metonymies are typically employed in indirect speech acts, that is to say, whenever a part of a speech act scenario is employed metonymically to stand for the whole of it. We have already mentioned speech acts scenarios in section 1.2 and they will be discussed in greater detail in section 3.2. For the time being, we shall say that Panther and Thornburg (1998) have described speech acts as organized scenarios consisting of three components: *before*, *core/result*, and *after*; each of these components can metonymically stand for the whole scenario. Consider (4):

(4) Can you drive me home?

This question about the ability of the hearer is interpreted as a request because it is one of the elements of the *before* component of the request scenario. This way, a part of the request scenario (i.e. the ability of the hearer) is in a metonymic stands for relation to the whole scenario (i.e. the request).

In addition to their impact on grammar, high-level metonymies are also a basic tool for conceptualization. For example, the GENERIC FOR SPECIFIC/SPECIFIC FOR GENERIC metonymies have a key role in the functioning of some high-order cognitive processes. The existence of some connections between 'generic' and 'specific' in the organization and processing of information was first pointed out by Lakoff and Turner (1989). These authors regard the relationships between 'generic' and 'specific' as metaphorical in nature. On the other hand, Kövecses and Radden (1998) and Panther and Thornburg (1999) have convincingly contended that the generic/specific distinction is better explained on metonymic grounds because these two concepts stand in a domain-internal relationship where 'specific' is a subdomain of 'generic'. The domain-subdomain relation that exists between 'generic' and 'specific' can be easily observed if we look at the nature of taxonomies. Consider the relationship

between 'bird' and 'robin'. Everybody agrees that 'robin' is a specific member of the category 'bird' and that it would be absurd to claim that these two concepts constitute absolutely discrete domains. Kövecses and Radden (1998) have also noted the relevance of these metonymies for the interpretation of proverbs. Consider the famous saying *Blind blames the ditch*, where a SPECIFIC FOR GENERIC metonymy helps to abstract away from this particular situation a generic conceptual structure, which is then employed to interpret another particular situation on the basis of the GENERIC FOR SPECIFIC metonymy[28].

Some initial studies of the grammatical consequences of metonymy have already been carried out by cognitive linguists (cf. Panther and Thornburg, 1999, 2000; Goossens, 1999; Waltereit, 1999). We shall devote the rest of the present chapter to the study of some grammatical phenomena whose semantic motivation can be explained on the basis of non-situational high-level metonymies. In the next chapter, we shall discuss the way in which situational high-level metonymies motivate some conventionalized illocutionary constructions. Other implications of high-level structure for the study of conceptual organization have been studied in some detail by Ruiz de Mendoza and Otal (1999), and Otal (2002).

2.2. Predicates

Consider these sentences:

(1)

(a) John is handsome.

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[28] Peña (2001) has noted the importance of these metonymies in the creation of what Fauconnier & Turner (1995, 1998) have called *generic spaces* in their *many-space* model of conceptual interaction (cf. Also Turner & Fauconnier, 1995). These authors argue that in order to interpret metaphors we need to activate a minimum of four different mental spaces. A mental space is a small conceptual packet of information build for the purpose of undertanding and communication. Two input spaces are projected to another space (the *blended space*). A fourth space (the *generic space*), which contains basic skeletal structure derived from the source and target inputs, licenses the projection. Peña (2001) posits that a SPECIFIC FOR GENERIC metonymy is employed to abstract information from the source input to the generic space, while the converse metonymy GENERIC FOR SPECIFIC allows the projection of information from the generic space to the target input.

(b) John is a handsome boy.

(c) *Be handsome, John.

As example (1c) shows, the adjective "handsome" cannot be used in imperative constructions with the verb "be". This lies in the fact that this grammatical construction is prototypically associated with a stative meaning and the imperative form of the verb invokes an action scenario. For example, *Come back home before midnight* is an instruction to the hearer to act in such a way that as a result the state of affairs described by the predication will come about. However, compare:

(2)

(a) Mary is patient.

(b) Mary is a patient girl.

(c) Be patient, Mary.

This is a case where the imperative form of the 'be' construction is not only possible but of very frequent use. The difference between (1c) and (2c) is that in the latter it is within the person's control to bring about the required state of affairs; that is to say, a person can choose whether to be quiet or not, but not whether to be tall or not. Thus, it may prove interesting to consider Dik's typology of states of affairs within his theory of Functional Grammar. In his theory, Dik considers 'control' as a basic semantic property of some predicates and arguments. Besides, Dik (1989: 90) has posited that a definition of the state of affairs type should take into account some properties of predicates and terms (or arguments); consequently, he has offered a classification of states of affairs in which there is a generic twofold distinction between situations (which are stative) and events (which are dynamic). He further subdivides situations into states (which are not controlled) and positions (which are controlled); events are, in turn, subdivided into processes (not controlled) and actions (controlled). Here are some of his examples:

States: The substance was red, The tree fell down.

Positions: John was sitting, John kept his money in an old sock.

Processes: The clock was ticking, The apple fell from the tree.

Actions: John was reading a book, John ran the marathon.

This classification allows Dik to determine the different semantic functions of predicates: for example an *agent* is the entity controlling an action; a *positioner* is the entity controlling a position; *force* is the non-controlling entity instigating a process; *processed* is the entity that undergoes a process; and *zero* is the entity primarily involved in a state. Dik further notes (cf. Dik, 1989: 96) that 'control' is a key feature from the point of view of grammatical structure since it must compulsorily be in imperative predications, as we have already pointed out ourselves, and in general in all directive and commissive speech acts. Take the following sentences:

(3)

(a) Bill ordered John to be polite.

(b) *Bill ordered John to be intelligent.

(4)

(a) John promised Bill to be polite.

(b) *The clock promised to keep ticking.

However, Dik has failed to observe that the notion of control cannot stand independently of the existence of an action frame or ICM, thus being subsidiary to it. In fact, control is one possible result of an agent's activity. For example, in *John kept his money in an old sock* we assume that John or someone else has put the money in the sock before and that John acts in such a way that the money remains in the state described. Lack of control occurs whenever there is a state which is not the result of intentional action, what Dik has termed a process. For example, a person is not old or tall because the person has done something intently in order to become old or tall. However, there are states which may result from a person's previous action like being

patient, calm, rich, poor, happy, among others. These states, which may be called *resultant states*, can be used in grammatical constructions which invoke an action frame, like those involved in the expression of directive and commissive speech acts:

(5)

(a) He told me not to be sad.

(b) Be happy!

(c) Don't be poor again.

(d) He became rich with my help.

(e) He has been quiet just for my sake.

The dependence of the notion of control on the action ICM is further evidenced by a number of metaphors which Lakoff (1996) has explained in terms of a system termed the DIVIDED PERSON. It has the following correspondences:

-A person is an ensemble (the subject plus the self)

-The experiencing consciousness is the subject.

-The bodily and functional aspects of a person constitute a self.

-The relationship between subject and self is spatial.

Some of the metaphors in the system have to do with the perception of control. For example, the ABSENT SUBJECT is a spatial metaphor used to conceptualize normal self-control by the subject and the lack of it: the subject is exercising normal control when it is in a normal location (e.g. on the earth, at home, at work, on the ground) or orientation (typically upright); this is seen in expressions like *He's spaced out*, *He's come to his senses*, *He's got his feet on the ground*, *He's down to earth*, *He's got his head in the clouds*. In the SCATTERED SELF if the subject wants to have control over the self, it has to get the self together: *He's pretty scattered*, *Pull yourself together*, *He's not focused*. In the SELF AS SERVANT our experiencing consciousness

is seen as exercizing control in a master-servant relationship. The self is supposed to carry out the dictates of the subject and the subject is responsible for the care of the self: *You need to be kind to yourself, I promised myself a vacation, I convinced myself to stay home*. In SELF-CONTROL IS UP the exertion of control by the subject is conceptualized as the subject's being above the self, and losing control as the subject's falling or being overcome: *He fell asleep, Wake up to the world around you*. In all these metaphors the subject controls the self by carrying out a certain action or by keeping a position which requires some previous action (e.g. *He's got his feet on the ground* presupposes that the person has actively done something for the situation to obtain).

Now, note that the only way to interpret sentences like *Be quiet, Be patient, Don't be sad* (versus others like **Be tall, *Don't be tall*), which make use of a grammatical form which typically requires action predicates is by means of a metonymic mapping of the source-in-target kind, where a resultant state maps onto the action which has given rise to it. The nature of the application of this metonymy is captured by the following paraphrase, which highlights the role of the action ICM (the matrix domain) as the metonymic target: 'act (intentionally) in such a way (i.e, by making use of whatever instruments, methods or procedures are needed) that as a result state X will hold'. The metonymy may thus be labelled RESULT FOR ACTION. Also, as other source-in-target metonymies, it involves domain expansion.

Other grammatical constructions which make use of controlled predications are characterized by typically invoking an action ICM and licensing the use of a RESULT FOR ACTION metonymy. Compare (6) and (7):

(6)

(a) I want to know how to cook vegetables.

(b) Why not cook some vegetables?

(c) What about cooking some vegetables?

(7)

(a) I want to know how to be rich.

(b) Why not be sincere?

(c) What about being sincere?

The 'how-to' construction serves to inquire into the method used to carry out an action. The 'why-not' and 'what-about' constructions suggest that something should be done. These are used non-metonymically in (6), since they mention the action explicitly, and metonymically in (7) where the action is reached by referring to the state which results from carrying out the action. This resultative construction with the verb "be" is easily fit into the VP part of these constructions.

More interesting is the existence of apparent asymmetries in the use of the RESULT FOR ACTION metonymy:

(8)

(a) John is happy.

(b) Be happy!

(c) Don't be so happy.

(d) ?What about being happy (for a change)?

(e) I want to know how to be happy.

(9)

(a) John is rich.

(b) ?Be rich!

(c) ?Don't be rich.

(d) What about getting rich?

(e) I want to know how to be rich.

(10)

(a) John fell asleep

(b) *Fall asleep!

(c) Don't fall asleep.

(d) *What about falling asleep?

(e) I want to know how to fall asleep.

Let us start with the affirmative imperatives. Note, first of all, that it is possible to ask someone to be happy, but not to fall asleep. The reason for this is that, as the metaphor SELF-CONTROL IS UP, LACK OF SELF-CONTROL IS DOWN suggests, people have no control over their falling asleep or not. The explanation for these differences is, in principle, independent of the grammatical relevance of the RESULT FOR ACTION metonymy, but places constraints on its operativeness; that is, not every predicate which expresses a resultant state can be part of this metonymy with the same degree of appropriateness. For example, it is easier to change from a state of unhappiness to one of happiness than from a state of poverty to one of richness, perhaps because subjective states can be controlled better than objective states even though we can intentionally try and do something about them. In the case of (10b), the lack of control that falling asleep involves prevents the potential application of the metonymy. By contrast, the use of the negative form of the imperative is possible since it is interpreted as an instruction for the hearer to act in such a way that he will not fall asleep, something which is not necessarily beyond his control. On the other hand, the negative imperative (9c) is strange for the same reasons as its positive counterpart (i.e. the difficulty inherent in changing an objective state).

As was mentioned above, 'what-about' constructions are invitations for the hearer to work out, usually together with the help of the speaker, a plausible course of action which has as a result a desirable state of affairs. The strangeness of (8d) may be derived from the fact that we tend to assume that speaker and hearer will act together, which is difficult in a subjective individual situation, like being happy. Not so, however, in (9d), where the business of trying to become rich can be conceived as a joint venture for speaker and hearer. (Observe that suggestions with the 'why-not' construction are not

constrained in this way since the construction does not necessarily involve the speaker; cf. *Why not be happy?, Why not be rich?*). Thus, the metonymy is possible in (8d) and (9d) with different degrees of felicitousness. However, it is impossible in (10d) because of the lack of control the speaker and hearer have over the situation.

Finally, consider examples (8e), (9e) and (10e). The 'how-to' construction, which is typically an action construction, could work well with the predicates 'be happy' and 'be rich' since they describe a resulting state which may be acted upon and modified; that is, under certain conditions one can decide to do something in order to be happy or to be rich. But, as we have noted before, one cannot choose when to fall asleep (it is easier to try not to fall asleep). However, the construction can take this non-intentional predicate provided it is adequately framed. Thus, in (10e) the speaker puts forward a hypothetical situation by means of the main clause. An adequate response to (10e) would be:

(11) You can't decide when to fall asleep.

In the light of this discussion, we argue for the grammatical relevance of the RESULT FOR ACTION metonymy, where not just the activity but the whole action frame is developed. We further suggest that the operativeness of the metonymy is constrained by constructional and conceptual factors such as the ones mentioned above.

2.3. Recategorization of nominal and verbal predicates

In their taxonomy of metonymic mappings Kövecses and Radden (1998: 55) have offered a list of metonymic configurations based on the formulation of several generic ICMs. For example, upon discussing the metonymies which are related to the action ICM, they contend that *to author a book* is a case of AGENT FOR ACTION, *to shampoo one's hair* of INSTRUMENT FOR ACTION, and *a screw-up* of RESULT FOR ACTION. In the perception ICM, *There goes my knee* (= *the pain in my knee*) is an example of the THING PERCEIVED FOR THE PERCEPTION, and *a gorgeous sight* of the PERCEPTION FOR THE THING PERCEIVED. In the control ICM, *Schwarzkopf defeated Iraq* falls under the CONTROLLER FOR CONTROLLED

heading, while *The Mercedes has arrived* is a case of the CONTROLLED FOR CONTROLLER metonymy. It must be noted that Kövecses and Radden (1998) assume that these metonymies are of the part-for-part kind, while in other cases we may have the part-for-whole and whole-for-part configurations. Thus, a category may stand for a member of the category, as in saying "the pill" to refer to 'the birth control pill', or conversely a member of a category may stand for the category as when we say *aspirin* to mean 'any pain-relieving tablet'.

In our view, it is possible to refine Kövecses and Radden's (1998) analysis in several ways. One has to do with their acceptance of so-called part-for-part metonymies. According to these authors, "to shampoo one's hair", which means 'to use shampoo to wash one's hair' is a case of part-for-part metonymy. However, in this metonymy, the target domain is the whole action carried out with the help of the instrument and not just part of it. The same logic can be applied to all the other purported cases of part-for-part metonymy, as we shall see below. The second problem is concerned with the necessity to distinguish between generalizations over specific metonymic mappings and mappings based on generic ICMs. Thus, in *The Mercedes has arrived* we understand that it is the car driver who has arrived in his Mercedes, but this metonymy is not based on the control ICM. There is control, in the sense that there is an agent which is by definition a controlling entity; however, in the metonymy the Mercedes could refer to the owner, not the driver, or to a prominent passenger who is being driven in the car. It is true that some metonymies map the controlled entity (the matrix domain) onto the controller (a subdomain) but there are many types of controlled entities and of controllers. For example, in *Chrysler has laid off two hundred workers*, the company (Chrysler), which is the matrix domain, is the controlled entity and someone who controls the company (a subdomain) has fired the workers, but we could also describe this metonymy with a more specific label like COMPANY FOR OWNER or COMPANY FOR PRESIDENT OF THE COMPANY. In *Russia has agreed to support Milosevic*, Russia is the controlled entity, and its government the controller, but we can also describe the metonymy as one of THE COUNTRY FOR ITS RULERS. None of these metonymies are high-level metonymies; they are simply generic formulations of mappings, derived by abstracting away from more specific ones, which by this process end up having a generic ICM either as the source or the target. These

mappings are only lexically relevant. The situation changes greatly when we have a mapping which makes direct use of a generic ICM, not of a concept which is a hyponym of it. In the previous sections, we have seen how high-level metonymies are capable of operating at a non-lexical level thus having an impact on linguistic structure. Kövecses and Radden (1998) seem to be unaware that some of the metonymies they have listed are of this kind even though, in dealing with those belonging to the action ICM, they have noted that the metonymic operation sometimes brings about a change of words class. For example, the denominal verb "to shampoo" is obtained by means of the INSTRUMENT FOR ACTION metonymy. In a similar way, a metonymic operation seems to underlie the origin of the deverbal nouns "screw-up" (RESULT FOR ACTION) and "sight" (PERCEPTION FOR THE THING PERCEIVED). There are many other cases of recategorization where metonymy plays a role. Here are some of the examples proposed by Kövecses and Radden:

(1)

(a) AGENT FOR ACTION: to *author* a book.

(b) ACTION FOR AGENT: snitch (slang; "to inform" and "informer").

(c) OBJECT INVOLVED IN AN ACTION FOR THE ACTION: to *blanket* the bed.

(d) ACTION FOR OBJECT INVOLVED IN THE ACTION: Give me one *bite*.

(e) ACTION FOR RESULT: a deep *cut*.

(f) TIME PERIOD OF ACTION FOR THE ACTION: to *summer* in Paris.

(g) DESTINATION FOR MOTION: to *porch* the newspaper.

It may be observed that, except for "a gorgeous sight", which invokes the perception ICM, all the other cases of recategorization are based on the action ICM. However, there is a problem in considering the word "sight" a case of metonymy since there is a change in word form. According to Kövecses and Radden (1998), derivational morphology has a metonymic base in such a way that a word like "writer" is a case of

ACTION FOR AGENT, and a word like "flight" of ACTION FOR OBJECT; however, this position is not feasible since derivation is not a matter of using one concept to stand for another, but of creating a new concept on the basis of another one by explicit grammatical means (like affixation).

Now let us go back to the other examples. Let us compare (2a), where we find the metonymy AGENT FOR ACTION with its rough equivalent in (2b):

(2)

(a) John has authored a chapter of that book.

(b) John has written a chapter of that book.

(2a) contains a source-in-target metonymy in which "author" stands for the action in which he is typically engaged in. At first sight, it seems that (2a) and (2b) share the same meaning; on closer inspection, however, we observe that this is not the case and that there is a subtle meaning difference between the two sentences. Whereas (2a) profiles the activity of John as the originator of the ideas in the book, in (2b) the authorship is generally presupposed, but not necessarily involved as (3) shows:

(3)

(a) *John authored a chapter of that book but he is not the author.

(b) John wrote a chapter of that book but he is not the author; he plagiarized the contents from another book.

(c) John wrote the chapter from Frank's dictation.

(d) *John authored the chapter from Frank's dictation.

Regarding deverbal nouns like "cut" in *a deep cut*, the metonymic type varies. The mapping here is one of the target-in-source kind, where a non-central domain (the result of an action) is highlighted. The mapping, which causes the recategorization of the word, has as an additional consequence the reduction of the conceptual material of the source domain; this is exactly the opposite of what occurs in source-in-target

mappings, where there is a process of domain expansion. To this latter kind of mapping belong -besides AGENT FOR ACTION- other metonymies cited by Kövecses and Radden like OBJECT INVOLVED IN AN ACTION FOR THE ACTION, TIME PERIOD OF ACTION FOR THE ACTION, and DESTINATION FOR MOTION. Note, however, that DESTINATION FOR MOTION is a rather inaccurate label. In *John porched the newspaper*, the expression "porched" does not only invoke the motion of the paper but also the rest of the relevant elements of the action frame, as shown by the following paraphrase: 'John acted in such a way that the paper reached a position on the porch'; typically, the action is one of throwing the paper through the air in a certain direction. Other kinds or means of motion may be involved as in *The whale beached itself* and *The submarine surfaced*. In view of this, a more adequate label would be DESTINATION FOR ACTION INVOLVING (KIND OF) MOTION TO SUCH A DESTINATION. In all cases we have a recategorization of the word class which has syntactic consequences.

The previous discussion leads us to compare deverbal nouns and denominal verbs obtained through metonymy with nominalizations obtained through what Halliday (1994: 352) has termed *grammatical metaphor*. A grammatical metaphor can be defined as the result of the grammar of language allowing parts of the system to be expressed in a non-congruent form. There can be grammatical metaphors at both the ideational and interpersonal levels. Here we are only interested in the former, where, for example, processes (which are congruently expressed as verbs) and properties (congruently realized as adjectives) may be reworded metaphorically as nouns[29]. This is the origin of nominalizations: for example, the process of destroying can be seen as an entity within a nominal group or noun phrase:

(4)

(a) They destroyed the village in 1923.

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[29] To give an idea of the extent to which Halliday takes his notion of grammatical metaphor, consider the lexicogrammatical resources of mood. According to him, some common speech act formulae are metaphorical in origin (Halliday, 1994: 365). For example, "I wouldn't ... if I was you" functions as a command whose congruent counterpart would be the negative imperative "don't ..."; "she'd better" is a modulated command which typically expresses advice, its congruent corresponding form being "she should"; "I have a good mind to ..." is congruently worded "maybe I'll ..."; and so on.

(b) The desctruction of the village occurred in 1923.

The nominalization "destruction" comprehends the verbal action in its entirety because there is no metonymic domain-subdomain relationship but a metaphoric domain-domain mapping. The difference between nominalizations originating in metaphor and deverbal nouns derived from metonymy is that in the latter the whole verbal action is not preserved but rather a relevant part of it is highlighted. However, since these two processes have much in common, we have labelled the metonymic mechanism by means of which a word form is recategorized *grammatical metonymy*.

Finally, note that the use of an incongruent option, which involves recategorization of a word class, has syntactic consequences. Halliday does not make mention of this point, but it is implicit throughout his discussion of grammatical metaphor, particularly when he notes its impact on the configuration of discourse[30]. Our examples of grammatical metonymy also involve a reorganization of the clause (cf. *He cut his knee deeply* and *He made a deep cut in his knee*), with comparable syntactic and discourse effects.

2.4. Valency extension and valency reduction

It is a common observation that it is possible to make intransitive uses of typically transitive verbs and vice versa. Compare the transitive and intransitive uses of the verbs "close" and "walk" in the following sentences:

(1)

(a) Mary closed the window.

(b) The window closed.

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[30] The question of the textual consequences of grammatical metaphor has been addressed, among many others, by Ravelli (1988) and Martin (1991). Ravelli (1988: 146) notes that grammatical metaphor helps to achieve a particular organization in the text, since variations in the organization of the message brings about changes in meaning. For example, it allows atypical parts of a message to be treated as given or to receive a focus which would not be possible through congruent realizations. Martin (1991: 329) provides us with examples of congruent and incongruent realizations of of key semantic variables which have an effect on discourse (cf. congruent "therefore" and incongruent "the reason why" and "due to").

(2)

(a) The dog walked.

(b) John walked the dog.

In (1a) we have the description of an action; in (1b) we have a process. Following Dik (1989: 98), both actions and processes are events, since they are dynamic, in contrast to situations, which are non-dynamic. But they differ in that actions, unlike processes, are controlled events. Sentences (2a) and (2b) both denote (controlled) actions, the difference being the causal sense of the latter. From a grammatical point of view, there is a phenomenon of intransitivization of the verb "open", which is typically transitive, and of transitivization of "walk", which is typically intransitive. In Dik (1997: 8-15), which elaborates on previous ideas expounded in Dik (1989: 74-75) and Dik et al. (1990)[31], these two phenomena are regarded as cases of quantitative valency reduction and extension respectively, and are defined as two of the procedures the language has to form derived predicates. The former consists in reducing the quantitative valency of a predicate by, at least, one argument position; in the latter, the quantitative valency of a predicate is extended by adding one extra argument. It may be noted that valency reduction brings about a change in the type of state of affairs designated by the predicate from controlled to non-controlled[32]. This is not the case with valency extension.

Since valency extension and reduction involve a recategorization of a predicate which has consequences for the syntactic organization of the clause, it seems plausible to find a metonymic mapping underlying both processes. We posit, for (1b) and (2b), the metonymies ACTION FOR PROCESS, and ACTIVITY FOR EVENT WHICH IS CAUSED BY IT respectively. Hence, in (1b) we understand that, although it is not explicitly stated, someone or something must have closed the window; in (2b) the activity of walking stands for the whole event in which it takes place, which includes an instigator of the activity. Consider now:

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[31] See also De Groot (1989: 137) and Siewierska (1991: 28).
[32] Intransitive predicates may designate controlled states of affairs (e.g. *John was running*).

(3)

(a) This bread cuts easily.

(b) This soap powder washes whiter.

Although in these examples there is an intransitivization of the predicate 'wash', the meaning associated with this operation is not a matter of the ACTION FOR PROCESS metonymy: the sentences in (3) do not focus on the action but on the result of the action, so we see in them a realization of the metonymy ACTION FOR (ASSESSED) RESULT. Note that it is hardly possible to use 'wash' without assessing the result of the action:

(4)

(a) ??This bread cuts.

(b) ??This soap powder washes.

The oddity of (4) is motivated by the tendency to activate an ACTION FOR PROCESS metonymy in the interpretation of an intransitive use of a typically transitive predicate, unless there exists an indication (e.g. an evaluative adverb) that the ACTION FOR (ASSESSED) RESULT metonymy is to be invoked. The meaning of (4a) and (4b) would be respectively something like 'it is possible to cut this bread' and 'it is possible to use this soap powder in order to wash'; but these interpretations are tautological since all kinds of bread can be cut and soap powder is used to wash, which explains the oddity of the examples. However, note that *This door opens* 'it is possible to perform the action of opening this door' makes sense since a door may be stuck.

These examples point to the existence of at least three patterns of recategorization regarding transitivity, which work on the basis of metonymy. In contrast to other cases of recategorization, these patterns vary in their degree of productivity as evidenced in the following examples:

(5)

(a) The sergeant marched the recruits.

(b) They stood him against the wall.

(6)

(a) *John ran the dog.

(b) *The sergeant strolled the recruits.

(c) *Peter jogged the dog.

(7)

(a) John closed/shut/slammed the door

(b) The door closed/shut/slammed.

(8)

(a) John broke/smashed the vase into little pieces.

(b) The vase broke/smashed into little pieces.

(9)

(a) One can clean/iron/rinse this jumper well.

(b) This jumper cleans/irons/rinses well.

(10)

(a) One can type well with this typewriter.

(b) This typewriter types well.

(11)

(a) One can open this door well.

(b) This door opens well.

As these examples suggest, ACTION FOR PROCESS and ACTION FOR (ASSESSED) RESULT are still very productive in English, while the causal pattern of ACTIVITY FOR (CAUSED) EVENT shows a much more restricted distribution, being reduced to just a few conventionalized examples. This does not mean that there is no underlying metonymy, but only that it has ceased to be productively applied in English. For example, the verb "run" has a variety of meanings such as 'give someone a lift' (e.g. *Could you run me to London?*), 'to move' (e.g. *She ran her fingers through his hair*), 'to organize or manage' (e.g. *Each teacher will run a different workshop*). Although all these meanings have undergone a process of conventionalization, there is still a causal element in them which lays bare their original motivation in the metonymy ACTIVITY FOR (CAUSED) EVENT: driving someone somewhere involves causing the person to arrive there; running an object (e.g. over a surface) is making it move in a certain way; and, running an activity causes it to move forward figuratively (thus, conveying the idea of progress).

Finally, consider the following examples:

(12) It felt good.

(13) El chocolate engorda.

     the.M.SG chocolate.M.SG fatten.PRES.3SG

     ' chocolate is fattening'

In these examples we find again controlled actions presented as non-controlled ones. If we compare (12) to (14) below, we observe that in the latter the subject position is occupied by the affected entity; that is to say, the external cause, which is responsible for the actual situation of the affected entity in the subject position, is not present in the clause.

(14) Mary felt sad.

By contrast, in (12) the affected entity is not directly mentioned and in the subject position we find the causer. Note that (12) can be easily reworded as

(12') It made me feel good

The comparison between (12) and (12') shows that in (12) a metonymic mapping takes place so that a caused action stands for a non-caused event. Like in ACTION FOR PROCESS metonymies, this mapping allows the speaker to present a controlled state of affairs as non-controlled, the only difference being that the mapping does not involve any change of qualitative valency. (13) is another instantiation of CAUSED ACTION FOR NON-CAUSED EVENT, since 'chocolate' in this sentence is not the affected entity but the causer of the action, i.e. it is the person that eats chocolate who puts on weight (cf. *chocolate makes you get fat*).

One exception to a metonymic account of valency reduction is found in the following example, discussed in Dik (1989: 74):

(15)

(a) John was drinking a glass of milk.

(b) John was drinking.

(c) John drinks.

For Dik, the difference in meaning between (15b) and (15c) is related to the fact that in (15b) the second argument is recoverable from the context while in (15c), which is understood as 'John is a habitual consumer of alcoholic drinks', it is not. Through valency reduction, 'drinks' in (15c) has been turned into a one-place predicate which ascribes a property to the remaining argument ('John'). It is unlikely that we can find a metonymic motivation for this reduction process, since "John drinks" expresses a habit through verb aspect and the reduction simply amounts to a consistent lack of specification of the complement by convention (cf. *John drinks alcohol*). Note that both the transitive and intransitive uses of "drink" denote controlled actions, which makes it impossible to apply either of the two metonymies which we have postulated within the activity pattern.

2.5. Argument structure

One of the areas of the grammar where the action of metonymy becomes more evident is argument structure. An argument typically consists of a noun (or a pronoun), designating an entity, and a number of modifiers which range from attributive or classifying adjectives and attributive (relative) clauses to definite and indefinite articles, demonstratives, quantifiers and classifiers. In this section, we shall discuss metonymic constraints on (i) the subcategorial conversion of nouns; (ii) the recategorization of adjectives; (iii) the semantic scope of some attributive adjectives; (iv) the role of some non-adjectival modifiers.

First, take the following sentences:

(1)

(a) There was cat all over the road.

(b) There is too much chair in this room.

Kövecses and Radden (1998: 51) regard (1a) as a case of the conceptual metonymy OBJECT FOR MATERIAL CONSTITUTING THAT OBJECT, within the constitution ICM. It is evident that the metonymic shift involves a subcategorial conversion from a countable to a mass noun. Sentence (1b) is offered by Dik (1989: 121), on analyzing entity types into individuals (expressed by proper and count nouns), sets (corresponding plural count nouns and collectives) and masses (realized by mass nouns), to illustrate this kind of conversion which, for him, is merely a grammatical process. However, Dik does not attempt to find a motivation for this frequent phenomenon nor does he attempt to discuss whether it is somehow constrained in its application. But our analysis points to its metonymic motivation and is consistent with the observation that the conversion does not affect the word class, since both entities and materials are worded as nouns.

It would be a controversial issue whether we can consider examples like (1a) and (1b) as cases of what we have called above grammatical metonymy since rather than recategorize a word, which has syntactic consequences, what we are doing is simply

perspectivize a nominal type from different angles, an operation whose consequences do not seem to affect clause structure and merely boil down to a matter of meaning effects or usage. However, to the extent that we regard subcategorization as a grammatical phenomenon and that we can show that it has at least some syntactic consequences, it would be possible to consider these examples as one variant of grammatical metonymy. Let us take two other sentences which show subcategorial conversion. They are given by Dik (1989: 121):

(2)

(a) There were three *Johns* at the party (Proper Noun > Count Noun)

(b) I would like three *butters* please (e.g. 'three slices with butter') (Mass Noun > Count Noun).

In our view, each of the conversions posited by Dik contains an underlying metonymy: "three Johns" stands for 'three people called John' and "three butters" for 'three slices with butter'. At first sight, the conversion has no significant effect on the structure of the sentence (i.e. we can say *There were three people called John at the party* and *I would like three slices with butter* without varying the general syntactic configuration of the sentence) and the function of these metonymies seems to be reduced to one of economy of expression. On closer inspection, however, we observe that (1b), which is an OBJECT FOR MATERIAL CONSTITUTING THAT OBJECT metonymy, indicates a situation of excess and the speaker's negative attitude with respect to it; this idea is not necessarily present in its paraphrase, which can be understood simply as a description of a situation:

(3) There are too many chairs in this room.

The affective involvement of the speaker in the 'too-much+ count noun' construction is evidenced if we compare these two examples and notice the slight oddity of (4b):

(4)

(a) There's too much immigrant in this country. One day someone will have to take real measures.

(b) ?There's too much immigrant in this country but there must be some way to help them.

A few other examples of this construction which seem to carry a built-in complaint are the following:

(5)

(a) There is too much illiterate in this country.

(b) There is too much car in this city.

(c) There is too much computer in our century.

(d) There is too much naked woman on the screen.

Note that the construction, which is based on the use of a singular quantifier indicating excess plus a countable singular noun, tends to be more felicitous if a time or place satellite (or adjunct) is added:

(6) ?There is too much chair (cf. There are too many chairs).

This observation adds to the syntactic impact of the metonymy in the creation of this construction and points to its treatment as a case of grammatical metonymy in contrast to what happens with examples (2a) and (2b) which have no comparable syntactic consequences.

Another type of subcategorial conversion is based on a proper noun becoming a mass noun:

(7)

(a) There is too much Yeltsin in Russia.

(b) There is a lot of America in what he does.

In (7a) 'Yeltsin' stands for 'his role as a politician and President of a country'. In (7b), 'America' stands for 'stereotyped American values'. In these examples, a relevant feature or characteristic of the source domain, which is cued by the rest of the predication and the context, is selected to become the target of the metonymy. In order to make this operation possible the relevant feature is conceived of as a substance and, therefore, as uncountable. The metonymy in these two examples could be labelled A UNIQUE ENTITY FOR ONE ITS (HIGHLIGHTED) PROPERTIES. This mapping has a counterpart with count nouns, which can be labelled AN INDIVIDUAL ENTITY FOR ONE OF ITS (HIGHLIGHTED) PROPERTIES:

(8) He had too much heart in him to quit the game.

Example (8) contains an instantiation of the HEART FOR DETERMINATION metonymy. It is a target-in-source metonymy, which is motivated by our conceptualisation of the heart as the site of qualities, feelings and emotions. The subcategorial conversion from countable to uncountable, which the metonymy underlies, is grounded in the fact that properties are typically understood as substances and therefore expressed as mass nouns. The metonymy has a non-central feature of the source domain as its target, which is highlighted by convention.

The target-in-source metonymy AN INDIVIDUAL ENTITY FOR ONE OF ITS (HIGHLIGHTED) PROPERTIES has its source-in-target counterpart in the DEFINING PROPERTY FOR AN ENTITY mapping, which is instantiated in *blacks* for 'black people', *nobles* for 'noble people', and *classics* for 'classic works'. Note that the source domain is a defining property encoded in an adjective and the target domain is an entity encoded in a noun. Therefore, as a consequence of this metonymy, adjectives are recategorised into nouns.

We must observe that recategorization generally occurs when the metonymic target designates an entity which is normally expressed by a category different from the one which realizes the source. It is immaterial whether the matrix domain is the source or the target of the mapping. Thus, in AGENT FOR ACTION, while an agent is realized by a noun, the action, which is both the matrix domain and the metonymic target, is expressed by a verb. In ACTION FOR RESULT, the action, which is the

matrix domain and the metonymic source, is realized by a verb but the metonymic target takes the form of a noun. However, when we are dealing with shifts involving properties the situation seems to be slightly different. For recategorization -rather than subcategorial conversion- to occur, the target of the metonymy needs to be the matrix domain too. In the source-in-target metonymy A DEFINING PROPERTY FOR AN ENTITY, there is a recategorization of the source since the target domain, which is the matrix domain, designates an entity. In the target-in-source metonymy AN ENTITY FOR A PROPERTY, in contrast, the target domain (which would normally be expressed by an adjective) is not the matrix domain, which rules out recategorization and only calls for semantic reinterpretation of the nature of the source.

Within argument structure we find some cases where there seems to exist some degree of incompatibility between a noun and its modifier. Compare in this respect the following sentences:

(9)

(a) A sad girl walked away.

(b) They were watching a sad film.

In (9a) the modifier "sad" ascribes a quality to the whole domain designated by the noun. The noun phrase "a sad girl" could be paraphrased as 'a girl who is sad'. By contrast, the expression "a sad film" cannot be understood as 'a film which is sad' despite both sharing the same attributive form. This occurs because sadness can only be attributed to animate entities (i.e. things cannot have feelings).

This problem can be easily accounted for by means of the EFFECT FOR CAUSE metonymy. Thus, the adjective "sad" profiles a subdomain of film, namely, that of the effect that watching a film may have on the audience. Note that 'a sad film' can be paraphrased as 'a film which causes sadness'. Thanks to this metonymic mapping a noun and its modifier which 'a priori' seem incompatible can collocate. Finally, it is interesting to point out that the meaning of film needs also to be parametrized by a metonymy since it is not the film itself, but the activity of watching it that is the cause

of sadness. This is another case of the mapping OBJECT FOR ACTIVITY IN WHICH IT IS INVOLVED, which we have seen in section 2.3. before.

Moreover, the EFFECT FOR CAUSE metonymy is not the only mapping which licenses a combination of noun and adjective, which would otherwise be impossible. Consider the following examples:

(10)

(a) Fast food.

(b) A slow thinker.

(c) A big donor.

Regarding (10a) there is not doubt that food does not have the property of being either fast or slow, as food is a non-dynamic entity. 'Fast food' is rather the result of a meal being prepared fast so that the customer gets it fast too. This suggests that in (10a) we have the metonymy ACTION FOR RESULT. In (10b) a different metonymy cues the interpretation of the expression. Here, whereas the adjective profiles the activity of thinking, which is the source domain, the target is not the result of the action but the agent. Note that 'a slow thinker' is a person who thinks slowly. We may label this metonymy ACTION FOR AGENT. Additionally, it is interesting to note that this metonymy forms part of a metaphor in which thinking is conceptualized as a physical activity such as running, swimming, etc. (cf. section 1.6 for a detailed analysis of conceptual interaction between metaphor and metonymy).

Finally, (10c) is particularly relevant in that it may have both a metonymic and a non-metonymic reading. In its more literal sense, a "big donor" has as its domain of reference physical size and refers to a person who has large dimensions (e.g. *very tall or fat*). But, this is not the default interpretation of (10c). We normally understand this expression as referring to a person who gives enormous quantities of money to an institution, a political party, etc. Thus, the adjective is ascribed to the object of the donation, which is a subdomain of our knowledge about donors. However, this case is slightly more complicated since the interpretation of (10c) calls for the activation of

both a high-level and a low-level metonymy. In the first place, there is an ACTION FOR RESULT metonymy which stresses the conversion of a person into a donor as a result of making a donation; i.e. only after a person donates (big) money does he become a (big) donor. In the second place, an OBJECT FOR AGENT metonymic mapping takes place. As a consequence of the first metonymy, the object of the action is vaguely involved in the result of the action. Thus, its properties must be transferred to a related domain (i.e. the 'result' domain). Our analysis suggests that when a high-level and a low-level metonymy work in combination the more generic one is always the blueprint for the other one[33].

These examples suggest that the semantic scope of some attributive adjectives is not necessarily restricted to the noun they modify and that, on many occasions, a metonymic mapping is needed to account for the incompatibility that exists between a head and its modifier.

The last aspect of argument structure involving metonymy which we shall analyze concerns some non-adjectival head modifiers. In this case, the situation is exactly the reverse of the one which we have discussed so far, since instead of the metonymy placing constraints on the grammar it is the grammar that places constraints on the nature of the metonymic operation. Consider the following instances of the AUTHOR FOR WORKS metonymy:

(11)

(a) Do you enjoy Van Gogh?

(b) Do you enjoy Shakespeare?

(12)

(a) He has bought a lot of Van Gogh lately.

(b) He has bought a lot of Shakespeare lately.

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[33] This is in keeping with other examples of conceptual interaction (cf. Ruiz de Mendoza 1999a; Ruiz de Mendoza and Díez, 2002)

In (11a) and (11b) the expressions "Van Gogh" and "Shakespeare" refer to their work (i.e. 'Van Gogh' stands for 'Van Gogh's work', and 'Shakespeare' for 'Shakespeare's work') as the following figures illustrate:
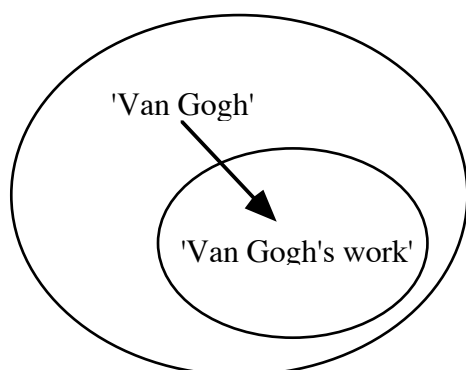
Figure 1: AUTHOR FOR WORK metonymy in example (11a)
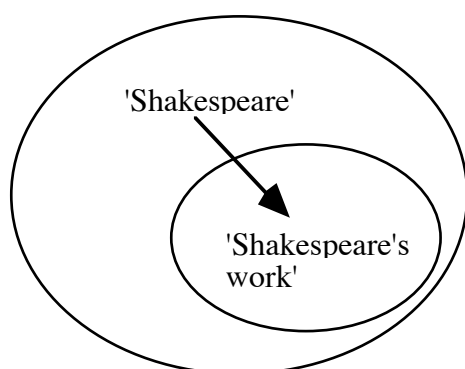
Figure 2. :AUTHOR FOR WORK metonymy in example (11b)

In this metonymy, which belongs to the target-in-source kind, the target is an abstract entity, which is metaphorically treated as a physical substance (i.e. a mass) and linguistically realized as an uncountable noun. The metonymic source is an individual entity, realized as a countable noun. The same metonymic shift applies to the examples in (12), where the use of "a lot of" shows that the modifier's real scope is the target domain of the metonymy. However, there exist some asymmetries in the realization of the AUTHOR FOR WORKS metonymy:

(13)

(a) I have a/the Van Gogh in my room.

(b) ?I have a/the Shakespeare on the desk in my room.

(14)

(a) ? Van Gogh is in my room.

(b) Shakespeare is on the desk in my room.

(15)

(a) The Van Gogh is there by the curtain.

(b) ?The Shakespeare is there on the top shelf.

The closest paraphrasis of the metonymy in (13a) is 'a/the painting by Van Gogh'. Here the use of the definite or the indefinite article brings about a specific reading of it, "a" meaning 'a certain' instead of 'any', and "the" meaning 'a single identifiable entity' rather than 'any arbitrary single entity'. These specific readings of the article provide some evidence against the plausibility of dealing with (13) by means of the AUTHOR FOR WORKS mapping alone, since the target is generic. This suggests that two further mappings are needed. One is a target-in-source metonymy where the source is the author's work in general and the target is a certain sample of his work. The other is a source-in-target metonymy where the target domain is the format a specific work of art is presented in (e.g. a book, a CD-ROM, canvas). It is important to distinguish between the target domain of the second mapping (i.e. a sample of an author's work) and the target domain of the final mapping since the first one is an abstract entity whereas the second is the physical format in which it is presented. This metonymy is diagrammed in the following figure:
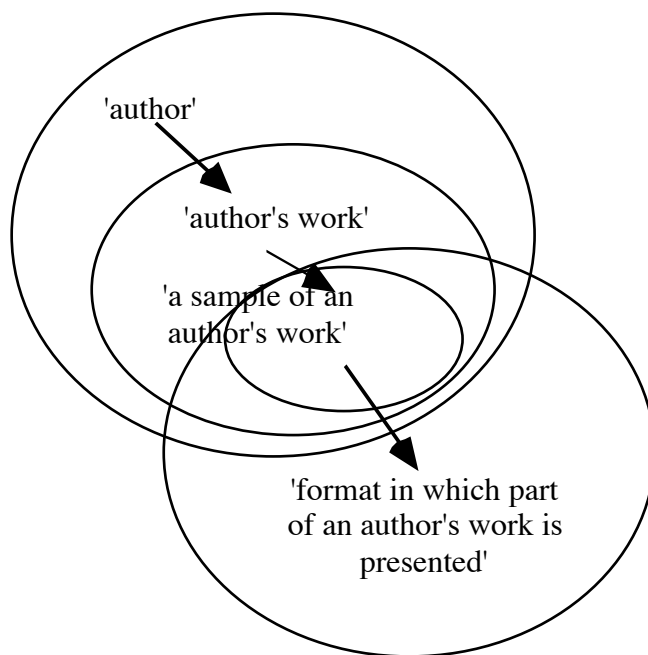
Figure 3: Triple metonymy AUTHOR FOR WORK FOR (NON-UNIQUE) SAMPLE.

The question now is where the difference between (13a) and (13b) lies, since they apparently share the same structural pattern, i.e. we need to know why the 'Van Gogh' metonymies take the definite or the indefinite article when their meaning is specific, while 'Shakespeare' metonymies do not. An important difference between the metonymies in (14b) and (13a) is connected with the conceptual nature of the target domain of the third metonymy. A picture, as a physical entity, is unique and autographic or non-copiable since it is the direct outcome of the painter's activity; by contrast, a book is only a means of expression for the author's ideas and, hence, allographic[34] or copiable: that is why we can use the article as a modifier of the source of the Van Gogh metonymy, the target being a unique item, but we cannot in the Shakespeare example, where the target is specific but not unique. These metonymic expressions, which involve the presentation format of the type of work, are cases of

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[34]Goodman (1968) distinguishes between dense and articulated symbols. The former are autographic (non-copiable) while the latter are allographic (copiable). A novel or the score of a piece of music are copiable without the need to reproduce the size and shape of the letter type in an exact manner. It is enough to preserve an adequate relationship between the different marks or signs. A painting, on the other hand, is autographic in that modifying any of its features brings about a modification of the whole.

triple metonymy[35], which consists of the combination of two target-in-source metonymies plus a source-in-target one. In this case we have two matrix domains which can be used for reference as will be explained in 2.8 in some detail.

It follows that a specificity element is argument structure involving a metonymic shift triggers a double/triple metonymic mapping, while a generic element only brings about one metonymic operation. It also follows that the scope of either specific or generic argument modifiers is always the least immediate of the target domain involved in the metonymic operation.

2.6. The predication

According to Dik (1989), the predication can be defined as the result of inserting a number of arguments (or terms) in a *predicate frame* which specifies the restrictions on such an operation. This suggests that predicates will somehow constrain the kind of metonymic operations which can take place. Besides, although it may seem that restrictions are only conceptual in nature, the analysis shows that they can also be grammatical since there exist some constructions which are motivated by metonymy. Compare the following examples:

(1)

(a) The newspaper announced her death.

(b) The newspaper has fired two of its best journalists.

(2)

(a) He ate the whole packet.

(b) He began the peanuts.

---

[35]As a matter of fact, a triple metonymy is but an extension of a double metonymy where the metonymic reduction of the initial matrix domain takes two stages. The second of these stages becomes the point of access for subsequent conceptual expansion into the final matrix domain.

(c) He enjoyed the peanuts.

(d) He began the packet.

(e) He enjoyed the packet.

In (1a) the predicate 'announce' cues the interpretation of 'newspaper' as the medium which stands for one of its communicators. In (1b) the metonymic shift goes from 'newspaper' as a company to the person/s in charge of employment regulations in it. The different domains of activation of the source domain are a function of the conceptual requirements of the predicate of each expression. The examples in (2) are also evidence of this property of predicates, but now within the field of the qualitative nature of the complementation pattern. The predicate in (2a) requires an 'edible' complement, which motivates the mapping from 'packet' to 'the food inside the packet'. The verb "eat" selects for a very specific type of entity. In contrast, other verbs like "begin" and "enjoy" select for an activity, which is a very generic concept. Jackendoff (1997: 61) considers examples like (2b)-(2e) as cases of *enriched composition* where the hearer needs to search into the world knowledge structure of the complement for an extension of it which is compatible with the generic complementation requirement of "begin" and "enjoy". We contend that Jackendoff's enriched composition is better explained as a phenomenon of contextual parametrization of the unrealized generic value of the generic selection restriction provided by the verb. In this source-in-target metonymic mapping the source is an entity (e.g. 'peanuts') and its target is the specific action where this entity plays a role (e.g. 'eating peanuts'). The parametrization of the kind of activity in each situation is carried out by the context. We have called this metonymy AN OBJECT FOR AN ACTION IN WHICH THE OBJECT IS INVOLVED. The relevance of the context in determining the kind of activity is illustrated in (3) and (4), where we offer some possible readings of (2b) and (2c):

(3)

(a) He began to eat the peanuts.

(b) He began to peel the peanuts.

(c) He began to salt the peanuts.

(d) He began to distribute the peanuts.

(e) He began to mix the peanuts with raisins.

(4)

(a) He enjoyed eating the peanuts.

(b) He enjoyed peeling the peanuts.

(c) He enjoyed salting the peanuts.

(d) He enjoyed distributing the peanuts.

(e) He enjoyed mixing the peanuts with raisins.

By way of illustration of how parametrization works, imagine the following situation in relation to example (3a). A couple is watching TV and suddenly they feel hungry. The speaker offers to go to the kitchen and brings a packet of crisps and another one of peanuts. Since they do not agree on which one to open, they decide that each one will begin one packet as they wish. Later on, in reproducing this event to another friend, he could say *He began the peanuts and I began the crisps*[36].

Other verbs which select for an activity in general are exemplified in (5):

(5)

(a) He chose the peanuts (to eat, to peel, etc.)

(b) He finished the peanuts (eating, peeling, etc.)

(c) He missed the peanuts (eating, peeling, etc.)

---

[36] It must be noted that (2c) has a stronger default interpretation than (2a); that is, we need more highly marked contexts for (2c) to yield values different from the default one in (4a). This is probably due to the fact that the range of 'enjoyable' actions in which a certain object is typically involved is usually very restricted (e.g. one typically enjoys peanuts by eating them, books by reading them, films by seeing them, and so on).

(d) He tried the peanuts (eating, peeling, etc.)

(e) He wanted the peanuts (to eat, peel, etc.)

A common feature of all these verbs is that they express the speaker's attitude or mode of action towards an activity more than an activity itself. This points to its constructional nature in the sense given to this term in Cognitive Linguistics. And as with other examples of construction studied in previous sections, we find a metonymic motivation for it. The construction could be provisionally formulated as 'Speaker's Attitude/Mode of Action V+(typically) non-actional NP'. A more complete formulation of it would require making an exhaustive examination not only of the verb types but also of the nature of the noun phrases which are part of it in relation to contextual parameters. For example, Jackendoff points out that there is no enriched composition if the complement noun designates an activity, as in *He enjoyed the dance*. However, this sentence could be taken to mean in some contexts, 'He enjoyed making preparations for the dance' (cf. *He enjoyed (making preparations for) the dance and I enjoyed (making preparations for) the concert*). We account for the fact that it is possible to make use of actional noun phrases in this construction by allowing for a typicality degree in its formulation.

This construction can be compared with another apparently related one which makes use of the activity verb "do" and will be called the 'do+ (typically) non-actional NP' construction:

(6)

(a) Do your teeth.

(b) Have you done the carpet?

(c) I'll do the bathroom first, then the rest of the house.

(d) John did the bathroom and I did the kitchen.

(e) You do the beer, and I'll do the wine.

(f) I'll do the dishes.

As in the previous case, "do" also selects for an activity (e.g. *I'll do the ironing*, *I'll do what you want*). This construction suggests that the agent carries out an action which is typically connected with him in a given context. The non-specification of the activity in the complement of "do" (e.g. 'hoovering') obliges the hearer to impose a value on the complement. In most cases we find default values as in "do your teeth", "do the carpet" which are normally taken to mean 'brush your teeth' and 'sweep the carpet', respectively. But imagine a context for (6f) in which a couple is packing because they are moving to a new house, and the woman says *I'll do the dishes*. In this context "do the dishes" means 'I'll pack the dishes', which is different from the prototypical meaning associated to (6f), namely, 'I'll wash the dishes'. The difference between 'do + (typically) non-actional N' and 'Speaker's Attitude/Mode of Action V+ (typically) non-actional N' constructions is that although in both there is a parametrization of a very generic meaning, in the former what we parametrize is the meaning of "do", which becomes more specific, while in the latter it is the type of activity. Finally, just to note that the metonymy which underlies the 'do+ (typically) non-actional NP' is GENERIC FOR SPECIFIC.

Equative predicational constructions are sometimes used to identify two terms or arguments as having the same referent:

(7)

(a) Peter is the singer of the group.

(b) That building is the Coliseum.

(c) That book is the one I want.

(d) This kind of attitude is what makes me sad.

A similar construction, however, may be used to indicate class inclusion:

(8)

(a) John is a doctor.

(b) That building is a palace.

(c) That bird is a robin.

As observed by Dik (1989: 130), class-inclusion in these constructions correlates with the use of an indefinite article, while identification is related to the use of the definite article, as evidenced by the examples in (7). The same point is made by Halliday (1994: 120, 122) who simply treats examples like those in (8) as one of several ways of expressing attribution.

In this kind of construction exemplified in (7) and (8) we find non-verbal one-place nominal predicates ('the singer', 'the one I want', 'a doctor', etc.,) which take just one argument. In some cases equative constructions can be paraphrased:

(9)

(a) John is a teacher of English.

(b) John teaches English[37]

Predicates are characterized by the difficulty we face in questioning them. This contrasts with the ease with which terms or arguments are normally questioned. Dik (1997: 274) has studied this issue in some detail. For example, it is possible to question all the terms of the sentence *John kissed Mary*:

(10)

---

[37] This is not invariably an exact paraphrase, of course. Cf. *At the moment, John teaches English but he's not really a teacher of English*.

(a) Who kissed Mary?

(b) Who did John kiss?

(c) Who kissed whom?

However, in order to ask about 'kiss', the speaker needs to employ some indirect option such as the use of some very general predicate (e.g. 'do', 'be', 'happen') which will combine with an argument in order to make explicit that we are searching for information about the type of action designated by the verb:

(11) What did John do to Mary?

We agree with Dik that this is based on the intrinsic nature of linguistic expressions which are constructed on the basis of predicate frames in which a specified predicate is combined with a number of terms. Once a given predicate has been selected, it is difficult to question its identity. These observations also apply in the case of non-verbal predicates, as the oddity of the following question regarding (7a) shows:

(12) What is Peter with respect to the group?

The same holds for (7c), (7d) whose non-verbal predicate is almost impossible to question:

(13) ?What kind of book is that with respect to you?

(14) ?What is that kind of attitude with respect to you?

By contrast, to question predicates like the ones in (9b) and (8a):

(15) What is John? (a teacher, a doctor)

and those in (7b), (8b), and (8c) is much more natural:

(16) What's that building? (the Coliseum, a palace)

(17) What's that bird? (a robin).

These predicates are easier to question because they are very generic. The opposite holds for (9b), whose predicate has been specified to a larger extent.

The reason why the hearer needs to parametrize their value is that 'What is?' questions are very generic. As with the "do" constructions discussed above, this is a consequence of the application of the GENERIC FOR SPECIFIC metonymy. Besides, Panther and Thornburg (2000), who have dealt with examples like (17) as cases of what they call the *What's that N?* construction, have noted that an apropriate answer to a question using this kind of construction should contain a hyponym of the noun[38]. Thus, (18) can be hardly considered an answer to (17), which points to the existence of a GENERIC FOR SPECIFIC metonymy:

(18) ?It's an animal.

In addition, we contend that the noun in this construction has to be quite generic in nature in such a way that the GENERIC FOR SPECIFIC metonymy can be activated

---

[38] Although the metonymic grounding of some 'what is' questions has already been pointed out Panther and Thornbug (2000), their treatment of the topic is reduced to two senses (the taxonomic and the causal). In what follows we attempt to provide a more elaborate account of the relation between the 'what is+def NP' construction and its various senses. Our approach has the additional advantage of providing a rationale for the use of this construction in terms of the analysis of questioning and equative constructions.

correctly. By way of illustration, observe how the akwardness of (19) is motivated by the low degree of genericity of the noun:

(19) ?What's that robin?

Finally, we note that the closest paraphrase of (17) is found in (20), which reveals the existence of the GENERIC FOR SPECIFIC metonymy in the parametrization of this construction.

(20) What kind of bird is that? (a robin)

However, there may be other metonymies at work. Consider the following dialogue from Panther and Thornburg (2000: 226):

(21)

    A: What's that noise?

    B: It's a burglar.

Imagine that this dialogue takes place between a couple that is awakened by a loud noise in the middle of the night. It is evident that A's question refers to the cause of the noise as the oddity of finding (22) in response to this question shows:

(22) ?It's a high-pitched noise.

Furthermore, an answer like the one provided by B is perfectly correct, which points to the neccesity of the EFFECT FOR CAUSE metonymy for the correct interpretation of (21), where the causal element serves as the antecedent for the anaphoric pronoun "it". From a syntactic point of view, the existence of the EFFECT

FOR CAUSE or the GENERIC FOR SPECIFIC metonymy in the understanding of a 'What's that N?' construction is shown in the element available for reference in the answer: while GENERIC FOR SPECIFIC allows the source domain to be the subject of the answer (cf. (23)), EFFECT FOR CAUSE does not (cf. (24)); in this latter case reference must be made to the cause (cf. (25)).

(23)

A. What's that bird?

B: That bird is a robin.

(24)

A. What's that noise?

B: ?That noise is a burglar.

(25) The cause of that noise is a burglar.

In this connection, notice should be taken that it is not a burglar but his actions that can be the cause of the noise. Thus, depending on the context, we could expand (25) a bit further into:

(26) The cause of that noise is a burglar trying to break into your house.

The EFFECT FOR CAUSE metonymy belongs to the source-in-target kind, while GENERIC FOR SPECIFIC is a target-in-source metonymy. The mappings may be represented as in figures 4 and 5 respectively. We shall see the importance of this remark later.
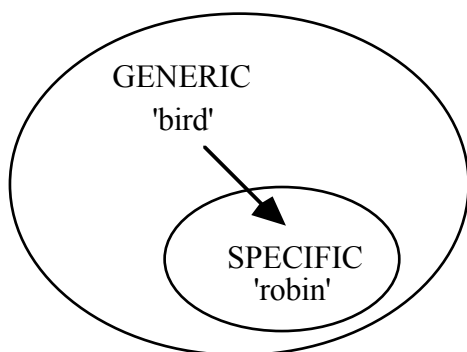
Figure 4: GENERIC FOR SPECIFIC metonymy.
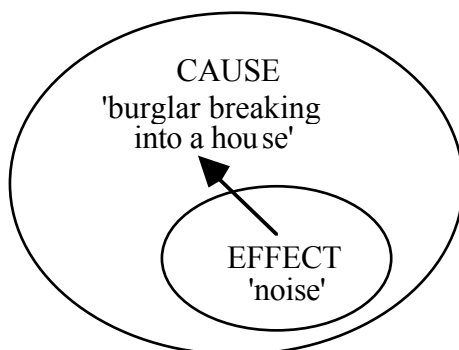
Figure 5: EFFECT FOR CAUSE metonymy.

The EFFECT FOR CAUSE metonymy lies at the basis of numerous sentences. Take the following example:

(27) I felt like 'Oh, my gosh, what is happening?'

In (27) the effect on the experiencer of an event is used metonymically to stand for the whole of it. Thus, *Oh, my gosh, what is happening* is the response of a person towards an unexpected state of affairs and in being the final part of that state of affairs, i.e. the effect, it serves to activate the whole of it as the following diagram represents:

CAUSE 'an unexpected

event'

EFFECT ON

EXPERIENCER

'Oh, my gosh, what

is happening?'
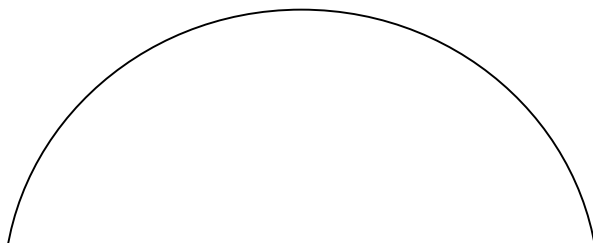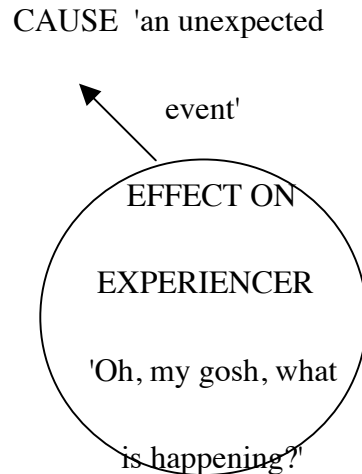
Figure 6: EFFECT FOR CAUSE METONYMY

Moreover, this mapping allows us to use direct report as non-direct report, which carries important consequences for the organization of the clause (cf. *Mary said that she loved John* vs. *Mary said: "I love John"*). Note that unless we employ this metonymy for the understanding of (27) this sentence will seem awkward.

Finally, let us consider another example of the 'What's that N?' construction. Imagine a situation in which someone asks the question in (28) below as he points to a photograph of Big Ben:

(28) What's that picture?

The speaker could get one of the following possible answers, among others:

(29)

(a) It's Big Ben.

(b) It's London.

(c) It's a picture of Big Ben.

(d) It's a picture of London.

(e) That picture is a photograph of Big Ben.

Some answers, however, are highly unlikely:

(30)

(a) ?That picture is Big Ben.

(b) ?That picture is London.

The situation here is comparable to the one evidenced in example (24) above. The noun phrase "that picture" cannot be used as the subject of the answer to the question in (28) since the construction to which it belongs is not used in its identifying function, as in (29c)-(29e). "It" in (29a) and (29b) does not refer to 'that picture' but to a subdomain of this concept, i.e. the image of Big Ben which is visible in the picture. It is this subdomain that is then metonymically invoked by the question in (28). However, there is a difference between (29a) and (29b) in that the latter calls for a second source-in-target metonymic mapping from the image of Big Ben to London. The first mapping is a case of the WHOLE FOR PART metonymy and the second of PART FOR WHOLE, the two 'wholes' being different domains in which the common part is profiled, as represented in figure 6 below:
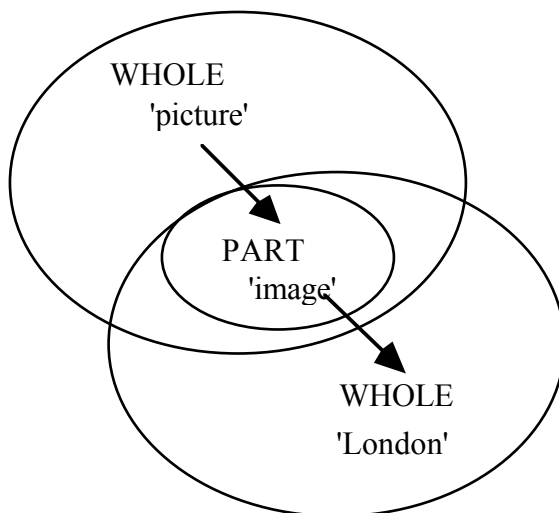
Figure 7: WHOLE FOR PART FOR WHOLE metonymy.

2.7. Modality

The area of modality has been one of the most controversial subjects of study in linguistics. Palmer (1986) defines modality as semantic information associated with the speaker's attitude and/or opinion about what is said. The most common distinction is between *epistemic* and *deontic* modality. Epistemic modality has to do with the speaker's assessment of the actuality of a state of affairs in terms of his knowledge; deontic modality is related to the speaker's evaluation of a state of affairs in terms of social, moral, or legal norms. This distinction has been taken over and developed by functional linguists like Dik (1989) and Halliday (1994). Dik, who bases his observations on previous work by Hengeveld (1987, 1988) (see also Hengeveld, 1989), defines three sub-areas of modality: (1) *inherent modality*, which has to do with a participant's 'ability' and 'willingness' for the realization of the state of affairs; (2) *objective modality*, which expresses the speaker's evaluation of the likelihood of occurrence of a state of affairs (in terms of certainty or obligation); *subjective modality*, which defines the speaker's personal commitment to the truth of what he says (he may either take personal responsibility for his assessment or may base it upon external evidence, like inference, personal experience, or reports from other people).

Moreover, Halliday (1994: 357) has distinguished between *epistemic modality* (what he calls *modalization*), which encodes either probability ('may be') or usuality ('sometimes'), and *deontic modality* (which he labels *modulation*), which signals either obligation ('is wanted to') or inclination ('wants to'). Consider the following examples:

(1)

(a) I must study French

(b) I needn't go.

(2)

(a) You must study French.

(b) You needn't go.

These two modal auxiliaries (i.e. *must* and *need*) serve to convey either an obligation or a lack of it that is imposed by the speaker. But, what happens when the speaker and the subject of the auxiliary coincide? For example, in "I must study French" the speaker seems to be imposing the obligation of studying on himself. In these cases, the sentence often becomes an expression of willingness or desire to carry out the action. This change of meaning can be easily accounted for by postulating a "deontic (or obligation) frame", which contains the following information: (i) actions may be imposed on us, and (ii) we are sometimes willing to accept the imposition. On the basis of this information, we suggest that the deontic readings of (1a) and (1b) are the result of the target-in-source metonymy OBLIGATION FOR DESIRE (TO CARRY OUT THE REQUIRED ACTION); i.e. there is a metonymic mapping where 'I must study' stands for 'I want to study because I feel I have an obligation to', and 'I needn't go' for 'I don't want to go because I feel I have no obligation to go'. The metonymy is also present when speaker and subject do not coincide, but it serves a different purpose. For example, in (2a) we understand that the speaker wants the hearer to study French. The metonymy is OBLIGATION FOR DESIRE (THAT THE ACTION IS CARRIED OUT).

Another modal auxiliary which has attracted the attention of cognitive linguists because of its relation to metonymy is 'can'. Take these examples:

(3)

(a) I can see him coming.

(b) I can understand what you say.

(c) I can hear the birds singing.

(d) I can learn a lot if I study hard enough.

As Panther and Thornburg (1999) have pointed out, the interpretation of examples like these calls for a metonymy where the ability/potentiality for physical or mental perception stands for the actual perception. For example, "I can see" means 'I see', "I can understand" (usually expressed metaphorically as "I can see") means 'I understand'

(or 'I see'), "I can hear" means 'I hear', and so on. They have labelled this metonymy POTENTIALITY FOR ACTUALITY. The logic of this metonymy is that in order to actually perceive something, one must have the ability to do so. What actually happens is the consequence of one's previous potential which is thus to be considered a subdomain of the actual event. The metonymy, which is diagrammed in figure 8, is of the source-in-target kind.
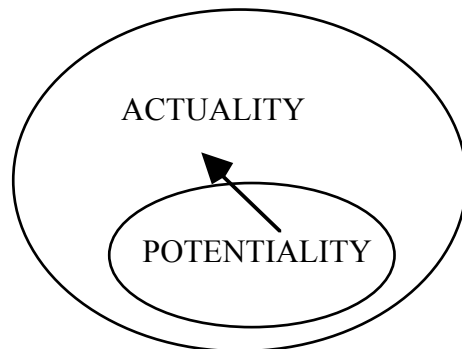
Figure 8. EFFECT FOR CAUSE metonymy.

Panther and Thornburg (1999) have observed that, apart from being very productive in the domain of physical and mental perception, the POTENTIALITY FOR ACTUALITY metonymy is also used to show the commitment of the actor to the coming about of a state of affairs or to the veracity of what he says. This is grounded in the fact that the factuality of something is more readily accepted if it is based on perceptions (we believe more easily in what we see, hear, touch, etc.) as is evidenced by the following examples from Panther and Thornburg (1999: 341-315):

(4)

(a) I can testify (= I testify) that, seen from the surrounding heights, it is a fairy land of lights.

(b) I can give (= I give) you my word that he is not at home.

(c) I can promise (= I promise) you I'll be at home.

Another feature of the POTENTIALITY FOR ACTUALITY metonymy by means of a construction with "can" is that it needs a specific complement for the perception predicate. Note:

(5)

(a) I can see (= I'm able to see).

(b) I can hear (= I'm able to hear).

Moreover, this metonymy is not activated whenever the semantic and grammatical requirements mentioned above are not fulfilled:

(6)

(a) I can (= I'm able to) play the piano

(b) I can (= I'm able to) run six miles in half an hour.

(c) Cheetahs can (= cheetahs are able to) run very fast.

In these examples no metonymy takes place since the speaker merely expresses the capacity of the actor to carry out an action, which does not involve his commitment or desire to do it (cf. *I can play the piano but I don't feel like it now*).

Sometimes, a "can" construction would seem to invoke a different kind of metonymy implying willingness to act. Consider:

(7)

(a) I can get rid of her if you want me to (=I'm willing to get rid of her)

(b) I can make your dreams come true (=I want to make your dreams come true).

However, these examples contain the commissive element which licenses the POTENTIALITY FOR ACTUALITY metonymy: the speaker is giving guarantees that the state of affairs will obtain because he has the capacity to make that happen. By implication, as with promises, we assume that the speaker is actually willing to carry

out the action if required to do so, which indeed is the case. We may compare this situation in which the speaker has an external motivation for action with cases of desire where the motivation is internal, like (1a). In the latter, the interpretation of the expression as a desire is part of the expression itself through the operation of the OBLIGATION FOR DESIRE metonymy. In contrast, a "can" construction may not express desire directly but only by implication in connection with a context (the hearer's wanting the speaker to carry out an action). In the case of (7a) the contextual clue originates in the expression "if you want me to". In (7b) it is the result of a default reading. The implication may thus be cancelled out, which supports our view that the desire interpretation is not part of the sense of the construction:

(8)

(a) I can (= I'm able to) get rid of her any time since I know how to deal with her.

(b) I can (= I'm able to) make your dreams come true but I won't.

Observe that for speakers who interpret 'I must' (versus 'I have to') as conveying internal obligation (versus external obligation), the following are rather odd examples:

(9)

(a) ?I must find a way out of this problem, but I don't want to.

(b) ?I must speak to you, but I don't want to.

(c) ?I must take care of the poor child, but I don't want to.

(d) ?I really must stop smoking, but I don't want to.

An additional clue to the existence of a desire interpretation for "must" sentences is the possibility of adding the adverb "please" when they are to be interpreted as indirect requests:

(10)

(a) I must find a way out of this problem, please.

(b) I must speak to you, please.

(c) I must be treated fairly, please.

(d) You must stop smoking, please

(e) We must buy a new house, John, please.

Example (10e) is very revealing with respect to the metonymic motivation of the use potential of the desire construction with "must". Compare it with:

(11) We must buy a new house.

Let us think of a context for this sentence in which John and Mary are married and both of them feel they need to buy a new house. The sentence, uttered by either John or Mary, would be a simple expression of the desire. But imagine that John is not inclined to make the purchase. In this case (11), if uttered by Mary, becomes a request to buy the house. So, we have two possible situations, one in which "we must" means 'we want', and another in which it means 'I want you to become involved with me in doing as I wish'. The latter situation is compatible with the use of "please", as shown in (10e). Whichever the situation, the metonymy OBLIGATION FOR DESIRE motivates the semantic interpretation of the "must" construction in such a way that it always expresses, at least, the speaker's desire.

In the light of the above discussion, we agree with Halliday (1994) on the need to distinguish two different types of deontic modality: obligation and inclination. However, we claim that obligation, in having the twofold status of metonymic sources and matrix domains, is more likely to have a more basic status within modulation than inclination; i.e. inclination is derived from obligation. Thus, the reverse metonymy DESIRE FOR OBLIGATION does not seem to show in the grammar. Note that expressions of desire with "will" and "be willing to" do not convey obligation, except perhaps by pragmatic inference in the appropriate context:

(12) I'm willing to sell my house just because I need the money. Otherwise I would never do it.

Probably, the DESIRE FOR OBLIGATION metonymy is not possible because of the nature of the obligation ICM or deontic frame. It is absurd to attempt to force people to do things which they are already willing to do. A similar observation can be made about the relationship between ability and action. A person will carry out an action only if he has the ability to do so, a fact which rules out a possible ACTUALITY FOR POTENTIALITY metonymy.

If our observations are correct, we would have in the area of deontic modality, at least, two metonymies at work, OBLIGATION FOR DESIRE and POTENTIALITY FOR ACTUALITY, each of which motivates a construction: one based on the auxiliary modal "must", and another based on "can". Finally, it remains to be seen if there are any metonymies at work within epistemic modality[39]. For example, it might be the case that there is a PROBABILITY FOR USUALITY metonymy which carries some grammatical consequences for the clause. This, however, does not seem to be the case. Let us consider two probability auxiliaries, "may" and "will":

(13)

(a) John may go to Church, since it's Sunday morning.

(b) Peter will go to Church, since it's Sunday morning.

Example (13a) involves the implication that John sometimes goes to Church on Sunday mornings, and (13b) that Peter regularly (or perhaps always) attends Church on Sunday mornings. The relationship is one of inference where there is an evident correlation between degree of probability and degree of frequency. Probability and usuality do not stand in a domain-subdomain relationship, which rules out the possibility of a metonymic mapping from one to the other.

In order to further substantiate our point, consider sentence (12b) below where it may be argued that there is a mapping from predictability/probability to usuality in relation to (14a):

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[39]According to Halliday (1994: 356), epistemic modality or modalization is concerned with the assessment of probability and usuality.

(14)

(a) (Probably/predictably) she'll telephone her sister and tell her the new gossip.

(b) When she has the chance, she'll telephone her sister and tell her the new gossip (= she often/always telephones her sister and tells her the new gossip when she has a chance).

The modal auxiliary "will" usually expresses a prediction or probability. These are the default readings of (14a). In (14b) the speaker expresses the protagonist's repeated or habitual behaviour. As usuality is a necessary consequence of predictability or probability, there is no metonymic reading of (14b). Note that in the metonymies we have distinguished within modality there is no such entailment relationship between the source and target domains. For example, *I needn't go* does not entail but simply presupposes 'I do not want to go'.

2.8. Anaphoric reference

In dealing with the various metonymic mappings which underlie the 'What is that N?' construction (cf. section 2.7), we hinted at the existence of a connection between the type of metonymy at work and the possibility of repeating the noun phrase of the construction to answer the question. Consider examples (1) and (2):

(1)

A: What's that bird?

B: That bird is a robin.

(2)

A: What is that noise?

B: ?That noise is a burglar.

Whereas the GENERIC FOR SPECIFIC metonymy in (1) allows reference to the noun phrase in the answer, the metonymy EFFECT FOR CAUSE in (2) does not. However, the anaphoric "it" is grammatically possible in both cases as evidenced in (3) and (4):

(3)

A: What's that bird?

B: It's a robin.

(4)

A: What's that noise?

B: It's a burglar.

In (3) "it" clearly makes reference to the noun phrase "that bird", which is explicit in A's question. The situation changes in (4), where "it" cannot refer to the NP "that noise" and we have a metonymic shift from 'that noise' to 'the cause of that noise', which, being compatible with the semantics of the rest of the construction, is also available for reference by means of the anaphoric 'it'. In other words, in (3) the anaphoric 'it' substitutes 'that bird' and in (4) 'the cause of that noise'.

The question now is why the GENERIC FOR SPECIFIC and EFFECT FOR CAUSE metonymies behave differently as far as anaphoric reference is concerned. We contend that the answer lies in the nature of the mapping. As has already been mentioned, GENERIC FOR SPECIFIC is a target-in-source metonymy, while EFFECT FOR CAUSE belongs to the source-in-target kind. Take now the following examples:

(5)

(a) Napoleon lost at Waterloo.

(b) The piano has the flu.

In (5a) 'Napoleon' stands for 'his army', which is a subdomain of our knowledge about the famous emperor. As the target domain is a subdomain of the source we are dealing with a case of target-in-source metonymy. In contrast, example (5b) is a case of source-in-target metonymy: 'the piano' refers to the 'person who plays the piano. Consider the following extensions of the two examples:

(6)

(a) Napoleon lost at Waterloo because he misinterpreted his enemy's strategy.

(b) The piano has the flu, so he won't come today.

Example (6a) suggests that in target-in-source metonymies anaphoric reference needs to be grammatical in nature, i.e. the anaphoric pronoun needs to agree with its antecedent in gender and number. On the other hand, in example (6b), which is a case of source-in-target metonymy, agreement would seem to be conceptual. However, Ruiz de Mendoza (2000) has argued that there is no such a thing as a division between grammatical and conceptual anaphora when the antecedent is metonymic, but that anaphoric reference is compulsorily made to the matrix domain of the metonymy no matter whether this domain is the source or the target of the mapping. In (6a) the matrix domain is 'Napoleon', and in (6b) 'the piano player'. The impossibility of using the subdomain for reference is illustrated by the following sentences:

(7)

(a) Napoleon lost at Waterloo although *it (=the army) fought courageously.

(b) The piano has the flu and *it(=the piano) sounds wonderful.

If we apply this principle to the cases of GENERIC FOR SPECIFIC and EFFECT FOR CAUSE metonymies studied above, we observe that the GENERIC FOR SPECIFIC metonymy has the generic domain as its matrix domain and works like example (6a). By contrast, in EFFECT FOR CAUSE metonymies, which belong to the target-in-source type, it is the cause, as the matrix domain, that can function as the antecedent. That is why we can make use of anaphoric "it" in the answer in (4), but

repetition of the metonymic noun phrase found in the question (i.e. "that noise") is not allowed: "it" in (4) refers to the cause of the noise, the matrix domain.

In Ruiz de Mendoza (2000) there is a more detailed study of the relationship between anaphoric reference and metonymy in non-generic conceptual domains. There, it is argued that the correlations between target-in-source metonymies and apparent grammatical anaphor, on the one hand, and between source-in-target metonymies and conceptual anaphor, on the other hand, seem to support the case for the proposed twofold division. Furthermore, we have observed that the formal nature of a metonymic mapping has consequences for the kind of anaphoric mechanism to be used. The general principle, which we shall call the *Domain Availability Principle,* says that whenever a metonymic noun phrase occurs in a sentence, only the matrix domain of the metonymic mapping is available for anaphoric reference. Recognition of the operation of this principle is important in order to avoid potential misconceptions on the nature of metonymic constraints on anaphora. This issue will be addressed later in this section.

The study of the intricacies of the relationships between some anaphoric relations and metonymy is not completely new, but it has received very little consideration in the literature. There is passing mention of it in Croft (1993: 361) and brief examination of some examples in Nunberg (1978, 1979, 1995), Fauconnier (1985), and Panther and Radden (1999). Stirling (1996), who bases her work on the development of Fauconnier's (1985) insights, is the only systematic attempt to deal with anaphoric relations involving metonymy. We shall summarize Stirling's approach, in connection with Fauconnier's, and then discuss some of the problems it poses and how they can be sorted out by referring to several cognitive principles, among which the Domain Availability Principle -formulated above- figures prominently.

Fauconnier (1985: 3) has taken up Nunberg's (1979) notion of *pragmatic function*, according to which we establish links between objects of a different nature on the basis of psychological, cultural, or locally pragmatic reasons, and has incorporated it into what he calls the *Identification Principle* (or "ID Principle"):

If two objects (in the most general sense), *a* and *b*, are linked by a pragmatic function *F* ($b = F$ (a)), a description of *a*, d_a, may be used to identify its counterpart *b*.

He gives the following example:

(8) Plato is on the top shelf.

If we have one function (F_1) which links authors with the books containing their works, the ID Principle allows (8) to mean:

(9) The books by Plato are on the top shelf.

Here, *a* = 'Plato' and *b* = $F_1(a)$ = 'books by Plato'. Object *a* is what Fauconnier calls a reference trigger, and b a reference target, *F* being the connector, as shown in figure 8.

F (connector)

a (trigger)

b   target
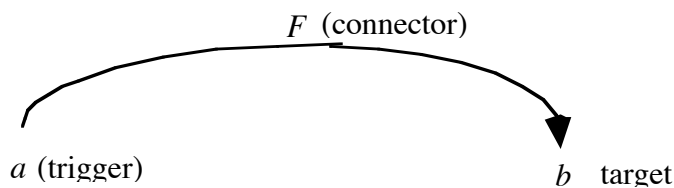
Figure 9: Reference shift in a connected situation

Fauconnier points out that there may be other pragmatic functions available to interpret (8): from persons to representations, from persons to information about them, from persons to names, etc. For example, using this last one would allow us to interpret that a sign with the word "Plato" on it is on the top shelf.

Stirling (1996: 78) uses this basic idea in order to elaborate a typology of anaphoric relations involving metonymy. They are represented below (figures 9-11):

antecedent

anaphor

designates b via a
ie activates:

intended to refer to b

R

a →▶ b

b
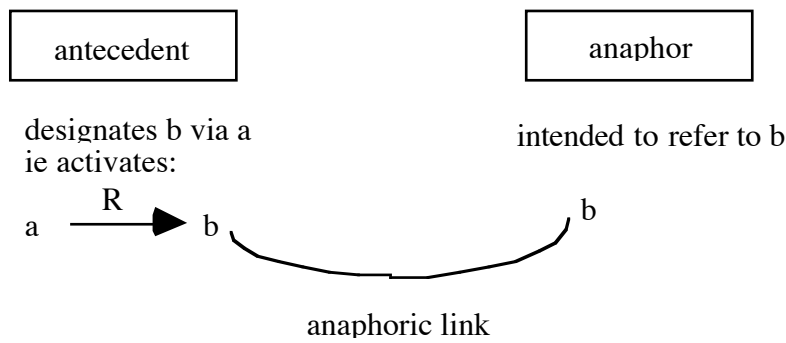
anaphoric link

Figure 10:. Type (i) of anaphoric relation involving metonymy

antecedent

anaphor

designates b via a
ie activates:

intended to refer to a

R

a →▶ b

b
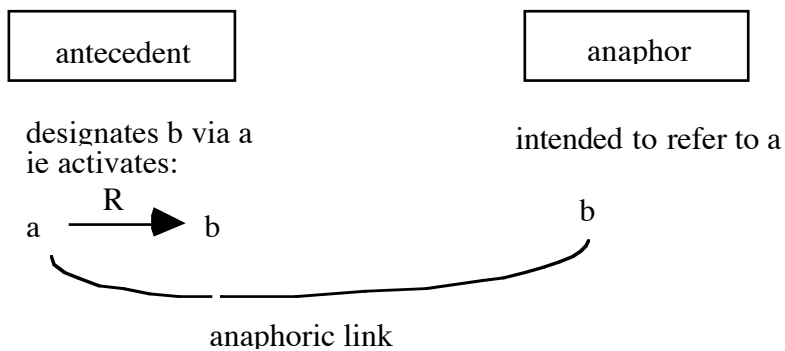
anaphoric link

Figure 11: Type (ii) of anaphoric relation involving metonymy

antecedent

anaphor

designates a

intended to refer to b

a

b

anaphoric link/metonymic
link

R

a →▶ b
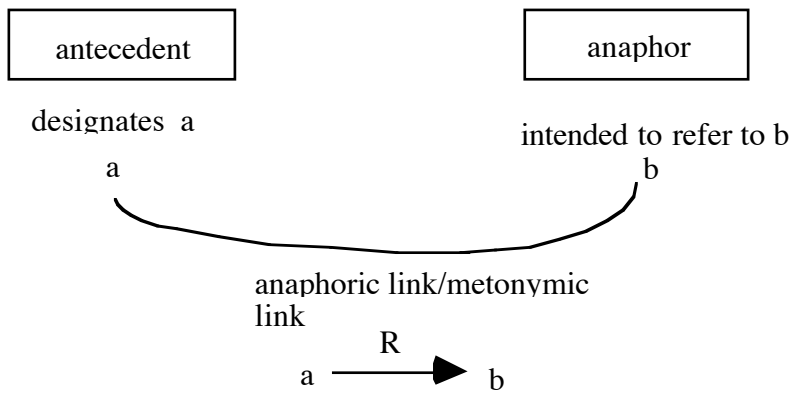
Figure 12: Type (iii) of anaphoric relation involving metonymy

Examples of each relation are the following:

(10)

(a) Plato is on the top shelf. *It* is bound in leather [type (i)].

(b) Plato is on the top shelf. You'll find that *he* is a very interesting author [type (ii)].

(c) Plato is a great author. *He* is on the top shelf [type (iii)].

Stirling considers type (iii) the only case of 'true' metonymic anaphora, since in it the metonymy is not entirely located in the antecedent, a claim which we shall dispute - together with most others- below.

Fauconnier contends that the activity of the ID Principle, which allows indirect reference, has linguistic consequences for the study of pronominalization. Since pronoun agreement is heavily dependent on gender, and gender in English expresses differences between animate and inanimate entities, most of Fauconnier's observations with respect to anaphoric pronominalization work on the basis of whether the trigger is animate or not. Stirling (1996: 82-83) systematizes and completes Fauconnier's study with the correct idea in mind, namely that Fauconnier's discussion is really concerned with metonymic anaphora. However, the resulting explanation has, both in Fauconnier's study and in Stirling's extension, a number of weak points. We use Stirling's examples, which she puts forward in an attempt to systematize and complete the ones found in Fauconnier (1985: 5-9):

AUTHOR FOR WORKS (Animate trigger- Inanimate target)

(11) Type (i)

(a) Plato $_{a\_b}$ is on the top shelf. It$_b$ is bound in leather.

(b) ?Plato $_{a\_b}$ is on the top shelf. He$_b$ is bound in leather.

(12) Type (ii)

(a) Plato $_{a\_b}$ is on the top shelf. You'll find he$_a$ is a very interesting author.

(b) * Plato $_{a\_b}$ is on the top shelf. It$_a$ is a very interesting author.

(13) Type (iii)

(a) Plato$_a$ is a great author. He$_b$ is on the top shelf.

(b) Plato$_a$ is a great author. It$_b$ is on the top shelf.

ORDER FOR CUSTOMER (Inanimate trigger-Animate target)

(14) Type (i)

(a) The mushroom omelet $_{a\_b}$ left without paying his bill. He$_b$ jumped into a taxi.

(b) ?The mushroom omelet $_{a\_b}$ left without paying its bill. It$_b$ jumped into a taxi.

(15) Type (ii)

(a) ?The mushroom omelet $_{a\_b}$ left without paying. It$_b$ was inedible.

(b) *The mushroom omelet $_{a\_b}$ left without paying. He$_b$ was inedible.

(16) Type (iii)

(a) *The mushroom omelet$_a$ was too spicy. It$_b$ left without paying.

(b) The mushroom omelet$_a$ was too spicy. He$_b$ left without paying.

Stirling observes that, in general, in the case of types (i) and (ii), the preference is for the pronoun to reflect the properties of its own intended referent (realized by the difference in gender), independently of whether the referent is trigger (in (i)) or target (in (ii)). In these types the metonymic relation is found in the interpretation of the antecedent. In type (iii), where the metonymic connection is implicated in the interpretation of the anaphor, acceptability depends on whether the trigger is animate and the target inanimate (cf. Plato examples) or the reverse (cf. omelet examples). If the trigger is inanimate and the target is animate, the pronoun must be animate, as in (16); if there is an animate trigger and an inanimate target, the animate pronoun is preferable although the inanimate one can also occur, as evidenced by the examples in (13).

There are several fundamental problems with this account. First, we have the question of the explanatory power of the trigger-target account of metonymy. While it is

true that in a connected situation, a description of an object may be used to identify another object, it is misleading to suggest that one of the objects is what triggers the metonymic shift. An account in terms of source and target domains, like the standard one initiated by Lakoff & Johnson (1980), would seem to be equivalent, but it is not. Under the source-target view, the metonymic shift is triggered by the profiling action of the predicate over the source domain. Thus, in *Plato is difficult to read*, the predicate 'is difficult to read' profiles the subdomain of Plato's activity as a writer and calls for the metonymic shift. In relation to this, we additionally note that there is nothing in Stirling's typology of anaphoric relations involving metonymy which reveals why the anaphor sometimes selects *a* and at other times *b* for reference. Evidently, this is not a problem if we take into account the Domain Availability Principle, which establishes the matrix domain as the only one to which anaphoric reference can be made.

A second problem is related to the fact that sometimes the connection between two objects is not as straightforward as Fauconnier's and Stirling's analyses suggest. We may recall our treatment of example (14b) in section 2.5, which required a triple metonymic mapping from the author to his work to a specific sample of his work to the format of presentation of his work. A careful consideration of the source-target relationships in multiple metonymic mappings, in connection with our Domain Availability Principle, sheds more light on anaphoric reference phenomena than Fauconnier's account and Stirling's extension of it. Let us consider again the form of the mapping for a sentence like *Plato is on the top shelf* (figure 13) and compare it with the form of *Plato is very interesting to read* (figure 14):
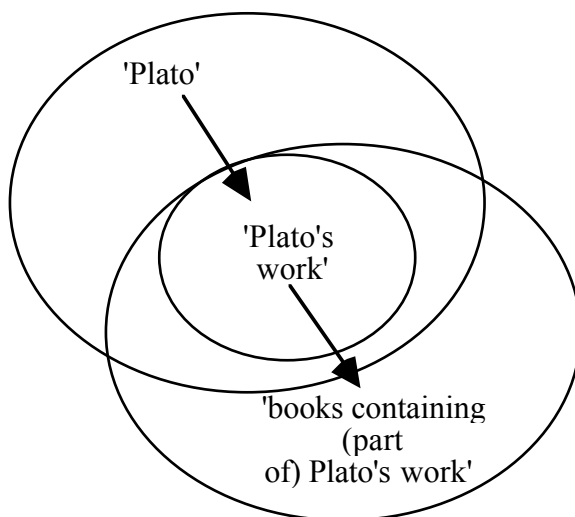
Figure 13: 'Plato' double metonymy.
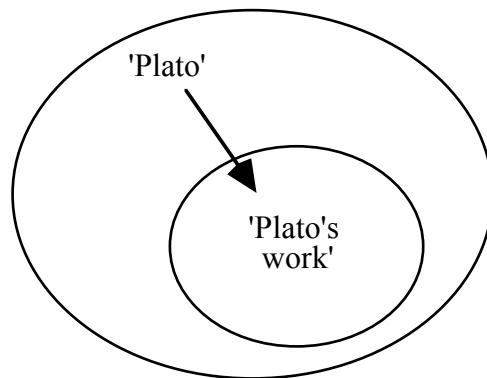
Figure 14: 'Plato' single metonymy.

Our analysis of this metonymy has greater predictive and explanatory power than the trigger-target account. Thus, the double mapping in figure 13, in conjunction with the Domain Availability Principle, covers all the cases of anaphoric relationships illustrated by examples (11)-(13). The double mapping provides us with two matrix domains: one is 'Plato', and the other 'the books'. So we have two available domains for anaphoric reference: naturally, the speaker will tend to select the domain which is semantically more compatible with the predicate of the sentence containing the anaphoric pronoun. This explains, on the one hand, why the speaker prefers sentence (11a) to (11b), since the property of being 'bound in leather' applies better to the final matrix domain than to the initial one in the metonymic chain; on the other hand, it does not rule out sentence (11b) as completely incorrect, since, as a matrix domain, 'Plato' is

still available for anaphoric reference. However, there is also another principle at work, which we shall call the *Principle of Domain Precedence*, according to which in a double metonymic mapping, unless the predicate combines better with the final matrix domain, reference is preferably made to the initial matrix domain. This principle licenses the use of (11b) but precludes sentence (12b) from occurring, since being 'a very interesting author' is only compatible with the initial matrix domain. Finally, we have the examples in (13), where the metonymic shift occurs in the anaphoric pronoun. By definition, the Principle of Domain Precedence only applies to cases where the metonymy is in the antecedent. The appropriateness of both (13a) and (13b) is a different matter. There is a double metonymy in the two examples, and only the Domain Availability Principle obtains, which renders both the initial and final matrix domains equally available for pronominalization.

Our discussion strongly suggests that the question of agreement between the pronoun and its antecedent is not simply a matter of types (i) and (ii) preferring the pronoun to take the properties of the intended referent. For example, this explanation gives us no cue whatsoever as to why while sentence (11b), although dispreferred, is not completely ruled out, sentence (12b) is impossible. But it also poses problems when we are confronted with other examples. Consider:

(17) Plato is very interesting to read but sometimes he/*it is difficult to understand.

The intended referent of the noun phrase 'Plato' is 'Plato's work', but the anaphoric pronoun does not agree with this referent; it agrees with 'Plato', a possibility which cannot be dealt with by the trigger-target account. However, it is predicted and explained by the application of both the Domain Availability Principle and the Domain Precedence Principle.

The mushroom omelet examples deserve a slightly different treatment. They are all cases of single target-in-source metonymies where the matrix domain is always the customer who has ordered the omelet. This is diagrammed below as figure 15.

156
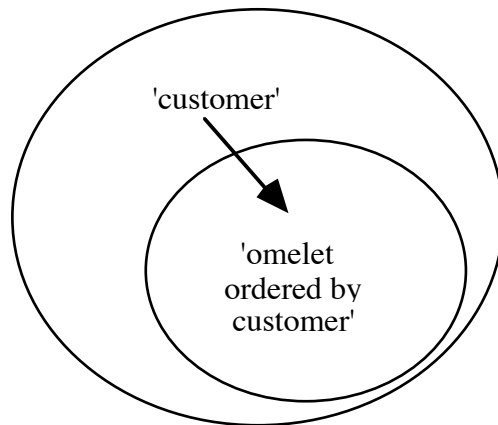
Figure 15: 'omelet' metonymy

The application of the Domain Availability Principle only allows anaphoric reference to 'customer', not to the omelet. This explains well the use of anaphoric "he" in (14a), and the extreme oddity (or perhaps even impossibility, against Stirling's acceptability judgement) of (14b). However, it does not by itself seem to explain the examples in (15). This is due to the fact that there is a strong incompatibility in them between the profiling activity of the predicates applied to the antecedent and to the anaphoric pronoun. In (15a) the predicate 'left without paying' triggers the metonymic shift from 'omelet' to 'customer' and makes it available for reference; but the second predicate in the juxtaposed sentence profiles the omelet in the domain of food and disregards the availability of the matrix domain, which makes the combination of the two sentences an odd one. It makes the hearer ignore the metonymy and find an adequate non-metonymic referent for "it". The case of (15b) evinces even greater oddity since the juxtaposed sentence seems to make use of the available referent (the customer) for anaphoric "he", but then assigns to it a predicate with which it is semantically incompatible (we do not usually think of customers as having the property of being edible). Finally, the examples in (16) are again cases of metonymy entirely located in the anaphoric pronoun. Example (16a) is ruled out because "it" refers directly to the mushroom omelet and is not congruent with the predicate 'left without paying'. Sentence (16b), on the other hand, is feasible but it can hardly be regarded as a case of

metonymy since the predicate 'left without paying' is semantically compatible with the pronoun "he" without making a metonymic shift of referent.

Our account also reveals one last weakness in Stirling's analysis. She thinks that there is a connection between the animate or inanimate character of the trigger and acceptability judgements for anaphors of type (iii); her claim is that there is a preference for an animate pronoun. She also seems to put too much weight on animacy (linguistically realized in terms of gender) as the essential property of the referent to be reflected by the anaphoric pronoun. Neither of the two claims is true. As we have already noted, the acceptability of the 'Plato' examples in (13) and of the 'omelet' examples in (16) depends on predicate profiling of the anaphoric pronoun in connection to its antecedent. Furthermore, in the case of (16a) and (16b), there is no metonymy proper. With respect to the role of animacy in the other metonymic anaphora types, consider the following examples taken from Ruiz de Mendoza (1999a):

(18)

(a) Hamlet has given a remarkable performance but *he* looked a bit strained.

(b) ?Hamlet has given a remarkable performance but I don't understand why *he* repudiated Ophelia.

In (18a) and (18b), 'Hamlet', the character, is the source of a metonymic mapping where the target is the actor playing Hamlet's role, the source being a subdomain of the target. Following the Domain Availability Principle we make use of the actor as the reference domain for anaphora, as in (18a). Obviously it is this principle that tends to render (18b) unacceptable, not the animate/inanimate distinction.

Our principles also apply in the case of anaphoric reflexive pronouns. Stirling (1996: 83) gives us a whole paradigm of examples, some of them taken from Fauconnier (1985), also grouped according to the classification criteria which she used for non-reflexive pronouns. We are only going to examine some of the examples provided by these authors. Consider, first, these unproblematic ones:

(19)

(a) Norman Mailer likes to read himself before going to sleep.

(b) *Norman Mailer likes to read itself before going to sleep.

(20)

(a) The mushroom omelet paid only for himself.

(b) ?The mushroom omelet paid only for itself.

In (20) we have again a target-in-source AUTHOR FOR WORKS metonymy, where the author is the matrix domain. In consonance with the Domain Availability Principle, only the author can serve as antecedent; so (19b) is impossible. In (20), the source-in-target metonymy ORDER FOR CUSTOMER, only allows us to use the customer matrix domain for anaphoric reference. The reason why (19b) is less acceptable than (20b) lies in the fact that target domains in target-in-source metonymies are not usually well-defined domains, while both source and target domains in the other metonymy type are well-defined domains.

But there are other examples of reflexivization which might seem to pose a problem for our account:

(21)

(a) *The mushroom omelet was eating itself with chopsticks.

(b) *The mushroom omelet was eating himself with chopsticks.

At first sight, the Domain Availability Principle should license the target 'restaurant customer', as the matrix domain, for anaphoric reference. This would only rule out (21a), but not (21b). However, the unacceptability of (21b) has to do with the fact that "himself" does indeed refer to the matrix domain 'customer', and as a result the predicate is telling us an impossibility, i.e., the customer was eating himself. Anaphoric "himself" cannot be used to refer to the omelet.

A similar impossibility of use of the anaphoric reflexive is observed in the following incorrect sentences:

(22)

(a) *The mushroom omelet appealed to itself.

(b) *The mushroom omelet appealed to himself.

The anaphoric reflexive in (22a) cannot refer to the 'omelet' by virtue of the Domain Availability Principle, which only allows the matrix domain 'customer' to be used for reference. In (22b) "himself" refers correctly to the customer, but then the sentence does not make sense, since what the speaker wants to refer to is the omelet.

Our examination of Fauconnier's and Stirling's examples has revealed a number of cognitive principles which underlie the use of anaphoric reference when metonymy is involved. This shows that an adequate account of this cognitive mechanism is necessary for a correct understanding of the use potential of such mechanisms as reflexive and non-reflexive anaphora, including cases of repetition of a noun phrase.

CHAPTER 3

THE COMMUNICATIVE IMPORT OF METONYMY

As advanced in the introduction to this book, most research carried out on metonymy within the framework of Cognitive Linguistics has to date focused mainly on its conceptual nature. Drawing attention to the fact that metonymy is more than a rhetorical or literary figure was indeed a major breakthrough of Cognitive Linguistics. Nevertheless, in hindsight it is now obvious that the relevance of this finding has had the unfortunate consequence that less attention has been paid to other aspects of the phenomenon of metonymy which, in our opinion, deserve a similar degree of attention. Without playing down the importance of metonymy as a conceptualizing tool, we would like to shift focus to the role that it plays in the achievement of effective linguistic communication and to other related issues such as the production of conversational implicatures.

3.1. The role of metonymy in explicature derivation

To the best of our knowledge, the most systematic attempt to unravel the potential of metonymy in connection with linguistic communication has been carried out within the relevance-theoretic framework. Relevance Theory, as devised by Sperber and Wilson (1995), starts off from the basic assumption that there exists a tendency in human cognition to focus attention on some aspects of the world at the expense of others. As a result of this general intrinsic tendency, when communicating we try to catch people's attention in order to be relevant in our talk exchanges. To account for this fact, Sperber and Wilson have formulated the Principle of Relevance:

> Every act of ostensive communication communicates a presumption of its own optimal relevance. (Sperber and Wilson, 1995: 158)

Ostensive communication shows up by means of some kind of code[40]. In every communicative situation, coded behaviour usually guarantees communicative success. However, sometimes we use a code as a cue to some other meaning. In these cases, comunication becomes a richer activity.

Another basic concept for Relevance Theory is the notion of context. Its importance is grounded in the fact that an assumption is relevant only with respect to the context in which it is processed; in other words, speakers are presumed to be relevant in conversation within a context.

Finally, Sperber and Wilson (1995) posit a distinction between explicatures and implicatures. The former are the fully developed propositional forms of linguistic expressions (i.e. explicitly communicated assumptions) while the latter are produced by invoking additional information from the context (i.e. implicitly communicated assumptions). Sperber and Wilson have further posited the existence of three different processes for developing explicatures: disambiguation, fixation of reference, and enrichment. Since disambiguation and reference assignment are commonly discussed processes, we shall focus on the notion of enrichment, which is described as a procedure

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[40] Sperber and Wilson (1995) postulate that the long-standing assumption that codes must always be linguistic does not hold.

by which an interpretation is made to contain the same information as a previous one and more. Consider (1):

(1) It will take some time to repair your watch.

As Sperber and Wilson (1995: 189) observe, the interpretation of this utterance is a truism and consequently it is irrelevant, but what people generally understand a sentence such as (1) to mean is that repairing the watch will take longer than expected. Sperber and Wilson argue that this situation is predicted by Relevance Theory: the logical form of an utterance is an assumption schema which may be in need of completion; where completion may be needed, this is indicated by "the presence of semantically incomplete or manifestly vague terms". The expression "some time" in (1) might be one second, one minute, one hour, etc. Each of these interpretations is an enrichment of the preceding one since it contains the same information and more. Finally, Sperber and Wilson (ibid.) claim that "the first accessible enrichment consistent with the principle of relevance is the one which specifies that the time it will take to repair the watch is at least more than would normally be expected".

This notion of enrichment is both interesting and problematic. Take Sperber and Wilson's claim that interpreting "some time" is a matter of finding the first accessible enrichment of the concept which will be relevant. Does this involve the hearer in working mentally all the way through a series of specific time lapses until he finds one which is felt to be satisfactory?; we are nowhere told what features, apart from consistency with the Principle of Relevance, may motivate the speaker to make use of this procedure. However, other factors may be at work. For example, the use of the expression "take some time" in the sense 'take longer than expected' suggests a certain degree of conventionalization of the underlying grammatical construction, and that accounting for its use may also be a matter of semantics and not only of pragmatics. This may be readily seen if the expression "take some time" is contrasted with "take time", which means 'take a long time' and is also a truism if interpreted literally. Since, according to Relevance Theory, we must assume that "take time", being vague and truistic, would also need enrichment, we need to know whether the two expressions need to be enriched in the same or in a different way. But if the former were the case,

why would the first accessible enrichment of both interpretations be different? Maybe we need to accept that there is some factor other than the principle of relevance which guides the enrichment process.

In this connection, Recanati (1989) has made a useful distinction between two types of enrichment: *saturation* and *strengthening*. The former takes place when the meaning of a sentence sets up a slot that must be filled with the help of the context. For example, an incomplete expression like *He's not good enough* would demand saturation. The latter occurs in cases like the expression "some time", where a rather vague conceptualization needs to be turned into a more specific one in such a way that the latter, which is richer, entails the former. According to Recanati, expanded versions of utterances are cases of saturation and what is said in each case differs from what is truly communicated. The same differentiation would seem to apply to cases of strengthening. However, the process is not exactly the same: in cases of saturation the information which will complete the intended thought is to be found in the context (whether this is the previous discourse, the present situation or the knowledge shared by speaker and hearer); by contrast, in cases of strengthening, making available information specific enough to satisfy our communicative needs is not a matter of retrieving supplementary information from the context but of adding information which is prompted by the linguistic expression itself. In this sense, we may relate strengthening to linguistic conventionalization and speak of semantic or conceptual motivation for this specific form of enrichment, while saturation is not semantically but grammatically motivated.

Bach (1994) has discussed Recanati's notion of saturation further. He gives the following examples:

(2) The princess is late (for the party).

(3) The princess is ready.

(4) *Al has completed.

Bach (1994) argues that the reason why (4) is ungrammatical is not semantic or conceptual but lexical. Furthermore, the reason why (3) needs completion is not

semantic either. It has to do with the grammatical construction associated with "be ready"; that is to say, the grammatical construction "be ready" may optionally be used with or without a prepositional object, while the verb "complete" does need the presence of a grammatical object. Since grammatical completion is sometimes optional, it makes sense to think that this may be communicatively exploited by the language user.

In contrast to what is the case with explicatures, the derivation of an implicature requires the addition of some extra implicit information which allows the hearer to develop a reasoning formula of the condition-consequence type. Consider the following dialogue, which is a classical example of implcature:

(5) A: Where are you going this weekend?
    B: I take my finals next week.

B's answer can only be relevant if A is able to work out that B will have to stay at home studying the whole weekend. This is implicated information because it has its own distinct propositional form which is functionally independent of the explicated information.

Distinguishing explicatures from implicatures, however, has been the source of ample discussion in recent times. The basic problem has mainly been to discover a reliable criterion on the basis of which to make this distinction. A very interesting proposal has been put forward by Carston (1988), who has posited the 'functional independence' criterion. Functional independence is a property of implicatures. Explicatures, on the other hand, always involve functional dependence between what is said and the enriched version of what is said since the latter entails the former. As a result, an enriched interpretation can never be an implicature. Thus, in sentence (1) "some time" is to be read as 'longer than expected'. This interpretation is obtained as a development of the blueprint provided by what is said. Note that the implicated meaning could be a suggestion for the addressee to go for a walk or to come back the next day because the watch will not be ready in just one day, which involves a different kind of relationship with what is said. Nevertheless, Carston's theory has been criticized by Recanati (1989) who claims that Carston's criterion fails because it uses a formal

property of propositions (i.e. entailment) to define explicatures as opposed to implicatures. Furthermore, Carston's criterion falls short of accounting for explicatures obtained through saturation (e.g. as *The princess is ready*), where it is evident that what is said is not entailed by its corresponding enriched version (e.g. as *The princess is ready for the party*).

Moreover, Levinson (2000) has pointed out some additional problems posed by the that the explicature/implicature distinction, such as the fact that explicatures do not need to include the semantic representation of the linguistic expression. Note that any implicature can be added as a conjunct to what is said (e.g. *I take my finals next week so I'm staying at home studying the whole weekend*), which shows the inadequacy of Carston's functional independence criterion.

Within the standard relevance-theoretic framework, metaphor and metonymy are regarded as cases of what these authors have called *loose uses* of language (cf. Sperber and Wilson, 1985/86). As an example of loose use of language, imagine a situation in which a housewife needs to know the quantity of milk that is left for breakfast and asks her husband about it. Although there are exactly 437 cubic centimetres of milk in the bottle, nobody expects the husband to measure the milk and answer *437 cubic centimetres*; on the contrary, the expected answer is *half a litre* or *around half a litre*. In fact, answering with precision would be odd and convey irony or sarcasm.

The interpretation of metaphors and metonymies is further related by Sperber and Wilson to the production of strong and weak implicatures. In this metaphor and metonymy are no different from hyperbole and other traditional figures of speech. Thus, in their explanation of the metaphor *Jeremy is a lion*, the main point of this utterance (i.e. the strongest implicature) is the stereotypical assumption that Jeremy is brave. However, even though this metaphor costs little to process, there is an extra processing effort which is to be justified by the production of other weaker implications, some of which may have to do with the type of bravery which characterises Jeremy and with his physical appearance. There are other more creative cases of metaphor, requiring greater processing effort, which is made up for by the larger number of implicatures which they

may give rise to. It is in these cases that different hearers will typically derive different implicatures depending of the nature of their background knowledge and imagination.

Although Sperber and Wilson's treatment of metaphor and metonymy makes evident the communicative similarities existing between this and other figures as creative exploitations of the interpretive dimension of language use, their account is incomplete in that it does not deal with the mental mechanisms which underlie this phenomenon. For example, they have failed to note that the connection between metaphor and metonymy is stronger than that between metaphor and hyperbole. Furthermore, Relevance Theory claims that cases of non-conventional metaphors can only be understood by meeting the requirements of the Principle of Relevance. Consider one of the cases of so-called creative metaphor offered by Sperber and Wilson (1985/86):

(6) You're a piglet.

Sperber and Wilson argue that calling someone a pig is a conventional metaphor and requires little processing effort, whereas a mother calling her child a piglet is not so conventional and therefore requires some extra processing effort, which should be offset by some added effect. The child may thus feel encouraged to derive not only the obvious central implication that he is dirty but also that he is endearing, since young animals are endearing. Indirectly, Sperber and Wilson agree that metaphor interpretation requires the hearer to look into cultural conventions to interpret (5), which is the same as saying that there is a degree of conventionality underlying this metaphor, too. It is not standard, but what is standard is that metaphors in which people are made to correspond to animals are usually interpreted in English in terms of behavioural rather than physical attributes if they take an equative form (i.e. A is B) or if they use the name of the animal as a verb (e.g. *He dogged me all day*). In non-equative constructions, as in *John has an eagle eye*, the animal metaphor may refer to abilities. What is interesting to note is that animal metaphors applied to humans are not used to talk about physical appearance, at least primarily. For example, in *John is a lion*, there may be something about John's physical appearance that makes us think of a lion, but only if this attribute is associated with his instinctive, courageous behaviour. In much

the same way, the metaphor *Her husband is a bull of a man* focuses primarily on the husband's clumsy, inconsiderate behaviour towards other people's feelings, but it also makes us think of his big, clumsy appearance. It is interesting to note that the meaning of animal metaphors depends not only on cultural convention but also on specific grammatical constructions typically associated with such a convention. In all these cases the central implication of the metaphor is the result of a cued mapping process. The cue is not always purely conceptual, but it may also be constructional.

As we have already mentioned, according to Relevance Theory, metaphor and metonymy interpretation exclusively involves the production of implicatures. However, this position is fraught with problems. Thus, it is difficult to tell the difference between what relevance theorists consider a genuine case of explicature and one of implicature. For them, "some time" in the truistic expression *It'll take some time to repair your watch* needs to be enriched into the specific amount of time which it will take to repair the watch, which would be its explicature. But, even for Sperber and Wilson's account, it is problematic to explain at least one additional implication which usually follows from the use of this expression, that is, the idea that fixing the watch will take longer than the hearer expected. One may wonder whether this would be an implicature or an explicature since there may be a whole range of explicatures produced by enrichment, and some explicatures are stronger than others. If this were the case, there would seem to be no actual qualitative or even quantitative difference between the sort of meaning effects produced by means of explicatures and those produced by means of implicatures.

One further problem comes from Sperber and Wilson's argument that an expression may be further enriched by embedding it under a higher-level description, such as a speech act. Consider the following example, taken from Sperber and Wilson (1993: 5):

(7) A: Can you help?
    B (sadly): I can't.

According to these authors, if by her answer A expected B to ask himself why she was sad and come to the conclusion that she is sad because she cannot help A, this conclusion would be an explicature. Other possible explicatures would be:

(8)

(a) A can't help B to find a job.

(b) A says he can't help B to find a job.

(c) A believes he can't help B to find a job.

(d) A regrets she can't help B to find a job.

Now think of a common metaphorical expression such as *John is a chicken*, meaning 'John is a coward'. In standard Relevance Theory, this would be an implicature. We may now wonder what are the higher-level explicatures of this utterance. If we were to admit that 'John is a chicken' is an explicature and 'John is a coward' an implicature, we would have to say that in 'the speaker says that John is a chicken' an implicature is embedded in -rather that derived from- a (high-level) explicature. This would be a strange situation since for implicit assumptions to be retrieved we need to have worked out the explicit information in the message. Or take another putative explicature like 'the speaker regrets that John is a chicken'. Here, the presuppositional predicate connot apply to the explicature 'John is a chicken' without creating an important incongruity (i.e. the assumption that John is an actual chicken) and the implicature would have to be derived before the explicature.

Such oddities may be avoided if we consider implicatures as deriving from the application of reasoning formulas of the condition-consequence type, and let explicatures cover other cases of implication. In this view, metaphoric and metonymic mappings would be regarded as procedures for producing explicatures. By way of illustration of the manner in which this takes place, consider the following metaphorical expression:

(9) You're going nowhere that way.

If this sentence is uttered by a father to his son, it can be easily interpreted that the father is warning his son. This implicature is obtained from developing (9) in the following way:

(10) The hearer is not going to attain his goals in life if he continues acting the way he is doing at the moment the speaker is talking.

In order to get this meaning we need to metaphorically understand objectives in life as the final destination of a path and the person's way of life as the route he chooses. The idea of doing something profitable in life is developed from mapping objectives onto the destination. In addition to this central explicature we can obtain other secondary ones, still on the basis of the same mapping system (e.g. the hearer has not got clear objectives in life, the hearer's way of doing this is not the right one, etc.). Besides, the number of implicatures is much larger as it is based on the possible explicatures that are generated from the conceptual mapping plus the contextual parameters:

(11)

(a) The father is going to punish his son.

(b) The son must obey his father.

(c) The son's behaviour makes her mother cry.

Regarding metonymy, the type of explicatures it generates depends on the nature of the metonymic relationship between the domains involved, i.e. whether we have a source-in-target or a target-in-source metonymy. The former involves domain expansion. For example, in *Hamlet was wonderful tonight*, the metonymy is used to avoid a long paraphrase like 'the actor who played Hamlet' in order to achieve successful reference. The latter involves domain reduction (e.g. *Bush attacked Iraq*, in which 'Bush' stands for the army under his command; cf. section 1.4). From these explicatures we develop implicatures with the help of the information provided by context. Thus, the explicature 'the actor who plays Hamlet was wonderful tonight' can work as a piece of advice for the hearer to go to the theatre to see the play.

Finally, we shall analyze how the distinction between explicature and implicature is also useful in dealing with conceptual interaction between metaphor and metonymy. Take the expression *He is the life and soul of the party* ('the person who, being lively and entertaining, will make the party more lively or cheerful'). Here, a party is metaphorically seen as a person (who has life and soul). The life and soul of a person refer metonymically to the person's lively behaviour. Then, there is one further metonymic mapping from lively behaviour to the ability to produce entertainment. In both metonymic mappings the target is a subdomain of the source: in the first one, a person's lively behaviour is seen as a consequence of the person's having 'life and soul'; in the second one, it is the ability to entertain others that is a consequence of the person being cheerful. Each of these metonymic mappings has the function of highlighting a relevant part of the domain to which they belong. In so doing, the metonymic mapping cues the central correspondence in the metaphoric mapping and consequently the most central explicature:
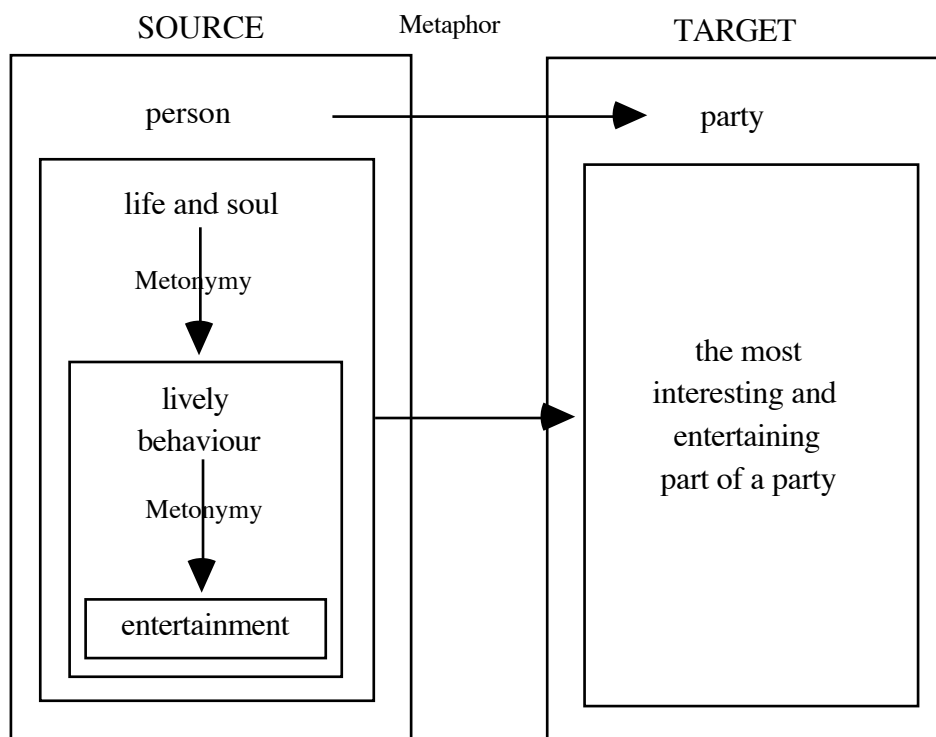
Figure 1: *He's the life and soul of the party*

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Now consider *He left with its tail between its legs*, which is an instance of *metonymic expansion of a metaphoric target*, i.e. the metaphor is constructed on the basis of a metonymy. Here there are two stages in the development of the explicture: one is metonymic and the other is metaphoric. The metaphor suggests that a person has been defeated and humiliated. This implication is based on the scene of a dog's leaving with its tail between its legs after being defeated or punished. The following diagram captures the development of the explicature:

SOURCE

```
┌─────────────────────────────────────────────────────────────┐
│   SOURCE                                                       │
│                                          TARGET                │
│   ┌──────────────────┐                                         │
│   │ a dog leaves with │                after being defeated    │
│   │ its tail between its │  Metonymy    and humiliated a dog   │
│   │ legs              │      ──────▶     leaves with its tail   │
│   │                   │                  between its legs       │
│   └──────────────────┘                                         │
│                                                                 │
└─────────────────────────────────────────────────────────────┘
                          │
                          │ Metaphor
                          ▼
                       TARGET
          ┌──────────────────────────┐
          │   after being defeated    │
          │  and humiliated a person  │
          │   stops his attempts to    │
          │     achieve his goal       │
          │                            │
          └──────────────────────────┘
```
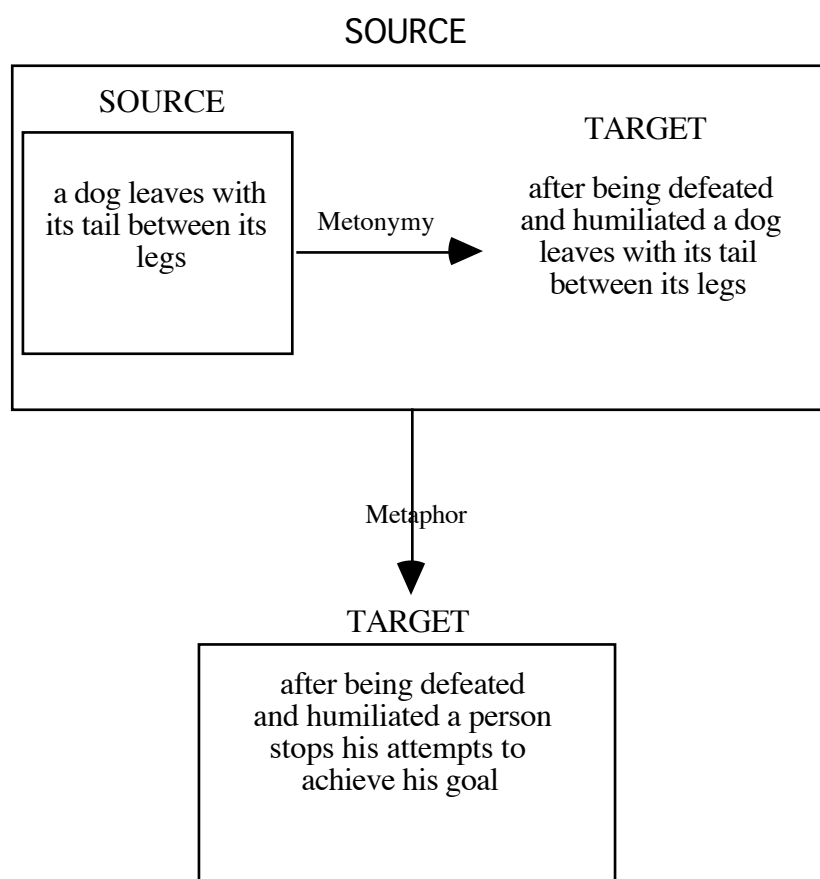
Figure 2: *A dog leaves with its tail between its legs*

In this case, the metonymy is one of source-in-target inclusion and serves the purpose of providing all the conceptual material for the metaphoric mapping to develop the central explicature.

It should be noted that the two possible effects of highlighting or developing a domain are independent of whether the metaphor is built on the metonymy or the other way round. They are, however, correlated with the mapping type in the metonymy. Finally, take the metaphor *My lips are sealed*:

TARGET

SOURCE

| SOURCE
a person closes his
mouth firmly |
| a person
seals
his lips | Metaphor → |

Metonymy

situation in which a
person voluntarily
decides not to speak on a
certain matter

TARGET
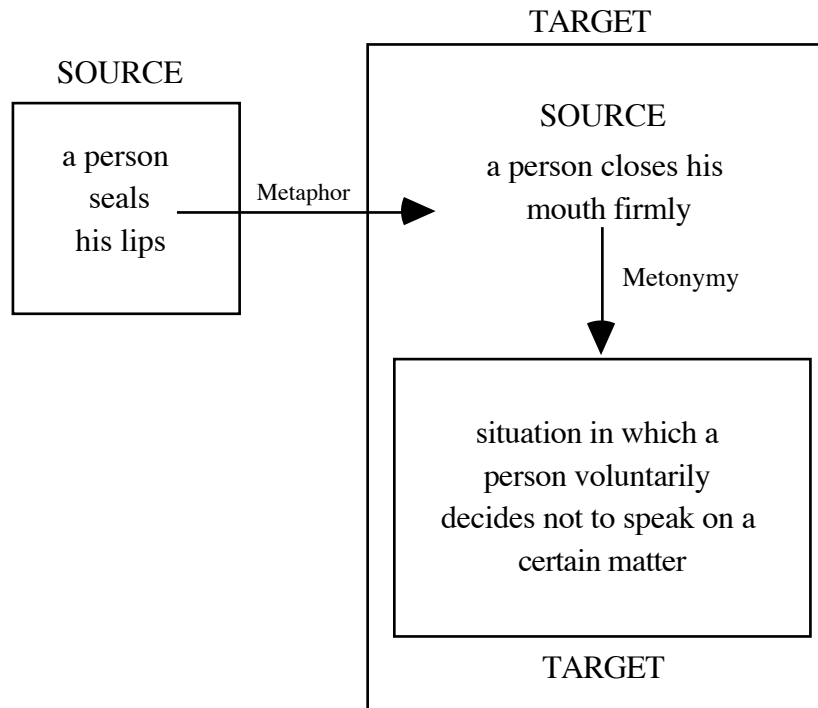
Figure 3: A *person seals his lips*

With this metaphor the speaker makes a binding promise that he will not reveal a secret. The act of sealing his lips is only a figurative indication that he will in no way open his mouth. This indication is part of a more general situation in which the speaker voluntarily decides that he will behave with discretion and absolute confidentiality. This general situation is the explicature of the expression. In short, we hold the view that metaphoric and metonymic mappings are cognitive mechanisms which yield sets of explicatures. Such explicatures then become available for condition-consequence reasoning templates which are the origin of implicatures (cf. Ruiz de Mendoza, 1999b).

3.2. Metonymy and indirect speech acts

Gibbs (1999: 68-73; see also the introduction to this book) makes passing reference to the role of metonymy in text processing and dialogue comprehension, but he does so only in order to provide further evidence of its conceptual nature. To date, the most comprehensive and far-reaching attempt to study the import of metonymy in relation to the issue of effective communication has been Panther and Thornburg's scenario approach to indirect speech acts (see Thornburg and Panther, 1997; Panther and Thornburg 1998, 1999). According to these authors any of the elements of an illocutionary scenario may metonymically stand for the whole corresponding illocutionary category. Panther and Thornburg's proposal, as will be made apparent below, is still largely programmatic and needs to be developed and refined in some important respects. In what follows we shall discuss how we believe this should be done. Much of our discussion is indebted to Pérez and Ruiz de Mendoza (2002).

Panther and Thornburg start out by questioning traditional inferential accounts of indirect speech acts (Bach and Harnish, 1979; Searle, 1975) in two respects. First, it is pointed out that they do not offer a satisfactory explanation of the fact that speakers usually grasp the ulterior indirect force of the speech act quite effortlessly. This is so, however, in spite of the fact that such an indirect interpretation is based on inferential processes, which are expected to be, at least theoretically, rather time-consuming. Second, those traditional inferential theories do not offer a systematic description of the inference patterns involved in the interpretation of indirect illocutions and of their cognitive grounding. In two interesting papers, Thornburg and Panther (1997) and Panther and Thornburg (1998) put forward a plausible solution to these weaknesses. They suggest that our knowledge about illocutionary categories may be systematically organized in the form of what they have referred to as 'illocutionary scenarios'. These information packages, which are shared by the members of a linguistic community, are stored in our long term memory, so that a succinct explicit reference to one of the pieces of information included in the scenario is enough to activate or, at least, to point to the whole corresponding illocutionary category. Let us reconsider Panther and Thornburg's

(1998: 759) illocutionary scenario for requests, treated in section 1.2 and 2.1, which we repeat here for convenience:

Illocutionary Scenario for Requests

(i) The BEFORE:
The hearer (H) can do the action (A)
The speaker (S) wants H to do A

(ii) The CORE:
S puts H under a (more or less strong) obligation to do A.

The RESULT:
H is under an obligation to do A (H must/should/ought to do A).

(iii) The AFTER:
H will do A

Given this requestive scenario, Panther and Thornburg argue that instances of indirect requests like (1) and (2) below are readily understood as such by virtue of the fact that they activate different components of the scenario:

(1) Can you keep an eye on my bag?

(2) Will you keep an eye on my bag?

In example (1), the modal verb 'can' instantiates part of the information contained in the BEFORE component (i.e. the fact that the hearer should be capable of performing the action). As a result, by making explicit one of the components of the request scenario, the whole illocutionary category of 'requesting' is activated and the utterance is easily and effortlessly understood as a request. Similarly, in (2) the AFTER component is instantiated by means of the future auxiliary 'will', thus yielding a request. It is further hypothesised that the higher the number of components of a given scenario that are overtly instantiated, the easier it will be to recognize the illocutionary intention of the speaker, and vice versa.

Panther and Thornburg argue that a metonymic approach to illocution like the one outlined above is capable of accounting for the fact that all these utterances are usually understood as requests: by focusing on the specific components of the scenario (the so-called pre-conditions, i.e. ability and willingness) they seem to be capable of invoking the whole of it. Moreover, the assumptions that (1) we have illocutionary scenarios stored in our long-term memory and that (2) each of the components of the scenario may stand for the whole scenario may further explain why the speaker's intended meaning is so readily inferred by the hearer. This makes Panther and Thornburg's proposal very appealing. There are, however, several problems with this view of illocutionary performance which become apparent when considering other examples of requests like the following:

(3) Can you keep an eye on my bag for a second?

(4) Can you keep an eye on my bag for me?

(5) Can you keep an eye on my bag, please?

(6) Could you keep an eye on my bag (for a second/for me), (please)?

(7) Would you keep an eye on my bag (for a second/for me), (please)?

(8) Would you mind keeping an eye on my bag?

(9) I wonder if you could keep an eye on my bag

As Pérez and Ruiz de Mendoza (2002) have noted, in contrast to examples (1) and (2), whose interpretation as either a request or a simple informative question is largely dependent on the context, examples (3) to (9) are clear instances of requests. Their interpretation as informative questions would require a marked context in most cases. If we follow Panther and Thornburg's reasoning, the fact that (3) to (9) are better examples of requests should correlate with their activation of a higher number of elements of the request scenario. This, however, is not the case. Examples (3), (4), (5), (6) and (9) activate the ability condition. (7) instantiates the AFTER condition. Finally, (8) refers to another BEFORE component, namely, the hearer's willingness to perform the action. According to Pérez and Ruiz de Mendoza, the number of scenario

components which is activated in each of the examples under consideration is still rather low, but interestingly enough, the interpretation of these utterances as requests is more straightforward than is the case with (1) and (2). So, the problem with Panther and Thornburg's otherwise correct initial hypothesis seems to lie in their attempt to account for the semantic conditions of illocutionary categories in terms of scenarios. This type of knowledge organization structure is incapable of accommodating on its own all the wealth of information that speakers of a language have about illocutionary categories.

The essential way in which Pérez and Ruiz de Mendoza's (2002) metonymic account of indirect speech acts differs from Panther and Thornburg's has to do, therefore, with the type of organization structure chosen to describe the knowledge associated with each illocutionary category. We argue for the description of the semantic make-up of speech act categories in the form of 'propositional idealized cognitive models' or 'propositional ICMs' (cf. introduction). Propositional ICMs have the advantage of being broader in scope than scenarios, which makes them capable of accommodating all the relevant information associated with a given speech act category. The sequential information contained in Panther and Thornburg's illocutionary scenarios, together with the pragmatic information of the type discussed above may be included within our propositional ICMs. The more important features to be taken into account are: the degree of politeness of illocutionary acts, the degree of cost-benefit of the requested action, and the degree of optionality conveyed by the illocutionary action. We contend that these features are necessary for a comprehensive analysis of indirect speech acts.

Propositional ICMs, as discussed by Lakoff (1987: 285), consist of an 'ontology' and a 'structure'. The ontology of an illocutionary ICM would include the values taken by the variables relevant to its description, while its structure would comprise the interplay between the different variables. Since the relations between the parameters of each illocutionary ICM have been found to be largely arbitrary and culture-specific, we shall refer to them as 'conventions'. Propositional ICMs will allow us to account for the existence of prototype effects within illocutionary categories.

In this type of metonymic account of illocutionary performance, it is also essential to pay some consideration to the study of the lexico-grammatical resources which make possible the instantiation of the different semantic variables comprising each illocutionary ICM. Following the proposal in Ruiz de Mendoza and Otal (1997), Pérez (2001) refers to these linguistic resources as 'realization procedures', since they linguistically 'realize' the semantic attributes included in the illocutionary ICMs (cf. also Ruiz de Mendoza and Otal, 1994b). In constituting sets of options, realization procedures can be understood as having a 'meaning potential' -in the sense given to this term by Halliday (1978)- and they are instrumental with respect to the semantic make-up of illocutionary categories.

Thus, examples (3) to (9) do in fact activate a higher number of meaning conditions specific to the request category than (1) and (2) do. Basically, the utterances in (3)-(9) show a higher degree of 'optionality' (i.e. they offer the hearer a higher degree of freedom to decide whether he wants to perform the proposed action or not). This is achieved by means of linguistic resources like the use of past modals (e.g. "could", "would"), mitigating devices (e.g. "for a second", "please"), etc. This higher degree of optionality results in turn in a higher degree of politeness. Considerable amounts of optionality and politeness are characteristic features of prototypical requests; hence the straightforward interpretation of those examples as requests (cf. Pérez, 2001). Finally, note that even a sentence such as (7), which makes use of a reletively large number of mitigating devices, may be understood either as a request or as an order depending on the nature of the relation that exists between the hearer and the speaker (i.e. their power relationship). Thus, if they are equals, (7) is prototypically interpreted as a request, whereas if the speaker is higher in the power scale, its natural reading comes close to an order.

Nevertheless, these additional meaning components are not included in Panther and Thornburg's scenario, which focuses mainly on the sequential order of events that should take place in the performance of a request. Pragmatic information, such as optionality, politeness, social power, social distance, cost-benefit, etc., is ignored in the scenario approach, thus yielding a partial characterization of illocutionary categories, and an incomplete explanation of illocutionary performance.

Pérez and Ruiz de Mendoza (2002) suggest that all these problems can be solved by postulating that illocutionary scenarios are better understood as part of the information contained in a more comprehensive knowledge organization structure: propositional ICMs. In these ICMs, apart from the information from the scenario, the following parameters will also be included:

(a) cost-benefit: the cost or benefit that the action involves for the speaker or the hearer

(b) optionality: the degree of optionality conveyed by the speech act

(c) power: the power relationship that holds between the speaker and the hearer.

In order to explain the role of the following parameters in the characterization of indirect speech acts, Pérez and Ruiz de Mendoza (2002) compare requests with other two types of directive act: ordering and begging.

Consider again (1) and (2). According to Panther and Thornburg (1997), these two sentences instantiate the before and the after components of the directive scenario. However, the information in the scenario is insufficient to determine the subclass of directive which they belong to. Note that the information contained in the scenario is the same for all of the acts in the directive category. On the other hand, their proposal reveals that there is an additional component which is activated and cues us to the typical reading of these sentences in an unmarked context, namely, requests. This parameter is that of high optionality. Note that the use of an interrogative sentence offers the hearer the possibility of refusing to carry out the action, thereby increasing the level of optionality. By contrast, orders are defined as having a low degree of optionality. The difference between these two types of directive is better explained by the comparison of the ICMs of requests and orders as in Pérez and Ruiz de Mendoza (2002):

ICM of Requests

Panther and Thornburg's Scenario plus:

(i) A represents a *cost* to H and a benefit to S.

(ii) High optionality (politeness).

(iii) The *power* relationship between S and H is immaterial.

ICM of Orders

Panther and Thornburg's Scenario plus:

(i) A represents a *cost* to H and a benefit to S.

(ii) Low optionality (lack of politeness).

(iii) S is more *power*ful that H.

Moreover, these parameters are not always enough to account for the differences between several types of directives, so we need to further explore and refine the component of the scenario in the search for an answer. In this connection, compare a request (e.g. *Will you wrap this up?*) and a plea (e.g. *Please, wrap this up for me, please, please do!*). Although both of them bear the same degree of cost-benefit, optionality and power, they differ in the degree to which the speaker wants that hearer to perform the action: the speaker's willingness is much higher in begging that in requesting. Therefore, we need to distinguish different degrees of speaker's desire, a characterization which is lost in Panther and Thornburg's (1998) approach. The contrast between requesting and begging is captured in the following redefinitions of the BEFORE component of both of them, taken from Pérez and Ruiz de Mendoza (2002):

Scenario for Requests

The BEFORE: H can do A

                S wants H to do A (degree of wanting: *high*)

Scenario for Begging

The BEFORE: H can do A

S wants to do A (degree of wanting: *very high*)

In the case of commissive speech acts, the semantic variables considered in relation to directives take up a different value. To conclude this discussion about the metonymic basis of indirect speech act performance, we offer a detailed account of the commissive act of promising in these terms. As shown in Pérez (2001), the semantic make-up of the illocutionary category of promising includes the following attributes and related conventions:

ICM of Promising

Agent type: Speaker

Time of the action: Future

Agent's capability of performing the action: Prototypically assumed to be high

Addressee's wish that the action is carried out: Prototypically assumed to be high.

Speaker's willingness to perform the action: Prototypically high

Cost-benefit: Prototypically promises result in a benefit to the addressee and a cost to the speaker.

Optionality: Prototypically low.

Mitigation: See conventions 1, 3 and 6 below

Power: Promises can be uttered whatever the power relationship that holds between the participants.

Social distance: Promises can be uttered whatever the social distance that holds between the participants.

Formality: Promises can be uttered whatever the formality that holds between the participants

These variables define prototypical instances of the speech act of promising. Let us consider the following example:

(10) I can and I will get you that beautiful doll you've been dreaming of, because I really want to.

Example (10) qualifies as a highly explicit instance of the category of promise, which metonymically activates the most central variables of the corresponding ICM:

Agent: The speaker (*I*)

Time of the action: Future (*will*)

Agent's capability of performing the action: High (*I can*)

Addressee's wish that the action is carried out: High (… *you've been dreaming of*)

Speaker's willingness to perform the action: High (…*because I really want to*)

Cost-benefit: Benefit to the addressee/cost to the speaker (*I will get you*)

In addition, other variables of the ICM of promising are activated contextually or by convention. The latter is the case of the variable of optionality, which is instantiated by the working of the so-called Convention of Politeness. As has been shown in Ruiz de Mendoza (1999c), people living in our society are expected to alter those states of affairs which are negative for others. A corollary of the politeness convention is that people living in society are expected not only to alter negative states of affairs, but also to avoid causing a negative state of affairs to hold for others. The convention of politeness would thus need to be extended to include this idea, as reflected in point (b) below:

CONVENTION OF POLITENESS (extended version)

(a) If it is manifest to the addressee that a particular state of affairs is not beneficial to the speaker, and if the addressee has the capacity to change that state of affairs, then the addressee should do so.

(b) If it is manifest that a potential state of affairs is not beneficial to the speaker, then the addressee is expected not to bring it about.

(Pérez, 2001: 292)

Promising to do something beneficial for the addressee and then refusing to do so would result in a state of affairs negative to the addressee (i.e. he may feel disappointed, deceived, etc.). As a consequence of this, the variable of low optionality which characterizes the act of promising is conventionally activated once the speaker has expressed his decision to do something beneficial for the addressee.

It should be also noted that most instances of everyday promises are not as explicit as (10). In the vast majority of cases, some of the variables which are linguistically activated in (10) are left to be filled in by the context. Let us consider the following instances of less explicit promises:

(11) I will buy you the doll you want

(12) I will buy you a doll

(13) I will buy a doll

(11) is still a highly explicit example of promising. Several of the most central attributes of the ICM of promising are activated linguistically (e.g. agent, time of the action, addressee as beneficiary of the action, and addressee's wish that the action is carried out). In turn, the optionality variable is instantiated via the convention of politeness, as shown above, and the rest of the variables are activated contextually. (12) fails to overtly instantiate the variable of addressee's wish, which can be filled in either contextually or by convention. It is a well-known fact that most little girls like dolls. Therefore, if the addressee is such a girl, then she is likely to want the speaker to carry out the predicated action. Finally, (13), the least explicit of the three examples, metonymically activates only two of the attributes of the ICM of promising, namely, those of the agent and the time of the action. Since these two variables are shared by other commissive speech acts, like offers, the utterance under consideration appears as a highly implicit instance of promising. It could be understood as an offer if the beneficiary turns out to be someone different from the addressee (e.g. *Since you won't have time yourself, I will buy a doll for your niece this afternoon, if you want me to*), or even simply as an assertion of the speaker's future plans since the beneficiary could be the speaker himself (e.g. *I will buy a china doll to decorate the top shelf in my office*).

As was rightly predicted by Panther and Thornburg (1997, 1998), the higher the number of semantic attributes that get to be activated by means of linguistic resources, the higher the degree of explicitness of the speech act and the lower the cognitive cost involved in its interpretation.

Everything said so far points to a constructional metonymic account of indirect speech acts, where each illocutionary construction consists in the metonymic activation of a variable number of those semantic attributes included in each illocutionary ICM, by means of the corresponding realization procedures (cf. Ruiz de Mendoza and Otal, 1997). This proposal makes possible the use of different degrees of explicitness in the production of indirect speech acts. Depending on the communicative aim of the speaker and on the amount of contextual information that is available, the speaker may choose to make his illocutionary act more or less explicit by overtly activating a higher or lower number of illocutionary semantic attributes through the use of the relevant linguistic realization procedures. This constructional metonymic account of illocution is thus sensitive to the infinite number of potential degrees of explicitness which characterizes illocutionary activity in everyday life.

3.3. Illocution-oriented presuppositional constructions

Let us compare the following examples:

(1)

(a) Can you do the laundry today?

(b) Will you do the laundry today?

"Can you" and "will you" interrogatives are two classical examples of highly conventionalized constructions to perform requests. Of course this does not mean that any utterance which makes use of these forms of interrogative will invariably have a request value. Consider:

(2)

(a) Can you (?please) dive to a depth of 300 metres?

(b) Will you (?please) be back on Saturday, or on Sunday?

"Can you" and "will you" interrogatives function better as directives when they have a specifity element in the complementation or adjunct pattern of the clause. Note that (3a) and (3b) below are not as resistant to a request reading as (2a) and (2b) above.

(3)

(a) Can you (please) dive into that part of the pool and find my earring?

(b) Will you (please) be back in time for the meeting?

We may thus postulate the existence of two related constructions, "can you V + specific X" and "will you V + specific X". Note that for a "can you"/"will you" interrogative to be taken as a request, the utterance must always contain some indication

that this kind of reading is available. This indication is provided by the specificity element which we have mentioned. Compare:

(4)

(a) Can you fly aeroplanes?

(b) Can you fly that aeroplane?

The complement is generic in (4a) and specific in (4b). Since it is impossible to interpret (4a) as a directive utterance, while (4b), although preferably read as directive, is ambiguous between the two readings, it follows that only specific complements provide a "can you" construction with the possibility of having a directive reading.

Now, compare (3a) to (5) below:

(5) Can you dive into that part of the pool?

Since the purpose of asking someone to dive is not as evident in (5) as it is in (3a), (5) is less clearly interpreted as a directive. Of course this lack of information can be supplied by the context, but the role of the context is more one of disambiguation than of forcing the directive reading. The same role is in fact fulfilled by the degree of specification provided by the linguistic expression itself. While (5) is linguistically underspecified in terms of calculating its illocutionary value, (3a) is so well specified that it would be hard to assign to it a non-directive value.

The question of the degree of specification of linguistic expressions is closely linked to the problem of explicature generation. In the case of (5), two processes of explicature generation are involved. First, we need to carry out a saturation or completion task not very different from the one for *The princess is ready (for the party)*, which we have treated in section 3.1. This task produces an explicature which becomes the BEFORE component of a request scenario. One further explicature is then obtained through the metonymic development of this component into a request. In the case of (3a) only the second step of this twofold process is required since there is no need for further saturation to take place. This suggests that the activation of the BEFORE component of the request scenario is only complete once the constructional element

"specific X" has been sufficiently parametrized by the internal make up of the linguistic expression, by information derived from the context, or by a combination of these two factors. As a result the two interrogative constructions under scrutiny can be said to encode a request illocutionary value.

The situation is somewhat different in the case of what we shall term *illocution-oriented presuppositional constructions*. These constructions also encode a certain illocutionary interpretation, but without the need to parametrize any of their elements since all necessary specifications are present in the form of presuppositions in the semantic structure of the resulting expressions. We can give two examples of such constructions, "what's X doing Y?", and "who's been V-ing Y?", both of which are semantically motivated by the high-level metonymy ACTION FOR (ASSESSED) RESULT, as will be examined in some detail below. We have already postulated the existence of this high-level metonymy in connection with some valency reduction processes, as in *This bread cuts easily*, studied in section 2.4. However, we are now dealing with a situational version of this metonymy. This is required by the nature of the "what's X doing Y?" and "who's been V-ing Y?"constructions, which is itself situational. Thus, in the non-situational version of this metonymy, the activation of the result of the action as the target domain is linguistically cued by the adjunct (eg. *easily*). Remember that the absence of the adjunct prevents this metonymy from taking place (cf. *The bread cuts/ The bread cuts easily*). In the situational version, however, it is not an element of linguistic structure that motivates the profiling of the result of the action, but rather our common knowledge that actions have results.

The intricacies of the "what's X doing Y?" construction have been studied by Kay and Fillmore (1999), who have unravelled many aspects of its peculiar nature. However, these authors have not dealt with its underlying metonymic motivation. Consider the following humorous dialogue taken from Kay and Fillmore (1999: 4):

(6)

A: Waiter, what's this fly doing in my soup?
B: Madam, I believe that's the backstroke.

The punchline in (6) lies in the inadequacy of the waiter's answer. This occurs because the customer's question is not to be understood as a request for information, but as a complaint. We postulate, in accordance with our theory of generic scenarios, that this meaning is derived on the basis of the situational high-level metonymy ACTION FOR (ASSESSED) RESULT. First, note that *doing* is a compulsory element of the construction whose function is to activate the action ICM. This ICM takes the form of a generic scenario which can be partially described as follows: (a) actions are controlled attempts to modify a state of affairs, (b) actions have results which can be harmful for the participants, and (c) whenever the results of an action are not beneficial for one or more participants, other participants should do their best to change this situation (cf. Ruiz de Mendoza, 1999b for details on the description of this ICM). In the realization of the situational high-level ACTION FOR (ASSESSED) RESULT metonymy in (6) the potential negative consequences of an action are highlighted by questioning the action. This happens because the construction implies that the speaker, in being capable of supplying so much information about what is going on, already knows the answer to his own question. This implication, which is derived on the basis of the Y element of the construction, has become conventionalized to such an extent that it is difficult to assign a different meaning to an expression based upon this construction. However, there are still traces of the origin of this highly conventionalized implication. This is seen in the fact that the greater the complexity of this Y element, the more evident it is for the addressee that the speaker is not demanding information, as the comparison between (7a) and (7b) reveals.

(7)

(a) What's the child doing in my room fiddling with my things?

(b) What's the child doing in my room?

Now, compare this to an example based on the related "what's X doing?" construction in (8):

(8) What's the child doing?

Sentence (8) is ambiguous between a question and a complaint, which may be further interpreted as a request for action (i.e. the speaker seems to want the addresse to do something about the child's behaviour). If it is evident from the context that the speaker knows what the child is doing, the interpretation of (8) as a question will be ruled out. In (7a) and (7b), on the other hand, the addressee is compelled to think - almost independently of the context- that the speaker is not asking for information at all since he is capable of supplying so many details.

As we have mentioned, in many contexts, the "what's X doing Y?" construction is interpreted as a request to change the state of affairs which troubles the speaker. This is done in accordance with part (8) of the action ICM, and it requires a second metonymic mapping as illustrated in figure 4 below. In this connection, consider again example (7a) above. In it, we first have an ACTION FOR (ASSESSED) RESULT metonymy which yields the explicature 'the child is in the kitchen doing something to my personal belongings which I don't like'. This explicature has a strong presuppositional basis since a question about an ongoing action presupposes that the action is being carried out. The rest of the components are obtained by conventionalized implication and are thus incorporated into the regular conceptual associations of the construction. Once fully developed, the resulting explicature has all the ingredients for a default interpretation as a complaint, which thus becomes a highly conventionalized illocutionary value for this kind of construction. Second, there is another mapping by means of which this sentence is usually viewed as a request of the type *Stop someone from doing something*. In this second metonymy, the complaint becomes the before component of the request scenario and metonymically stands for the whole of it. However, the implication that the speaker wants the addressee to change the non-beneficial state of affairs which he is calling attention to is not presuppositional, but rather depends on the activation of the relevant part of the action ICM. As a consequence, the resulting interpretation of the sentence above as a request for action is not really constructional but just a contextual implication obtained through metonymy.
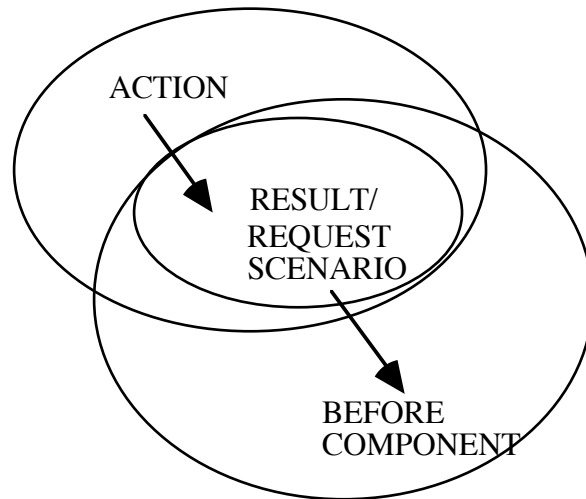
Figure 4: The metonymic motivation of the WHAT'S X DOING Y? construction

Let us now discuss the "who has been V-ing Y?" construction. It is presuppositional, like "what's X doing Y?", in that asking about the development of a past action presupposes that the action has taken place. It additionally conveys the meaning that whatever the subject has been doing bothers the speaker and may thus be understood as a complaint. Consider:

(9) Who has been reading my journal?

In (9) the action of someone having read the speaker's journal is taken for granted. Moreover, the question suggests that the speaker does not like this and therefore (9) should be understood as a complaint. But, there is an important difference between the way this meaning is achieved in the "who has been V-ing Y?"construction as compared with the "what's X doing Y?" construction. In the latter, as we saw above, there is a conventionalized implication which hinges upon part of the action ICM. In the former, the speaker presents the presupposed information about the action having occurred as if it were still happening. In the real world, the action is no longer taking place, but in the speaker's mind it is. This suggests that whatever has happened is relevant to the speaker now. Since calling attention to the nature of a state of affairs

serves -as we have seen- as an indication that something may be wrong with it, the sentence is easily interpreted as a complaint[41].

[41].- Notice should be taken that although the result of an action may be both positive or negative, the ACTION FOR (ASSESSED) RESULT metonymy always profiles the possible negative results in both constructions. We suggest that this occurs because there are some pragmatic conventions (e.g. the principle of politeness) which make us avoid face-threatening acts (cf. Brown and Levinson, 1987) such as making direct reference to the harmful consequence of an action. As a result, speakers have to make use of alternative options which mitigate the face-threatening value of what they say. One such option is to metonymically point to the undesirable situation but without explicitly mentioning its harmful nature. In contrast, when an action has a positive outcome, making it explicit does not violate politeness conventions, which renders indirecteness strategies unnecessary.

CONCLUSION

The Cognitive Linguistics literature has barely started to explore the full range of implications of metonymic processes at various levels of linguistic description and explanation. In this book it has been our main aim to fill some of the relevant gaps in the cognitive theory of metonymy. Thus, we have not only addressed definitional and typological problems, as should be expected, but we have also devoted most of our work to exploring the connections between metonymy and grammatical theory, on the one hand, and between this cognitive mechanism and pragmatic theory, on the other. While we believe this latter exploration to be our main contribution to the field, it is also true that it would have been impossible without having clear definitional and typological criteria. So we have attempted to make this preliminary discussion as rigorous as possible and have consequently made some innovative proposals.

We have carefully worked out a definition of metonymy which takes into account not only the formal and ontological nature of this cognitive operation, but also the boundary lines with other related phenomena, viz. metaphor and so-called literal uses of language. We have made a proposal -different from others in the literature- for a metaphor-metonymy continuum and have classified metonymy from different perspectives. Thus, besides ontological aspects, we have considered genericity degrees, and the nature of relationship between the metonymic source and targets. This last criterion has allowed us to postulate two basic kinds of metonymy, source-in-target and target-in-source. This distinction has proved to be highly relevant to understand many aspects of metonymy theory, especially the role of metonymy in its interaction with metaphor, the existence of double and triple metonymic mappings, and the principles which regulate metonymic anaphora.

The study of genericity degrees has allowed us to postulate the existence of high-level or generic metonymies, and following the lead of some scholars, to deal in detail

with the impact of such metonymies on understanding the full conceptual motivation of some grammatical phenomena, especially those pertaining to categorial and subcategorial conversions. Of course, one must be cautious when dealing with the complexities of grammar, so our conclusions with respect to this connection are to be regarded as merely tentative. We believe that this is an area of enquiry which deserves much closer attention. Although we have attempted to cover a fairly broad range of representative phenomena, there are probably many more which have escaped our attention. It is also possible that some of our proposals need to be revised further. However, we still believe that we have provided the interested scholar with a good starting point.

We have also devoted some space to the study of the role of metonymy, whether high or low-level, in anaphoric reference. To the best of our knowledge, our account is the only one with a goal for systematicity in this area of enquiry. We have proposed the existence of at least two principles, the Domain Availability Principle, which holds for all kinds of metonymy, and the Domain Precedence Principle, which is applicable to cases of double and triple metonymic mappings. In combination, these principles account for all our data. We have strived to be comprehensive, but if further cases of metonymic anaphora not contemplated in our study arise, it might still be possible to find additional principles which regulate this phenomenon or to refine the ones we have put forward.

Finally, we have devoted some space to the relationship between metonymy theory and the pragmatic approach to communication. Here, we have addressed the topic of the role of metonymy in inferencing. We believe that our proposals in this respect build a bridge between modern inferential pragmatics and Cognitive Linguistics. However, these proposals require introducing some minor modifications or adjustments in some of the postulates of pragmatic theory. Whether this peculiar symbiosis will be beneficial for both approaches to language is left to the reader to assess. Cognitive linguists have not made many serious attempts to deal with questions of language use, nor have most pragmaticists taken the experiential approach to language too seriously. But if communication is, at least in part, a matter of cognition, as in fact many modern pragmaticists believe, it would not be fair for them to ignore the cognitive mechanisms

which underlie the way we exploit linguistic resources communicatively. In the same way, it would not be fair for cognitive linguists to ignore the general principles which seem to govern our use of the cognitive mechanisms which they study.

In sum, it is our hope that, even though not all readers will agree with all of our proposals in this book, we have been able to bring to the fore some of the most crucial issues and, in providing our own solutions, have offered the reader enough food for reflection.

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