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Guidelines for the application of the theories of metaphor and metonymy to textual examples*

Abstract

The cognitive theories of metaphor and metonymy, in the author's view, present some minor deficiencies which have to be overcome if they are to be easily applicable in linguistic and literary research. Moreover, the researcher attempting to apply these theories must be given some clear guidelines helping her/him to decide as confidently as possible whether a given portion of a text is the expression of a conventional metaphor, of a conventional metonymy, or of both, and (s)he must also be able to identify the kind of metaphor and / or metonymy that is at work, and the kind of interaction between them. The article is, in its first part, a contribution to the clarification of some of the theoretical problems, namely those that affect the notion of metonymy, which has been less intensively studied by cognitive linguists, and those affecting the distinction between metaphor and metonymy, especially the one that derives from the cognitive notion of conceptual domain. The second part is a case study of a brief textual example, by means of which the guidelines that in the author's view should be followed in the application of the cognitive theories of metaphor and metonymy are briefly discussed and tested. The reader is assumed

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to have at least some superficial familiarity with the basic tenets and terminology of cognitive linguistics.

Introduction

The article is devoted to pointing out and attempting to solve some of the *definitional* and *descriptive* problems that in my view affect the notions of metaphor and metonymy within the cognitive tradition¹. It has been written with the ultimate goal of making these notions more readily applicable in linguistic and literary research, especially when this research has to cope with sets of 'authentic' (i.e. not constructed) examples. The first part of this paper deals with some definitional problems, among them, the differences between metaphor and metonymy. The second part deals with some of the descriptive problems by suggesting a procedure that could be used to guide the analyst's hypothesis as to the existence and the occurrence of a particular metaphor or a particular metonymy in a given textual example.

My own experience with the application of these theories has persuaded me of the need to write a double-purpose article like this. Over the past ten years I have applied the cognitive theories of metaphor and metonymy to sets of authentic examples in a number of articles aimed at describing the semantics of emotional concepts in English and / or in Spanish (e.g. Barcelona 1986, 1989, 1992). I have also applied these theories to the semantic study of a literary work (Barcelona, 1995b). In all of these attempts the theories in their present form have worked quite well in most cases, i.e. with most examples. But in quite a few other cases they were not so easy to apply, simply because it was not at all easy to decide whether the example in question was metaphorical, metonymic, or both. This was already a clear indication that the definitions required some refinement to make them more operative. Even when one could confidently identify the metaphor or the metonymy at work it was even more difficult (and still is, as we shall see below) to decide the superordinate class(es) of metaphors or metonymies it was to be assigned to. So besides a definitional problem, we often also have a classificatory problem, which is in fact inextricably bound up with the definitional one, because the nature of the network of metaphors and metonymies doubtless has to influence the definitions, and viceversa. Unfortunately, we will still have to wait some time until much more

¹ By cognitive tradition I mean the approach to linguistic research initiated by George Lakoff (1987), Charles Fillmore (1982) or Ronald Langacker (1987, 1991). This approach considers that linguistic theory and description have to be consistent with what is known about cognition and the brain. This position is expressed forcefully in Lakoff (1990).

research is done into the kinds and hierarchies of metaphors and metonymies before being able to provide some plausible answers to the classificatory problem. Thus I will only be able to address some of the definitional and the descriptive problems.

Cognition and language are strewn with prototype effects, and it is not surprising that the very analytical categories used by linguists (sentence, clause, metaphorical mapping, etc.) often display prototype effects themselves (for example, there are prototypical clauses like *John broke the window* and less prototypical clauses like *Long live the Queen*). The same applies to such sheoretical constructs as the cognitive theories of metaphor and metonymy. But a scientific theory of metaphor and metonymy should in principle strive to create theoretical categories as predictive as possible, of the form: “a metaphor is a conceptual mechanism that has these minimum characteristics:...”. Such predictive categories have to be able to accommodate as many phenomena as possible. The first part of the present paper is a modest attempt in this direction. However, after the successive refinements of the categories, there will still be cases where

it will not be easy to decide which kind or kinds of mechanisms are at work. Those cases should lead us to refine the definitions still further, provided they are still consistent with the nature of the data, i.e. provided they do not lead to vacuous abstract generalisations. Of course, if no further refinements are feasible, then perhaps we should treat these stubbornly impregnable cases as deviations from prototypical metaphor or metonymy.

Beyond the definitional and the classificatory problems, I think that the analyst trying to apply these theories should follow a set of systematic procedures clearly laid out to check the correctness of his/her account of the occurrence and operation of a given metaphor and/or metonymy in a specific reading of an authentic example. Otherwise, as has also been my repeated experience whenever I have asked some of my students to identify in a text the metaphors for a certain domain (i.e. romantic love), the descriptive results may at best be very limited (eg. when a student analysed *Our love has withered* as a realisation of the metaphor LOVE IS A ROSE, failing to generalise to flowers or better still to living beings, by linking this example to others where love is regarded as a living being). The co-instantiation of one or several metaphors and metonymies by the same expression is fairly common, as will become apparent below in the case study. When the analyst encounters an expression which can be interpreted as activating either a metaphor, a metonymy, or both, a methodology for stating clearly the various possible readings and their interaction will be of great help. The second part of the paper is a modest attempt at devising such a methodology.

The reader is supposed to be only superficially familiar with the basic outlook and terminology of cognitive linguistics. For two good introductions, see Taylor 1995) and Ungerer and Schmid (1996).

Definitional problems in the notions of metaphor and metonymy²

The notions of metaphor and metonymy

Metaphor is the cognitive mechanism whereby one experiential domain (in the sense of Langacker, 1987, Ch. 4) is partially mapped onto a different experiential domain, the second domain being partially understood in terms of the first one. The domain that is mapped is called the *source* or *donor domain*, and the domain onto which it is mapped, is called the *target* or *recipient* domain. Both domains have to belong to different superordinate domains. This is basically the cognitive concept of metaphor propounded by George Lakoff, Mark Johnson and Mark Turner (Johnson 1987, Lakoff & Johnson 1980, Lakoff 1987, 1990, 1993b, Lakoff and Turner 1989, Turner 1987, 1991), as well as by Gibbs (1994), Sweetser (1991), and by other cognitive linguists that have been investigating the field for the past fifteen years.

In the well-known metaphor UNDERSTANDING IS SEEING, illustrated in examples 1 through 3 below, the domain of sight, itself a subdomain in the domain of bodily functions, is mapped, that is, superimposed, onto the domain of understanding, itself a subdomain in the domain of mental functions:

- 1) **I can't see the solution.**
- 2) His theory **has thrown light on this problem.**
- 3) The **candidate's speech was not really transparent** enough. There were many **dark points** in it.

This metaphorical mapping³ transfers a large number of attributes, entities and propositions from the experiential domain of sight to the experiential domain of understanding. The following are some of the submappings or correspondences between the source and target domains illustrated by examples 1 through 3 (of course there are more correspondences that are not illustrated by these examples):

- The act of seeing corresponds to the act of understanding (example 1).
- The person that sees is the person that understands (example 1)
- An increase in light on an object corresponds to an increase in the likelihood for something to be understood (example 2).
- Impediments to seeing corresponds to impediments to understanding (example 3).

² This part of the paper is in fact an initial published report of ongoing work aimed at constraining the notions of metaphor and metonymy within cognitive linguistics. A first attempt in this direction was Barcelona 1995a.

³ By 'metaphorical mapping' we should simply understand a set of fixed conceptual correspondences, not a real-time algorithmic process by means of which we start out at the source domain semantic structure and then we end up at the target domain one (Lakoff 1993b).

Besides these *ontological correspondences* we can find *knowledge* (or *epistemic correspondences*). For example, we know that when an object has opaque boundaries we cannot see its inside; this corresponds to our knowledge that when, for example, an idea or a series of ideas is not clearly expressed, it is difficult to understand it (for instance, a messy speech may be difficult to understand - example 3). We also know that we can see better when illumination is better, and that the agent and/or cause for the increase in light brings about an increase in visibility; this knowledge maps onto anything or anybody that brings about an increase in understanding, and on to the means used for it (the man in example 2, who helps to clarify the problem thanks to his theory).

Epistemic correspondences in fact normally entail ontological correspondences. Once we map the schema of seeing on to the schema of understanding, all of our knowledge about seeing can potentially be incorporated into our knowledge of the schema of understanding (provided the constraint imposed by the Invariance Hypothesis is respected; see below). Thus our knowledge that, if an object is not transparent we cannot see inside it, is mapped onto the notion that if an idea is not orderly expressed we cannot understand it (example 3). This epistemic correspondence thus yields the fourth ontological correspondence presented above. Incidentally, example 3 co-instantiates UNDERSTANDING = SEEING and the CONDUIT METAPHOR (Reddy 1979), which regards words as containers for meaning. As ‘containers’ they can have varying degrees of ‘transparency’ (i.e. understandability).

The main constraint on metaphorical mappings seems to be the so-called Invariance Hypothesis (Brugman 1990, Lakoff and Turner 1989, Lakoff 1990, 1993b, Turner 1990). That is, if both domains share at least in part their image- schematic structure, then the mapping is possible⁴.

⁴ Image-schemas are prelinguistic cognitive structures, many of which are acquired from the earliest experiences upon which our complete cognitive development is based: experiential-cognitive structures like ‘container’, ‘part-whole’, ‘front-back’, ‘up-down’, ‘source-path-goal’, ‘link’, ‘centre- periphery’. These experiential blocks are often extremely simple, and are used in the formation of most (if not all) basic concepts. For example, the concept of ‘journey’ is grounded on the ‘source- path-goal’ schema. See, e.g. Lakoff 1987, 270-276, Johnson, 1987; Gibbs and Colston 1995 for their psychological reality and Mandler 1992 for their role in the transition from perception to concepts in child development.

The Invariance Hypothesis is “a constraint on existing metaphorical mappings” (Lakoff: 1993b), to the effect that:

- 1) The mapping is consistent with the inherent structure of the source domain: sources are mapped onto sources, paths onto paths etc., not sources onto paths or paths onto sources. In *SCALES OF MEASUREMENT ARE PATHS* (Lakoff 1993b) (‘John is *way ahead* of Bill in intelligence’, ‘John is *far* more intelligent than Bill’) we find that the beginning of the path is mapped on to the bottom of the scale, and distance travelled on to distance in general.
- 2) The mapping cannot violate the image-schematic structure of the target domain. One example: in *ACTIONS ARE TRANSFERS* (‘She gave me a kick’), the source domain contains the information

Metonymy has received much less attention than metaphor, although it is probably even more basic than it in language and cognition. In general terms, metonymy is a cognitive mechanism whereby one experiential domain is partially understood in terms of another experiential domain included *in the same common experiential domain* (see note 8 below for the notion of *schematic metonymy*). Metonymy is a case of what Croft (1993) calls *domain highlighting*. In metonymy, one domain, the target domain, is ‘highlighted’, i.e. ‘activated’, often with a limited discourse purpose (Lakoff 1987, 78-80), because it is this domain that is partially conceptualised by mapping onto it the source domain included in the same common domain. If we study one of Lakoff and Johnson’s (1980) examples, namely, example 4 below,

4) *Washington* is insensitive to the needs of the people

we find that within the common domain of the capital city of the United States, we have, among others, the subdomains of the city itself as a location, the subdomain of the political institutions located in it, and further in the background, the subdomain of the people that make the decisions in those political institutions (the President, the department secretaries, the senators and congressmen, etc.). Via metonymy, one of these subdomains, namely, that of the political institutions, is activated and additionally referred to from that of the city itself as a location, which is backgrounded in the figurative interpretation of this sentence. And indirectly, the important people in these institutions are also highlighted and referred to via an additional conventional metonymy, in which the institutions stand for the people that have a prominent role in them⁵. The phenomenon of ‘chained metonymies’ is in fact relatively frequent⁶.

in its image-schema structure that the object given remains in the possession of the recipient.

But the inherent structure of the target domain does not include the fact that the recipient of the action keeps the action in his possession (although the *effects* of the action may be with him for a long time!). In this case, this part of the mapping cannot take place.

However the Invariance Hypothesis has to be formulated more precisely. One of the obvious modifications required is to state that what has to be preserved is not only the image-schematic structure of the target domain, but also its associated conventional knowledge about the target domain. This sum of image-schematic structure and conventional knowledge is what Lakoff and Turner (1989) call ‘schemas’. It is these that have to be preserved, as the preceding example shows. The Invariance Hypothesis has been subsumed under other broader principles in Lakoff’s Neural Theory of Language (Lakoff and Johnson 1999) and in Fauconnier and Turner’s theory of Conceptual Integration (Turner and Fauconnier 1995).

⁵ That conventional metonymy is conceptually independent from the location for institution metonymy. Notice that even if the speaker/writer had not perspectivised the federal government from its geographical location, having thus used a phrase like ‘The federal government (is insensitive)...’ there would still be a metonymy (notice the singular concord with the collective

From what has been said so far, it should be clear that both metaphor and metonymy are mental mechanisms, not to be confused with their expression, linguistic or otherwise. Metaphors and metonymies are often not verbalised, but can be expressed through gestures (McNeill 1992) or other non-verbal communicative devices, or not be communicated at all and simply motivate our behaviour (Lakoff and Johnson 1980). In some cases there does not even exist a fully conventional lexical item to denote them, as is the case with the housewife- mother metonymic model discussed by Lakoff (1987, Ch. 5). The mother who is a housewife but does not have a job outside the home is the typical mother in the nurturance model of motherhood, that is, in the model of mothers *as nurturers*. Within the nurturance model, there is another submodel which contrasts with the housewife-mother model, and for which there exists an established lexical item, *working mother* (which refers to a mother that has a job outside the home, even though she may also be in charge of her home). The housewife-mother model, which is thus a subcategory or subdomain within the experiential domain of motherhood (i.e. which is only one of the possible kinds of mothers), stands for the whole category of mothers from the point of view of nurturance, as housewife- mothers are stereotypically regarded as more representative providers of nurturance than working mothers. The fact that the housewife-mother model does not have an established lexeme shows that this is a default model for the category ‘mother’ in the nurturance model, i.e. that it is, via metonymy, its prototypical subcategory.

Problems in the notions of metaphor and metonymy

First of all let us comment briefly on two *problems affecting specifically the notion of metonymy*. The first of them is whether a metonymy has to be necessarily referential. Lakoff & Johnson (Ch. 8), and later Lakoff and Turner (p. 100ff) have said that its function is primarily referential (without clearly making this function a requirement). Lakoff (1987, chapter 5) discusses a number of “metonymic models” (i.e. prototype categories whose central category has

subject NP), in which the federal government as an institution would stand for the important people in the government. Example 4 therefore provides an additional ‘line of defence* for those people, because their personal involvement is backgrounded and only becomes obvious when one reads off this additional metonymy.

⁶ In fact it seems that in both metonymies we have the same generic type of metonymy (part for whole): federal political institutions are a part of the conceptual whole constituted by our experiential domain of Washington, and the people in charge of these institutions are in turn a part of these institutions. The chaining comes from the Chinese-box like part-whole connection between the geographical location, the institutions located in it and the decision-makers who are a part of the institutions.

emerged through metonymy), which turn out to be one of the four fundamental cognitive mechanisms (or *idealised cognitive models*⁷) which he proposes. Some of the most cognitively powerful metonymies he explores are not necessarily used for reference, like the housewife-mother stereotype, but principally for making inferences. Croft (1993) sets reference as a necessary requirement for metonymies, but Taylor (1995, 124) says metonymy is not restricted to the act of reference. My own position is that, given the evidence provided by Lakoff 1987 (who, on the other hand, does not address this problem), metonymies are *not* to be regarded as necessarily restricted to the act of reference; however, especially in metonymies for individuals (Lakoff and Johnson, chapter 8), this is the most frequent “limited discourse-pragmatic purpose” (Lakoff, 1987, 79) for which they are used.

The second problem is whether *every* potential association (i.e. any evocation, association or index-type connection - in Peirce’s sense) within a conceptual structure should be considered a conventional metonymy. For example, the Potomac river is indirectly associated with U.S. federal political institutions in the same conceptual structure through its direct association with the notion of Washington. However, a sentence like *The Potomac River is insensitive to the needs of the people* would not automatically evoke any of these federal political institutions, even though the river could evoke Washington, which in turn does often metonymically evoke the institutions. As Taylor says (*ibid*, 123), a conventional metonymy must

- 1) follow one of the conventional avenues or types of metonymic conceptualisation, like part-for-whole, producer-for-product, path-for-goal, etc. (unfortunately, a thorough and systematic cognitive study of this typology still has to be done, and this is one of the serious lacunae in the cognitive theory of metonymy); *and*
- 2) be conventionalised on the basis of a body of knowledge and belief encapsulated in an appropriate frame and/or in virtue of the specific features of a given situation or of the specific features of the relationships that hold in the domain.

Let us illustrate these requirements with some examples. One of the conventional types of metonymy is, according to Lakoff and Johnson (p. 38), ‘producer for product’. For example, in the sentence *I bought a Picasso*, the expression *a Picasso* stands for the painting on the basis of the belief, included in the frame for art, that works of art are the unique products of the creative powers of artists⁷, and, at the same time, on the fact that the author is a naturally

⁷ Frames are structured *models* of blocks of experience which often have a propositional structure (see Fillmore 1982). For the factors intervening in the conventionalization of metonymies, see Kovecses and Radden (1998), and Barcelona (in press).

salient subdomain in the domain of art works. Now if my sister Mary cooks a wonderful cake, the sentence *I ate a Mary* follows the same general producer- for-product pattern, but the metonymy is not conventionalised (except perhaps inside my family circle), because her cakes are not regarded as unique creative products by the broader speech community⁸.

The kind of food consumed is a naturally salient feature of customers (from the point of view of restaurant owners and waiters), which explains the conventional metonymy - 'consumed goods for restaurant customer' - in Lakoff and Johnson's example (*ibid*, 35):

5) *The ham sandwich* is waiting for his check⁹.

The rest of this section will address two *problems affecting the distinction between metaphor and metonymy*. The most important of these is the one that derives from the notion of *domain*. In the encyclopaedic view of linguistic meaning that prevails in cognitive linguistics, conceptual domains are normally open-ended. Conceptual domains, which can be defined as structured blocks of knowledge based on experience, are very often presupposed in other apparently separate domains, in an extremely intricate conceptual web (see Langacker, 1987,

⁸ One is reminded, when facing cases like this, of Langacker's discussion (1987, Ch 4) of the transient impact of the word *peanut*, which temporarily became a metonymy for President Jimmy Carter, and even for the whole presidency. It was conventionalised, but only temporarily. On the other had, there are many metonymic associations that are not conventionalised.

A more systematic approach to this problem is Barcelona (in press), where I propose to distinguish between *schematic*, *typical*, *conventional*, and *prototypical* metonymies. A *schematic* metonymy is a mapping of a cognitive domain, the source, onto another cognitive domain, the target, both belonging to the same common domain, so that the source causes the mental activation of the target. A *typical* metonymy is a schematic metonymy whose target is clearly distinct from the source, either because it is a non central subdomain of the source or because it is not included in it. This helps us account for the difference between (i) '*This book* is a history of Irak', in which the SEMANTIC CONTENT subdomain of BOOK is activated, and (ii) '*This book* is very big', in which the PHYSICAL DOMAIN subdomain of BOOK is activated. Sentence (i) is a *typical* metonymy because SEMANTIC CONTENT is a clearly distinguishable subdomain from PHYSICAL OBJECT in the BOOK domain; thus (i) is more easily felt as a mapping, as a semantic shift, than (ii). In (ii), the PHYSICAL OBJECT domain is less easily distinguishable from the BOOK domain as a whole, and the semantic shift is less obvious; (ii) would be a schematic, but not a typical metonymy. A *conventional* metonymy is a typical metonymy that responds to a natural type of metonymic relationship and which is socially sanctioned (most of the metonymies discussed in this paper). A *prototypical* metonymy is a typical metonymy with individuals as targets and as referents (e.g., examples 4 above and 5 below).

⁹ The following convention has been followed so far in the presentation of examples and will be followed in the rest of the paper; the linguistic expression (normally a phrase) whose metonymic reading is being pointed out will be italicised, whereas the linguistic expression whose metaphorical understanding is being discussed will be in boldface.

Ch. 4). Only what Langacker calls *basic* domains do not presuppose other domains for their conceptualisation: space, time, vision, pitch, taste and smell, temperature, pressure, pain, the emotions, and perhaps others¹⁰.

This conception of domains creates a problem for the definitions we have just given of metaphor and metonymy. For example, Croft (1993, 348) says that the SADNESS is DOWN metaphor that we find in the sentences in example 6

6) She's **feeling down**

I'm **in low spirits**

Mike was **downhearted**

is possible because the mapping is from the spatial subdomain of spatial orientation to the emotional subdomain of sadness, in which, according to him, there is no spatial orientation subdomain. But in my own study of the concept of depression in American English (Barcelona 1986), I identified a typical behavioural effects metonymy in which, in a given pragmatic context, a drooping bodily posture stands for sadness:

7) Mary has a *long face* (that is vertically 'long', with drooping facial muscles). John *drooped his head* (sadly).

She walked with *drooping shoulders* / *downcast eyes* after the news of her child's death.

A *drooping* posture presupposes the spatial orientation subdomain. The behavioural effects of sadness are a part of the encyclopaedic knowledge people have about this emotion, and this specific behavioural effect presupposes the spatial orientation subdomain: it follows that this subdomain, and with it the whole spatial domain, can be said to be somehow presupposed in the emotional subdomain of sadness. Therefore in expressions of the SADNESS = DOWN metaphor we would have a mapping to the subdomain of sadness from one of the

¹⁰ This list of basic domains could be questioned of several grounds, depending on what is understood by 'presupposing a domain'. One of its problems is that under a very broad interpretation of domain presupposition, any contribution, no matter how indirect, of a domain to the conceptualisation of a basic domain could be regarded as a case of presupposition of another domain by the purported basic domain. Another problem is that this broad interpretation would regard the metaphorical mapping from one domain (say space) onto a purported basic domain (say time or the emotions) as a case of presupposition of the source by the target. In this light, time or the emotions would not qualify as basic domains (see Barcelona 1986, Kovecses 1986, 1988, 1990, 1991, Lakoff 1987). In the discussion in connection with example 6 below, I propose a restrictive interpretation that could solve the first kind of problem created by broad conceptualisations of domain presupposition.

subdomains included in it, namely the spatial orientation subdomain. But this is exactly the definition that is usually given of *metonymy*, not of *metaphor*'. The solution, in my view, is to complete the definitions of metaphor and metonymy that are normally given in cognitive linguistics.

In metaphorical mappings, a propositional idealised cognitive model, or ICM (Lakoff 1987), of the *taxonomy* of domains has to exclude the source domain from the target domain and viceversa. The spatial domain is included in the domain of sadness by the *unconscious* encyclopaedic knowledge that people have about this emotion. But this does not mean that it is included in the domain of sadness by the *conscious* folk taxonomic categorisation of experiential domains. This taxonomic categorisation is carried out by means of conscious propositional models, like e.g. Fillmore's frames¹¹. That is, in our (relatively) conscious folk taxonomy of experiential domains, the emotions are domains that do *not* include any spatial concepts. With this tiny addition to the definition, the SADNESS IS DOWN mapping, exemplified by the sentences in ex. 6 can be considered as a metaphor, and not as a metonymy¹². This is presumably what is meant by metaphor theorists like Lakoff and Turner (1989) when they say that the source and the target "concepts" must be in separate domains. They simply had to specify on what basis the domains are to be understood as separate.

In metonymic mappings, the inclusion of both the source and the target domain¹³ probably also has to be specified by a conscious propositional model of the taxonomy of experiential domains. 'Conscious' is meant, here and in the

" This does not mean that e.g. every time the SADNESS = DOWN metaphor is activated people have to be conscious of the fact that verticality belongs to an altogether separate domain. The requirement is simply that they should reject the proposition that the notion of sadness includes that of verticality or space in general, when it is explicitly presented to them. The obvious rejection of the truth of this proposition by most people is evidence that our folk taxonomy of domains separates sadness (or happiness) from verticality.

¹² Langacker's notion of 'unit status' (1987: chapter 4) would be a different way of formulating this solution to the theoretical puzzle. If we consider that the notion of verticality presupposed by the notion of a drooping bodily posture is not automatically activated whenever we use a conventional non-metaphorical and non-metonymic linguistic expression of the domain of sadness, this means that the notion of verticality has not reached 'unit status' within the domain of sadness; that, in other words, it is not an entrenched subdomain in it. This amounts to saying that it is not automatically regarded by the conscious folk model of the taxonomy of domains as a subdomain of sadness.

¹³ Some readers may still be surprised to hear that in a metonymy there can also be a source and a target domain. They should remember that metonymy is also a mapping from one domain to another, that is, from a source domain to a target domain. The big difference from metaphors in this respect, as we said above, is that both source and target are subdomains within the same common domain, whereas in metaphor they have to be totally separate domains (see Lakoff and Turner, 1989: 104, where the source-target mapping is also recognised for metonymies).

preceding paragraphs, to refer to the fact that people can become aware of either the inclusion in or the exclusion from a larger domain of another domain after some reflection (for instance, many people would have no trouble accepting that weeping, a typical behavioural effect of sadness, is a part of it, and even less acknowledging that a limb is a part of a body); of course, the awareness of the membership of a domain in another varies greatly. In any case, the really important requirement is the special link existing between the source and the target of a metonymic mapping, that is, the fact that the source domain is quite likely to activate the target domain, in virtue of the cultural belief or the specific features that we commented on above. Obviously, if one domain can automatically activate the other, this is because they are experientially and conceptually ‘close’; in other words, because they are in the same experiential domain. In example 4, *Washington* is experientially included by most people, probably in quite a conscious way, in a common domain with U.S. federal political institutions, but the important thing is that the location can activate or highlight the institutions, due to the salience of the former in relation to the latter.

The other definitional problem affecting the distinction between metaphor and metonymy concerns the distinction between metaphor and metonymy when they interact with each other. The interaction between metaphor and metonymy has been treated in some detail by Lakoff & Turner (1989) and more systematically by Goossens (1990). In my view there are two *kinds of interaction*:

- 1) Interaction at the conceptual level.
- 2) Purely textual co-instantiation of a metaphor and a metonymy in the same linguistic expression.

The most important of these for definitional purposes is *interaction at the conceptual level*. We discuss it in the first place. There are mainly two types of metaphor-metonymy interaction at this level:

- a) The metonymic conceptual motivation of metaphor.
- b) The metaphorical conceptual motivation of metonymy.

The *metonymic conceptual motivation of metaphor* is fairly problematic, and it constitutes a real challenge for the theory of metaphor. A large number of metaphors have been found to have a metonymic basis, SADNESS IS DOWN is a case, as we have just seen; another case is the ANGER IS THE HEAT OF A FLUID metaphor, as investigated by Lakoff and Kovecses and reported in Lakoff (1987). Taylor (1995, 139) suggests some other cases. These are some of Lakoff and Kovecses’s examples:

8) I had reached the **boiling point**

She got all **steamed up**

When I told him, he just **exploded**

According to them, this metaphor is motivated by a group of metonymies in which certain physiological effects of anger stand for this emotion. These are some of their examples of these metonymies, preceded by the kind of physiological effects of anger that stand metonymically for it:

9) Body heat: Don't *get hot under the collar*

Internal pressure: When I found out, I almost *burst a blood vessel*

Agitation: I *was hopping mad*

A very interesting area of research is thus the study of the extent to which the metaphorical network of a language is motivated by the metonymic one. Taylor (*ibid*) says that, though very tempting, the claim that all metaphors are based on metonymy is contradicted by the existence of metaphors like those in example 10 below. The second member in each pair, according to him, is a case of synaesthesia (in Taylor's loose use of it, this term denotes a kind of metaphor in which a sensory domain is mapped onto any other kind of domain).

10) Loud music / A **loud colour**

A sweet cake / **Sweet music**

A black cloth / A **black mood**

In the metaphorical member of these pairs (the one in bold type) we find the following mappings, according to Taylor: in the first pair, the source is the auditory domain and the target is the visual domain; in the second pair, the source is the gustatory domain and the target is the auditory domain; in the third pair, the source is (the colour subdomain of) the visual domain and the target domain is the domain of emotions. He says he cannot find a metonymic motivation for these metaphors. I believe there *is* such a motivation. The details of my alternative analysis can be found in Barcelona (2000b). They are not included here so as to maintain a reasonable balance between all the parts in this paper. As an illustration of my analysis I can only comment briefly on the first metaphor in 10.1 claim in Barcelona (2000b) that the metonymic perspecti-vization of showy ('loud') colours as colours that force themselves on one's attention motivates the selection of loud sounds, which likewise force themselves on one's attention, as the source in the metaphorical mapping. The focus (see Kovecses, 2000) of the metaphorical mapping is the issue of the attention-getting power of these colours. Thus, loud sounds are an ideal source to metaphorically describe our experience of perceiving a gaudy colour. A metonymic motivation is also offered in that article for the other two metaphors in 10 and for other counterexamples pointed out by Taylor. Radden (2000) has discovered the metonymic basis of a large number of conventional metaphors. The extent to which all or most metaphors have an ultimately metonymic basis is, thus, an extremely interesting area of inquiry.

The outcome of this research might be the realization that metonymy may be a more basic cognitive strategy than metaphor.

The *metaphorical conceptual motivation of some metonymies* can be discovered in metonymic interpretations of a linguistic expression that are *only possible within* a co-occurring metaphorical mapping, as in example 11:

11) **She caught the Minister's ear** and persuaded him to accept his plan.

(Goossens, 1990).

The metaphor here is ATTENTION IS A (TYPICALLY MOVING) PHYSICAL ENTITY (that one has to get hold of or attract, or 'call')- At the same time we find in this sentence a specific version of the conventional type of metonymy BODY PART FOR (MANNER OF) FUNCTION. In this conventional type of metonymy a body part stands for its function or for the manner in which its function is performed (cf. 'He has *a good hand*', 'She has *a good head*')

The specific version of the conventional type of metonymy in this example is EAR FOR ATTENTION; or, to put it differently, we have a body part whose function (hearing) is characterised as being performed in a highly specific manner: 'with attention'. This body part stands for *this* manner of its function. As Goossens says, the specific version of the metonymy only takes place in metaphorical mappings involving attention as the target domain. That is, only if attention has been made the target domain in a metaphorical mapping is it possible, within the target domain, to carry out a metonymic mapping in which the ear stands for a specific attribute (attention) of its typical function (hearing). This means that the specific metonymy can only be found in linguistic expressions of metaphorical mappings where attention is the target domain. In fact if we look at cases where 'ear' stands for 'attention', we find that this is indeed the case:

12) She **won** *his ears*.

13) She **lent** *an ear* to my words.

Again in these two cases, as in example 11, attention is understood as an entity (usually a moving one) that has to be attracted or obtained in some way, and it is metonymically represented by the ears. Of course, this does not deny that this metaphor can eventually be shown to be motivated by a different metonymy.

The second kind of interaction is the *purely textual co-instantiation of a metaphor and a metonymy* in the same linguistic expression. This happens when the metonymy can occur in linguistic expressions independently from a given metaphorical mapping, even though it may happen to co-occur in some other linguistic expressions with that metaphorical mapping. In other words, the metonymy is conceptually independent from the metaphor, and their cooccurrence is not due to the fact that either of them conceptually motivate other, but to a mere textual coincidence:

14) The ham sandwich **started snarling**

The metaphor in this example is a special version of PEOPLE AS ANIMALS (see Lakoff and Turner, 1989). The special version is ANGRY BEHAVIOUR IS AGGRESSIVE ANIMAL BEHAVIOUR (Lakoff 1987, case study 1 on anger). This sentence would refer, in a restaurant situation, to the angry behaviour of the customer that bought the ham sandwich.

The metonymy is, as in example 5 above, CONSUMED GOODS FOR CUSTOMER.

Both the metonymy and the metaphor are conceptually independent from each other. It is easy to see this fact, as regards the metonymy, by considering again example 5 (*If The ham sandwich is waiting for his check*). As for the metaphor, it is enough to replace the subject in example 14 to realise that the metaphor does not depend conceptually in this case on *this* metonymy:

15) John **started snarling**.

Steps suggested to formulate hypotheses as to the presence of a conventional metaphor or metonymy in a textual example

We will discuss these steps in connection with metaphor, then in connection with metonymy, and finally we will suggest the metaphoric-metonymic meaning of the example.

STEPS SUGGESTED TO IDENTIFY CONVENTIONAL METAPHORS

In order to illustrate the discussion, we will use the following example taken from *Romeo and Juliet*.

16) Friar Laurence: “Young men’s love then lies
Not truly in their hearts, but in their eyes” (II.3.63-65).

The edition of the play that has been used is T. J. B. Spencer’s (Spencer, 1967).

Step 1 : *Observe where the mapping takes place.*

That is, make sure that the hypothesised mapping is *across* consciously independent domains, in metaphor, and *within* the same domain, in metonymy. In this case, there seems to be a mapping from the domain of *containers* to the contain of *people*, the source and the target domains appearing in consciously

independent taxonomies of domains (containers are exclusively in the taxonomy of objects and people are in the taxonomy of living beings). We might call this mapping the PEOPLE AS CONTAINERS metaphor. There is a further mapping from *physical entities* to

that emotions are understood as entities of some kind, usually an inanimate entity like a fluid or a solid, but also sometimes an animate entity, such as a person (usually an opponent: *I was **seized** by anger*) or an animal or plant (***He unleashed** his anger, his affection **withered***)¹⁴. This metaphor is known as EMOTIONS ARE PHYSICAL ENTITIES. I will mostly concentrate on the first metaphor.

Step 2: Characterise the metaphor in precise terms.

This characterisation can be broken down into a number of operations:

1) *Look for additional conventional linguistic expressions of the metaphor.*

That is, look for several other examples

- a) in which a linguistic expression of the source domain appears in a grammatically acceptable combination with a linguistic expression of the target domain, and
- b) in which the source domain expression, in an appropriate context, must or can be interpreted in the target domain, that is, metaphorically (Croft, *op. cit.* suggests some interesting rules as to the kind of element in a syntactic composition that will be interpreted metaphorically).

The second requirement is a necessary one.

Going back to our Shakespeare example, we can find in the literature on metaphor a large number of additional examples of linguistic expressions for both the PEOPLE AS CONTAINERS¹⁵ and the EMOTIONS AS PHYSICAL ENTITIES metaphors (Barcelona 1986, Johnson 1987, Kovecses 1986-1990, Lakoff and Johnson 1980, Lakoff 1987) that satisfy the two preceding requirements, or at least the second one. The following sentences, all but the first of them borrowed from Kovecses (1990, 146ff), illustrate both metaphors:

17) She was about to **explode**

She was **filled** with emotion

Emotion **welled up** inside her

Her emotions **rose**

¹⁴ These inanimare physical entities are usually fluids when composed with the container metaphor, but not necessarily so. They can also be solids: *That kindled my ire* (Lakoff and Kovecses as reported in Lakoff 1987, 388).

¹⁵ This metaphor is usually known in the literature as the BODY IS A CONTAINER (for the emotions). But the curious fact is that in many of the examples offered, like those by Kovecses reproduced in example 17, the target domain is terms by expressions (*/, she*) which refer to people, rather than specifically to their bodies. Take *My body is full of love*; this is a clear case in which the target domain is the body, although there might be a metonymic reading of *my body* to *I*. In any case, the body is conventionally regarded as inseparable from the person, and there is a frequent metonymic co-implication between both domains, so that both labels would be adequate for the metaphor.

I feel emotionally **drained** I was
swelling with emotion She
overflowed with emotion

We can add the following example in which the ‘content’ of the person is not an emotion: it shows that the first metaphor is not tied up with emotions as the typical metaphorical ‘content’:

18) I am **full** of ideas

In the first sentence of 17 both requirements are satisfied as far as the PEOPLE = CONTAINERS metaphor is concerned (*She* is an expression of the target domain and *explode* is an expression of the source domain, since containers can explode; and of course the source domain expression is interpreted in the target domain of people). As for EMOTIONS = PHYSICAL ENTITIES, only the second requirement is met by this sentence, since we only have an expression of the source domain (again, *explode*, since explosions can be caused by certain physical substances under certain conditions - very hot fluids, or gases, or even burning solids), but no expression of the target domain (emotions). However, the second requirement, namely, the mapping to the target domain of emotion, is satisfied. This mapping is arrived at through the linguistic or situational context, or through a conversational implicature¹⁶. Moreover the co-occurrence of PEOPLE = CONTAINERS already creates a strong bias towards this inference to emotion as the target domain, because what corresponds to the physical substance that can make a person ‘explode’ has to be an emotion. We could alternatively say that the ration of exploding in this context is a strong index (in Peirce’s sense) for the whole metaphorical mapping from objects (explosive objects in this case) to emotions (violent emotions in this case).

In the remaining sentences of 17, *fill*, *well up*, *rise*, *drain*, *swell*, and *overflow*, are simultaneously expressions of the source domains in the PEOPLE AS CONTAINERS and in the EMOTIONS AS PHYSICAL ENTITIES metaphors: that is, the domains of containers and physical entities, in this case fluid substances (with which you 511 the container, which rise inside the container, of which a container is drained, etc.). The domain of containers is furthermore evoked by *inside* in the third sentence. The expressions of the target domain of people are *she*, *her* and *I*. The ones corresponding to the target domain of emotion are *emotion*, *emotions*, and *nationally*.

¹⁶ Croft (1993) suggests that the principle accounting for metaphorical and metonymic interpretation is the principle of the ‘conceptual unity of the domain’, as he terms it, which prompts interpreters to figure out a single conceptual domain in which to interpret syntactic compositions.

The important thing is that the source domain expressions which are combined with the target domain expressions in these examples have to be interpreted in the target domain: that is, *fill*, *rise*, etc. have to be matched with some aspect of the domain of emotions (the aspect being in this case ‘emotional intensity’) and with some aspect of the domain of people (the aspect being in this case the effects of these emotions on people).

2) *Look for additional semantic/pragmatic evidence*

That is, we must look for evidence in conventional linguistic or other behaviour that the metaphor is really alive, that it is used in reasoning and in making inferences. This is done by finding evidence of the conventionalization of specific submappings (that is, of what Lakoff and Johnson call ontological or epistemic mappings). Simply by looking at example 16, we can find the linguistic expression of some of these specific submappings of the PEOPLE AS CONTAINERS metaphor (in fact the following account is a simplification¹⁷):

Some ontological submappings in example 16:

- the container is mapped onto the person (often to his/her body).
- the exterior of the container is mapped onto the visible, ‘outer’ parts of the person: in the example, one of these visible parts is highlighted, namely the eyes (the eyes are further understood metaphorically as smaller containers ‘in’ which love ‘lies’).
- the topological centre of the container is mapped onto the heart, which is conventionally regarded as the topological centre of the person and the body. Besides in this case it is also regarded as an internal container for emotions, in fact, as the typical inner container for emotions¹⁸.

¹⁷ Because, for instance, we should add the epistemic mapping that the image-schematic container mapped onto the person and his body in this metaphor can be opaque or transparent (cf. *He is transparent. You can see through him* i.e. it is easy to know what he means). When it is opaque, its opaque, visible boundaries are mapped onto the opaque, but visible, outer parts / boundaries of the body. In containers with opaque boundaries, only these boundaries, and not the interior, can be seen from the outside. In these lines from Romeo and Juliet the composite metaphorical expression regards the person as an opaque container, thus distinguishing between the body parts, like the heart, which are not accessible to an external viewer, and where emotional ‘content’ remains invisible, and the body parts, such as the eye, which are accessible to an external viewer, and through which the emotional ‘content*’ of the body can be accessed only indirectly.

¹⁸ THE HEART AS SEAT (OR CONTAINER) OF EMOTIONS metaphor is an independent metaphor from PEOPLE = CONTAINERS, though it is consistent with it; it is independent from it because it arises on the basis of the ‘affected heart function metonymy’ —one of a group of common metonymies in which the physiological effects of an emotion stand for the emotion itself. Some strong emotions are believed to cause a change in heart rate; this affected heart function is then often used, in an

- the content of the container (which is normally a physical entity, i.e. an object or a substance) is mapped onto an emotion (romantic love); this submapping of PEOPLE AS CONTAINERS is furthermore consistent with the metaphor EMOTIONS ARE PHYSICAL ENTITIES.

Some epistemic (or knowledge) submappings in example 16:

- The knowledge that a physical entity is inside a container when it is located on the inner side of its outer, visible boundaries (i.e. an object attached to the outer side of the walls of a container is not in it, but only next to it)

is mapped onto

the proposition that an emotion is in a person when it is 'located' on the inner side of her/his outer, visible boundaries (e.g. the skin, eyes, etc.), rather than on their outer side; that is, an emotion exists¹⁹ in a person when its manifestations are not restricted to his/her visible parts (in this example, the eyes), but when they seem to lie 'deeper inside'²⁰.

- The knowledge that the closer to the topological centre of the container the less likely an entity is to move out of it, the more stable its location is, and the more safely its existence can be ascertained

is mapped onto

the proposition that the closer to the topological centre of the body (in this case, the heart) an emotion is, the less likely is it to move out of it (that is, to disappear, due to the metaphorical link between location and existence explained in an earlier note), the more stable its location is, and the more safely its existence can be ascertained.

appropriate context, as an effect-for-cause metonymy for these emotions. Some of these examples are borrowed from Kovecses (1990): *My heart beat when I saw her* (love), *His heart was throbbing with pride* (pride), *His heart began to beat faster* (any kind of excitement). This metonymic link, together with the reapplication to the heart of the image-schematic notion of a container, leads to the metaphorical understanding of the heart as a bounded location for emotions.

¹⁹ Via the EXISTENCE IS LOCATION HERE metaphor (Lakoff 1987, 518), that underlies many expressions like *There's a baby on the way* (is about to be born), *the baby has arrived* (has been born), *He's left us* (has died), *The chances are gone* (no longer exist), etc.

²⁰ The difficulty of using different linguistic expressions to name the target domain attests to the real difficulty of conceiving of the relationship between people and their emotions in purely 'literal', non-metaphorical terms. The ontological target domain counterpart of the interior of the container is simply the 'interior' of the person. If we try and look for alternative ways of stating this target counterpart, we find that we cannot escape the metaphor ('the *place* where the person's *inner* feelings lie'? 'the *seat* of emotions'?). But what is the 'interior' of the person? The 'centre' of his/her body? Perhaps her/his 'inner self'? This last answer would be favoured by Taimy's (1988) force-dynamic conception of the divided self and by Lakoff's Divided Self Metaphor' in Lakoff (1993a), or by the metaphor THE BODY IS A CONTAINER FOR THE SELF also suggested by George Lakoff (included in the list provided in his Conceptual Metaphor Homepage, available through WWW).

- From the epistemic correspondences involving the existence of an emotion, we get this entailment: if an emotion exists, then, the belief that this emotion exists is correct; if it does not exist, the belief is incorrect. That is, Friar Laurence says that young men's love does not really exist because it is superficial, and implies that they all too often believe that they are genuinely in love, when they are simply infatuated with a girl.

We find evidence of at least some of these epistemic submappings in example 16 and in such examples as

19) **Heartfelt** thanks

I am **deeply** interested in the subject

and many others, where there is an implicit contrast between 'superficial' and 'deep' (authentic) emotions.

The following is a frequent epistemic submapping in the metaphor which, however, is not foregrounded in example 16:

- The knowledge that when the amount of the content goes beyond the capacity of the container, it exerts pressure on its walls and can overflow

maps onto

the knowledge that when the intensity of an emotion goes beyond the capacity for self-control it exerts pressure on the person and is overtly manifested (recall cases like *I overflowed with emotion*).

3) *Try and recognise the most general metaphorical mapping*

a) *of which the mapping under analysis can be a specific instance and/ or*

b) *which yields the mapping under analysis in combination with another metaphor.*

It is common for basic metaphors to be extensions or elaborations of more abstract mappings, or the result of combinations (or 'compositions' as Lakoff and Turner would call them). The PEOPLE AS CONTAINERS metaphor is itself one of the most elementary mappings, since it maps a basic image-schema (that of containers) to people. Unfortunately there is still a long way before the hierarchies and the structure of the network of metaphors underlying our conceptual system is established with some degree of confidence. Thus the present state of the theory complicates this third operation. Yet in this case there seem to be grounds for hypothesising that PEOPLE = CONTAINERS is a specific instantiation of the GREAT CHAIN metaphor (Lakoff and Turner: 171-181) and that the version of EMOTIONS = PHYSICAL ENTITIES in which the source domain is an entity is at least coherent with it, since in both of them the structural attributes and functional behaviour

of a lower form of being (an object like a container or an inanimate physical entity) are mapped onto the attributes and behaviour of higher forms of being (human beings)²¹.

EMOTIONS=ENTITIES is additionally coherent with one of the submappings of the dual of the very general EVENT STRUCTURE metaphor studied by Lakoff and his associates (Lakoff 1990, 1993b)²². Thus EMOTIONS=ENTITIES is at the same time a manifestation of two general metaphors: EVENT STRUCTURE and GREAT CHAIN.

This third operation is really the most difficult one to carry out, and its results are not always satisfactory. But one should at least try to describe the mapping at the highest superordinate level possible. As a matter of fact, I described in Barcelona 1995b one of the three linguistic instances of container metaphors in this example ('in their eyes'; the other two have people and the heart as targets) as an expression of the metaphor EYES = CONTAINERS FOR (SUPERFICIAL) EMOTIONS. Though this account of the metaphorical meaning of the example did capture some of the essential aspects of it (as we shall see later), it failed to relate this micro-mapping to the one that is really at work, namely, the PEOPLE = CONTAINER metaphor, which is the one that, together with the concordant metaphors that we

²¹ The GREAT CHAIN metaphor, as proposed by Lakoff and Turner (chapter 4) basically consists of a very abstract metaphor, the GENERIC IS SPECIFIC metaphor, whose mappings are guided or motivated by two entrenched cultural models, namely, THE BASIC CHAIN OF BEING and THE NATURE OF THINGS (which are themselves combined into 'the extended great chain'), and by the pragmatic maxim of quantity. There is no space here for a detailed exposition of each of these ingredients, but THE GREAT CHAIN METAPHOR explains a large number of mappings in which lower order forms of being and their attributes can be mapped to higher forms of being and their attributes, and viceversa: people as animals, animals as people, things as people, natural phenomena as animals; it also explains the mappings that cannot occur.

In the PEOPLE AS CONTAINERS metaphor we find that lower- order forms of being, their attributes and their usual behaviour or functioning are mapped onto higher order forms of being, their attributes and behaviour or their functioning: containers are mapped onto human bodies and people; location in a topological centre is mapped onto existence of an emotion, etc.

²² The notion of duality in metaphors is very recent. Let us try and illustrate it by means of the event structure metaphor:

The event structure metaphor is a very general metaphor that maps the domains of space and force dynamics to the domain of events. In the normal version of the metaphor, an entity that changes in some way (even emotionally) is regarded as moving to a location (thus states are regarded as locations): */fell in love* (change of state), *I am in trouble* (state). In the dual, the changing entity does not move metaphorically: it is regarded as a possessor of another object that does move; this object corresponds to the new state (thus states are regarded now as possessions): *I have plenty of love*, *I have trouble*, *I am full of hate*. So, the object possessed is the dual of the location in the other version, and the possessor is the dual of the changing entity. In the version in example 16 of EMOTIONS = PHYSICAL ENTITIES (in which the entity is a thing), emotions are objects that are located in the container, which can also be conceptualised as the possessor. Notice that we could rephrase the example as 'Young people *have* love not in their hearts but in their eyes'.

have mentioned and the metonymy that we are about to discuss, really indicates a contrast between ‘superficial’ (i.e. non-existent, hence insincere) and ‘deep’ (i.e. existing, hence sincere) emotions. Furthermore only through this metaphor can it make sense to contrast two possible locations for love, as the whole of the passage does: one ‘on the outside’ (the eyes), and another ‘at (or near) the topological centre’ (the heart), of the person-container.

4) *Describe the functioning of the metaphor in the particular context in which it is used.* This entails:

4-1) *observing whether or not some specific submappings of the metaphor are highlighted at the expense of others*

and

4-2) *observing whether or not the linguistic expression of the metaphor is itself metaphórico-metonymically complex.*

As for the specific submappings, we have already seen that only the epistemic submappings that highlight the issues of the existence and intensity of the emotion are foregrounded in example 16, but not other possible submappings like the one focusing on the control of one’s emotions, which is highlighted, for example, in the first and the last sentence on the list in 17 above.

As for the metaphórico-metonymic complexity of the linguistic expression, we must study whether the expression manifests more than one metaphorical mapping, and whether it also manifests one or more metonymies. The expression under analysis is metaphorically complex because we find in it, first of all, a composition of EMOTIONS=PHYSICAL ENTITIES (“Young men’s *love* then *lies*”), with PEOPLE = CONTAINERS (“then *lies*, not *in* their hearts but *in* their eyes”). We additionally find a composition of this common composite metaphor (PEOPLE ARE CONTAINERS FOR THE EMOTIONS WHICH ARE PHYSICAL ENTITIES) with, on the one hand, HEART = CONTAINER FOR EMOTIONS (“*in* their hearts”) and with EYES = CONTAINERS FOR EMOTIONS (“but *in* their eyes”), on the other hand. And the metaphorical entailment in that young people often deceive themselves about their feelings, is possible thanks to the purely *conceptual composition* of the composite metaphor PEOPLE = CONTAINERS FOR EMOTIONS WHICH ARE PHYSICAL ENTITIES with EXISTENCE IS LOCATION HERE (or the reverse: non-existence is viewed as absence from a location).

The passage furthermore activates a common metonymy which contributes in an important way to its meaning, as we shall see presently. Therefore, the whole of example 16 is, as is usually the case, metaphorically and metonymically complex.

These are the steps and the subordinate operations that are suggested to hypothesise one or more metaphors in a given linguistic expression. If the metaphor to be characterised is sufficiently documented in the literature on metaphor we may skip step one (“observe where the mapping takes place”) and

operations 1 and 2 (“look for additional conventional linguistic expressions / additional semantic and pragmatic evidence”) of step 2. The characterisation step would then reduce to operation 3 (“establish the most general type, the most abstract metaphor instantiated by the one hypothesised”) and operation 4 (“describe its functioning in the particular context...”) ²³.

STEPS SUGGESTED TO IDENTIFY CONVENTIONAL METONYMIES

Step 1: Observe where the mapping takes place.

In particular make sure that the hypothesised mapping is *within* the same domain. This is what happens in example 16. In this example, *eyes* stands metonymically for *an unspecified kind of ocular behaviour*, that is, an activity in which a person uses his/her eyes. The metonymised expression (*eyes*) of itself does not specify the exact kind of ocular behaviour for which its primary meaning stands. Only the context makes this clear. In this example, the types of behaviour in which young men engage by means of their eyes are crying and, perhaps, looking lovingly at their sweetheart. The context also specifies that these kinds of behaviour are caused by love, not by real romantic love, but by unrequited ‘superficial’ love. Friar Laurence seems to be saying that young men’s love never goes beyond the enraptured contemplation of the object of love or the crying over being rejected.

Love, like some other emotions, is conventionally thought to have a number of behavioural effects on the person affected: the lover tries to be close to the object of love, uses tender language to speak to or of that person, etc. Engaging in some kind of loving ocular behaviour is just one of these behavioural effects (when you are in love with someone you are supposed to look at her/him tenderly, or with shiny eyes, etc.). But there can be other kinds of ocular behaviour caused by love: for example, if your love is unrequited, you may, as in the case of Romeo’s unrequited love for Rosaline, engage in a different kind of ocular behaviour, like crying, keeping your eyes looking downwards, etc.) ²⁴

Both the eyes and the kinds of behaviour with which they can be conventionally associated, are in the same experiential domain (the domain of

²³ In some cases, even operation 3 may have been carried out by other linguists and be available in the literature, and occasionally, even operation 4.

²⁴ In fact, if one reads the rest of Friar Laurence’s speech, this ocular behaviour is actually that of tear-shedding (“Jesu Maria! What a deal of brine / hath washed thy sallow cheeks for Rosaline! / How much salt water thrown away in waste / To season love, that of it doth not taste”, etc). Note furthermore how these few lines effectively confirm the metaphorical implication, which was pointed out earlier, that young men’s love is often, besides non-existent (*love that of it does not taste*), a mere illusion (*thrown away in waste*).

the eyes). We might call the metonymy that involves *eyes* in example 16 EYES FOR OCULAR BEHAVIOUR, but if we consider that displaying ocular behaviour is just one of the functions or the uses to which the eyes can be put, perhaps we should recognise the mapping as a special case of the more general metonymy EYES FOR FUNCTION OF THE EYES. In the metonymy, the eyes in fact stand for one of their *functions*. At the same time, it is this function that is conceptually highlighted (and referred to), rather than the general domain of the eyes itself. The functions of the eyes can be, on the one hand, seeing, tear-shedding, or blinking., which, not being fully controllable by subjects, cannot be said to constitute instances of behaviour, but mere physiological/psychological processes or responses to stimuli: blinking at a sudden flash of light, or tear-shedding due to some irritant substance applied to the eye. Looking, winking, crying (crying because of sadness), on the other hand, are instances of behaviour because these actions can in principle be controlled by subjects (although in the case of crying it is not always easy to decide to what extent a person is capable of controlling this emotional response to a depressing event). The eyes can metonymically stand for either type of functions. An example in which the eyes would be metonymically mapped onto their physiological functions, but not onto their behavioural functions would be *John has good eyes*, uttered in a context in which this sentence would mean that John's eyesight is good.

Step 2: *Characterise the metonymy in precise terms.*

We will carry out the same operations as with metaphors:

1) *Look for additional conventional linguistic expressions of the metonymy.*

That is, look for some other examples

a) in which a linguistic expression of the source domain appears in a grammatically acceptable combination with a linguistic expression of the target domain,

and/or

b) in which the source domain expression, in an appropriate context, must or at least can be interpreted in the target domain, that is, metonymically (again, Croft *op. cit.* suggests some interesting rules as to the kind of elements in a syntactic composition that will be interpreted metonymically).

The second requirement is a necessary requirement.

The requirements are thus the same as those for metaphorical expressions.

As we have said just a few lines earlier, the eyes can stand for two kinds of ocular functions: non-behavioural and behavioural functions. This could in principle yield two series of instances of the metonymy, that is two series of *submetonymies*-, EYES FOR SEEING, EYES FOR TEAR-SHEDDING, etc. (non-behavioural),

or EYES FOR LOOKING, EYES FOR CRYING, etc. (behavioural). We have also seen that in example 16 the behavioural rather than the non-behavioural submetonymies are instantiated, specifically EYES FOR CRYING and EYES FOR LOOKING (in a special manner). The first of them is obvious in the lines following example 16, where Friar Laurence makes explicit reference to Romeo's crying (see note 24). The other submetonymy is less obvious, but it is also a possible reading if the context of the whole play is taken into consideration. The Friar, later in the scene, scolds Romeo because his love "did read by rote, that could not spell", which is paraphrased by the editor, T. J. B. Spencer (1967, 214), as "your notions of love were like those of someone who could recite words of a text learnt by heart without actually being able to read the words"; that is, Romeo's love of Rosaline is simply limited to external manifestations, among them, looking tenderly at the object of love. In the next scene Mercutio criticises Romeo in II.4.39-40 for having loved Rosaline in the Petrarchan way, that is, with exaggerated manifestations of love. Of course, among these manifestations is that of looking tenderly at the object of love. In fact, the conventionalisation in English of this second submetonymy is manifested by a much larger number of common linguistic expressions (see below) than the submetonymy in which the eyes stand for crying. Therefore we shall pay more attention in the ensuing paragraphs to the characterisation of the submetonymy where *eyes* points to loving ocular behaviour than to the submetonymy where it points to crying.

It is relatively easy to find additional conventional linguistic evidence of the existence of the submetonymy pointing to loving ocular behaviour. Many of the figurative uses of *eye* that are registered in standard dictionaries are actually based on a metonymy highlighting 'looking'. Then the specific mapping on to '*loving looks*' is easy to convey with the help of the discourse context, as in the sentences in example 20 (the first two sentences are borrowed from Kovecses 1986, 1991; I have added the minimal contexts in brackets):

20) He *could not take his eyes off her* (because he liked her)

Love showed in his eyes

He was *telling you with his eyes* (that he is madly in love with you)

He *feasted his eyes on her* (because he finds her so attractive)

Her *eyes belied her words* (because she really love you)

He was *making eyes at Jenny*

Some of the italicised expressions are registered as idioms in the entry for 'eye' in many standard dictionaries, and *make eyes (to)* is registered as specifically denoting loving ocular behaviour. In the italicised expressions in the other examples in 20, *eyes* eventually gets its more specific metonymic reading as '*loving looks*' through the discourse context, which selects 'love' as the entity causally connected with this way of looking. Yet even before getting to this

specific metonymic reading, we find in all of the sentences in 20 an expression of the source domain (*eyes*) in combination with expressions that have to be interpreted, either literally or metaphorically²⁵, in the target domain of behaviour (*could not take off, showed, was telling, feasted, belied, was making*), since they refer to a relatively specified kind of behaviour (which is manifested by means of the eyes). *Not be able to take one's eyes off someone* refers to a kind of ocular behaviour in which a person is irresistibly driven to look insistently at another person. *He was telling you with his eyes* evokes a kind of behaviour in which an agent communicates non-verbally by means of his eyes (i.e. by engaging in a certain kind of ocular behaviour). The sentence could approximately be paraphrased by 'He was telling you by looking at you in that way'.

The important thing is that the source domain term in the examples (*eyes*) must or can be interpreted metonymically as referring, rather than to the eyes themselves, to the notion of ocular behaviour. In all of the sentences in 20, *eyes* actually highlights of itself a relatively unspecified behaviour with the eyes. This relatively unspecified behaviour may consist of looking at someone in a certain way (as in the first, third and fourth sentences), of adjusting the retina and the eye muscles in a certain way (as in the second and fifth sentences), etc. The specific kind of ocular behaviour is highlighted by the target domain terms. Thus in the first sentence, *could not take* o#highlights the specific kind of look, which, caused by an irresistible force, is an *insistent* look; in the third sentence, *was telling* specifies that he looked at you in a *meaningful* way; in the fourth sentence, *feasted* specifies that the behaviour, besides being insistent, caused *pleasure* to the looker; in the second and sixth sentences, *showed* and *was making* specify that the adjustments of his retina and his eye muscles expressed the joy, the tenderness, or other *attitudes* typically associated with love; and in the last sentence, *belie* signals a *lack of correspondence* between these ocular adjustments and her words²⁶.

The submetonymy where the eyes stand for crying is hardly if at all represented in the conventionalised lexical senses of the lexeme 'eye', and thus it is not so easy to find common phrasal, clausal or sentential manifestations of

²⁵ As a matter of fact the target domain terms in the first five sentences are at the same time highly metaphorical. For example the first one is an expression of the metaphor SEEING = PHYSICAL CONTACT, the second ones manifests PEOPLE = CONTAINERS and EMOTIONS = PHYSICAL ENTITIES, the third and fifth one map language onto communicative ocular behaviour, and the fourth one reflects THE OBJECT OF DESIRE (in this case the object of love) = APPETISING FOOD (Cf. *She is quite a dish*).

²⁶ The preceding two paragraphs are not to be taken as advocating a strictly compositional view of linguistic meaning. In fact, for instance, both *could not take off* and *eyes* (and not only *eyes*) jointly and inseparably yield the general metonymic reading 'unavoidable insistent behaviour by means of the eyes'. This reading is arrived at in a holistic, gestalt-like manner, but *eyes* highlights the body part aspect of the inference, and *could not take off* highlights its behavioural aspect.

it. I looked up the lexemes 'cry' and 'eye' (both as nouns and as verbs) in a number of recent editions of standard thesauruses and dictionaries (Brown (1993), Chapman (1992), Gilmour (1995), Green (1986), Urdang (1991)). The closest conventionalised metonymic near synonyms for 'cry' that I was able to find were expressions like *be with watery eyes*, *be with brimming eyes*, *be with eyes suffused in tears*. Yet in these expressions the word *eyes* does not refer metonymically by itself to a relatively unspecified kind of ocular behaviour. It is only the complex concepts evoked by the whole of those idiomatic expressions that stand metonymically, not for crying but for tear-shedding. Of course they can also stand indirectly for crying. In *Mary has watery eyes* the prima facie metonymy is EFFECT (the wet eyes) for CAUSE (having shed tears): the state of her eyes tells us she has been shedding tears. However, in some contexts, this sentence could also mean that she is about to cry, or that she actually is or has been, crying. But this would be a further metonymic reading in which tear-shedding itself stands for crying. In fact this is what happens in example 16: *eyes* actually (and exceptionally) stands itself for tear-shedding, and not directly for crying. The lines following immediately refer metaphorically to the tears ("salt water") that had bathed Romeo's face, but readers make an immediate automatic metonymic extension from 'tear-shedding' to 'crying for sorrow', that is, to ocular behaviour, prompted by Friar Laurence's later words (that make it clear that Romeo had cried for his disdainful lady; see note 24), and helped by their knowledge that Romeo had been rejected by Rosaline.

As for the lexeme 'eye' (both as noun and as verb) I found no sense and no near synonym of it whose literal meaning belonged to the domain of crying, or for that matter, to the domains of blinking, or winking, or eye-rolling. All of this is a clear indication that the domain of the eyes is not institutionalised as a metonymy for these domains.

The difference then between the two submetonymies is that the one mapping the eyes on to the behavioural domain of looking, and from here, on to the domain of loving looks (although in example 16 this is only a legitimate additional reading), is more profusely represented in conventional language, as is attested by 20, and is furthermore a more direct metonymy: we can read directly '(way of) looking' from *eyes*, at least in the second, third and fifth examples in 20, with very little help from the context. The context would of course specify the precise way of looking (insistently, glowingly, etc.) and/or the cause for that way of looking (love in example 20). The submetonymy to crying, on the other hand, is less commonly found in conventional language, and in any case, the metonymic shift from the eye domain to the behavioural domain of crying is not direct, but only via the physiological domain of tear-shedding and with additional indispensable recourse to contextual information.

2) *Look for additional semantic/pragmatic evidence.*

That is, we must look for evidence in conventional linguistic or other behaviour that the metonymy is really active, that it is used in reasoning and in making inferences. This is done by finding evidence both that the metonymy belongs to a general type - operation 3 below - and that it is somehow conventionalised on the basis of a body of social belief and /or on the basis of specific features of the domain or the situation.

In the case at hand, the conventionalisation is based both on a body of belief associated with the eyes, and on the specific characteristics of the ocular domain. The behaviours conventionally associated with the eyes are, in fact, determined by the folk-theoretical functions of the eyes and by the conventional attributes of these functions. The folk theoretical functions are uses like seeing, blinking, winking, eye-rolling, tear-shedding, crying (which can be characterised, in one of its senses, as tear-shedding caused by sadness), or looking (which can be characterised as seeing intentionally). The folk theoretical attributes (manners, causes, circumstances in general) of these functions can be varied and they are often specified contextually: looking *lovingly*, *with hate*, *insistently*, etc.

If we look into the specific characteristics of the ocular domain, the functions and their attributes constitute a naturally salient subdomain. This salient subdomain, this specific combination of function and attribute is what is highlighted by each different metonymic use of 'eye'. In *Her eyes made me shudder* the speaker has perhaps highlighted by means of *eyes* (in an appropriate context) the notion of 'looking with hate'. In the examples in 20 above, the metonymies highlight various *manners* of looking (insistently, denoting pleasure...), and, with the aid of either the immediate or the larger context, the *cause* for the look (love). Thus we have in these sentences a metonymic chain stretching from eyes to function of the eyes (looking) and to the manner attribute of the function (insistently, etc.), and to its causal attribute (romantic love).

In example 16, however, the highlighted function and attribute are 'crying for (unrequited) love'. But, as we said above, this version of the EYE FOR FUNCTION metonymy is not as fully conventionalised lexically and in everyday language as the submetonymies with looking as target. In fact, of the functions of the eyes, only seeing and (manner of) looking are institutionalised as target domains in metonymic mappings from the eyes, and this is evident in the institutionalised lexical senses of 'eye' and in everyday expressions. This is perhaps so because seeing and looking are the most salient functional subdomains of the eyes, and the most likely candidates for metonymic highlighting, together with the shape of the eye (a metonymic highlighting of which underlies metaphorical expressions like *The eye of the needle*).

A conclusion then is that the version of EYE FOR FUNCTION with crying as target is not conventionalised. It is just a potential, only occasionally instantiated, metonymy, whereas that with (manner of) looking as target is fully conventionalised.

3) Try and recognise the most general metonymic mapping

- a) of which the mapping under analysis can be a specific instance or
- b) which yields the metonymic mapping under analysis in combination with another metonymy.

As with metaphors, but even more seriously here, we find ourselves rather unassisted by the specialised literature. The uncovering of the network of general metonymies underlying our conceptual system is a neglected area of research: very little has been done yet in this direction²⁷. The metonymy EYE FOR EYE FUNCTION/ATTRIBUTE in the example cannot even be included in any of the types of metonymic models suggested by Lakoff (1987, 85-90): social stereotypes, ideals, paragons, generators, etc. Anyway it seems that this metonymy is a particular instance of the general metonymy A BODY PART STANDS FOR ITS TYPICAL FUNCTIONS AND FOR THE ATTRIBUTES CONNECTED WITH THEM, as example 21²⁸ seems to demonstrate:

21) He has a good hand

(hand for manual skill - an attribute connected with the primary function of the hands, which is that of manipulating objects).

John has a good head

(‘Head’ for ‘intelligence’, an attribute connected with the folk theoretical main function of the head, i.e. thinking).

John has good legs. He can walk five miles without a stop

(‘Leg’ for ‘walking/ running capacity’, an attribute of the function of the legs, i.e. walking).

They have good eyes

(‘Eyes’ for ‘sharpness of vision’, an attribute of the main function of the eyes, i.e. seeing).

²⁷ However, a workshop on conceptual metonymy held in 1996 at the University of Hamburg and organised by Gunter Radden and Klaus-Uwe Panther offered some important results, which will appear in Panther and Radden, 1999.

²⁸ On the other hand, perhaps this metonymy can be further regarded as an instance of the WHOLE FOR PART general class of metonymies, if we consider typical attributes and functions as a part of the domain of body parts.

4) Describe the functioning of the metonymy in the particular context in which it is used.

This entails:

4-1) observing whether or not some other subdomains of the common domain have been highlighted and

4-2) observing whether or not the linguistic expression of the metonymy is itself metaphoric-metonymically complex.

The second subordinate operation has already been performed alongside the analysis of the metaphors. We noticed then the complexity of the expression under analysis. The metonymy EYES FOR FUNCTION OF THE EYES (in either of the two versions that we have been considering here) interacts with the PEOPLE = CONTAINERS and EMOTIONS = PHYSICAL ENTITIES metaphors in example 16, but it does not arise conceptually within them: it is independent from them, since it can occur independently from them. In example 16 the primary metonymic reading points to tear-shedding. I think this version of the metonymy is independent from the two dominant metaphors, but perhaps not from the conventional metaphor where the eyes are regarded as containers: *be with brimming eyes*, *be with eyes suffused in tears*. In any case, this version of the metonymy is hardly conventionalised at all.

As for the additional metonymic reading of *eyes* in example 16 as ‘way of looking’, all the sentences in example 20, except perhaps for the second one (*Love showed in his eyes*), definitely attest to the conceptual independence of the metonymy from all the metaphors occurring in the lines from *Romeo and Juliet* reproduced in example 16. By asserting that the metonymy is conceptually independent from the metaphors I mean that in example 20, we do not necessarily have to take recourse to the PEOPLE = CONTAINER or the EMOTIONS = SUBSTANCE, etc. metaphors to be able to do a metonymic reading from the eyes to their function.

In the second sentence in that example (*Love showed in his eyes*), as in example 16, the metonymy is still independent from, but at the same time *consistent* with, the metaphors: if love shows in your eyes this may be because they are the outlet for the (radiant, overflowing, burning) love-substance inside you. And this potential articulation between the metaphors and the metonymy can be exploited overtly in a linguistic expression. This is what happens in example 16, where external loving ocular behaviour is contrasted with the lack of genuine feelings of love in the internal metaphorical seat of emotions, namely, the heart.

The first subordinate operation is more interesting. Normally metonymies can lead to other metonymies, so that, depending on the context and on the perspicuity of the analyst, we can often read off a chaining of several metonymies, all of them triggered off by the same linguistic expression. A highlighted

subdomain often constitutes a basis for the highlighting of other related subdomains.

We have already noted that *eyes* can evoke a full metonymic chain stretching from the functions of the eyes to some of the attributes of the functions, especially manner or cause (from 'eyes' to 'looking'; and from here, to 'looking insistently' and to 'looking insistently because of love'). But this chain could easily be supplemented by another chain if we moved to other functions and their attributes: the metonymy can also be from 'eyes' to 'seeing' and from this function to one of its attributes, namely the object of the function; in this case, from 'seeing', we would move to 'thing seen'²⁹. This chain, together with the knowledge of the dramatic context, would afford yet an additional metonymic reading of example 16, where *eyes* could also be interpreted as a reference to the purely visible features of the beloved, who, according to the conventional model of love (see Kovecses, all publications), is beautiful. In sum, 'eyes' also stands for 'those physical features of the object of love that come through the eyes' i.e., for 'the beauty of the object of love'. Thus an additional implication is that Romeo had only loved Rosaline for her beauty.

On the other hand, the general part-for-whole metonymy would take us from the chain leading to the behavioural domain of 'looking lovingly' (which is just one part of the set of behavioural effects of love) to all of the other conventional behavioural effects of love, and to the effects of love in general (both behavioural and physiological).

All of these additional inferences are consistent with Romeo's behaviour. He had displayed, just a few scenes earlier, several other behavioural effects of unrequited love (sleeplessness, unsociability) which are all epitomised by Friar Laurence with his reference to tear-shedding in the rest of his speech. But now Romeo has forgotten all about Rosaline. There does not seem to have been any basis for his love of her, other than an appreciation of her beauty, as he had explicitly declared in those earlier scenes, and his love had only been manifested in the conventional behavioural and physiological effects of love, and, when rejected, of unrequited love. There was nothing else 'inside'.

These are the steps and the subordinate operations that are suggested to hypothesise one or more metonymies in a given linguistic expression. As with metaphors, if the metonymy to be characterised is sufficiently documented in the literature we may skip step one ("observe where the mapping takes place") and operations 1 and 2 ("look for lexicogrammatical /semantic /pragmatic evidence") within step 2. This characterisation step would then reduce to operations 3 and 4.

²⁹ The metonymy 'seeing' for 'thing seen' (PERCEIVING FOR PERCEPT) is quite conventional. Cf. *She was a sorry sight, The lake is a wonderful view.*

Metaphorico-metonymic meaning of this example

Friar Laurence's words present Romeo's love for Rosaline as superficial love. It is a feeling that does not really come from 'inside', from the heart. Therefore it does not really exist. It only appears on the 'outside'. That is, it consists solely of the conventional behavioural effects of romantic love and romantic unrequited love (especially crying, loving ocular behaviour, unsociability) and of its physiological effects (lack of sleep, paleness). This superficial emotion is furthermore grounded solely on the appreciation of the physical beauty of his loved one.

On the other hand, this feeling is only a delusion. The shallowness of Romeo's love of Rosaline is brought into relief when he discovers Juliet.

Conclusions

This article has summed up briefly the cognitive notions of metaphor and metonymy and then pointed out and attempted to answer a number of problems with these notions. In connection with metonymy, we have suggested that it need not be referential and that a distinction must be drawn between conventional metonymies, on the one hand, and non-conventional metonymies, on the other hand, although there seems to be a continuum here rather than a clear-cut separation. In connection with metaphor, we have attempted to clarify the requirement that the source and the target domains must be in separate domains. This requirement means, it has been suggested here, that metaphorical mappings are only possible if a conscious ICM of the taxonomy of domains excludes source and target from each other. We have finally distinguished the conceptual interaction between metaphor and metonymy from their simple co-instantiation by a given expression. Once these definitional problems have been clarified, a methodology for describing the metaphorical and metonymic structure of a textual example has been laid out and applied to a case study. The methodology has proved useful as a proper way of focusing upon the various issues that have to be considered in a descriptive task of this kind: the kind of the mapping, the type of evidence that has to be used, the classification of the mapping as an instantiation of a more general mapping, the functioning of the mapping in the textual example (that is, which specific part of the mapping is at work), and the possible metaphorico-metonymic complexity of the textual example. The methodology has also enabled us to single out the areas where the theory has to be extended (the classification problem, especially with metonymies). One of the conclusions that can be drawn from this case study is the realisation that the

same figurative expression often activates or instantiates simultaneously more than one metaphor and/ or metonymy. The figurative reading depends in part on how much we want to 'read into' the example. But the methodology proposed here constitutes at once a filter against unsubstantiated readings and a prompt to formulate plausible readings as precisely as is possible in the present state of our knowledge of the metaphorical and metonymic systems of English.

References

- Barcelona, Antonio. 1986. "On the Concept of Depression in American English: A Cognitive Approach". *Revista Canaria de Estudios Ingleses*, 12:7-35.
- Barcelona, Antonio. 1989. "Modelos cognitivos metafóricos y metonímicos: la conceptualización de las emociones en inglés". In Fernández, Francisco (1989) (ed.), *Pasado, presente y futuro de la lingüística aplicada en España. Actas del 111 Congreso de la Asociación Española de Lingüística Aplicada*. Valencia: Secretariado de Publicaciones de la Universidad de Valencia.
- Barcelona, Antonio. 1992. "El lenguaje del amor romántico en inglés y en español". *Atlantis*, XIV 1-2: pages 5-27.
- Barcelona, Antonio. 1995a (unpublished). "Constraining the Notions of Metaphor and Metonymy within the Cognitive Theory of Metaphor". A paper presented at the III Conference of the European Society for the Study of English. Glasgow, September 8-12, 1995.
- Barcelona, Antonio. 1995b. "Metaphorical Models of Romantic Love in *Romeo and Juliet*". *Journal of Pragmatics*, 24-6. Special issue: Masako K. Hiraga and Joanna Radwańska Williams (eds). *Literary pragmatics: Cognitive Metaphor and the Structure of the Poetic Text*. December 1995. Amsterdam: North Holland. 667-689.
- Barcelona, Antonio (ed.). 2000a. *Metaphor and Metonymy at the Crossroads. A Cognitive Perspective*. Berlin and New York: Mouton de Gruyter.
- Barcelona, Antonio. 2000b. "On the Plausibility of Claiming a Metonymic Motivation for Conceptual Metaphor", In: Barcelona, Antonio (ed.), p. 31-58.
- Barcelona, Antonio. In press. "On the dominant notion of metonymy in cognitive linguistics. An analysis and a few modest proposals". In: Hubert Cuyckens, Klaus-Uwe Panther and Thomas Berg (eds.), *Motivation in Language: Studies In Honor of Gunter Radden*. Amsterdam: John Benjamins.
- Brown, Lesley (ed). 1993. *The New Shorter Oxford English Dictionary: On Historical Principles*. Oxford: Oxford University Press.
- Brugman, Claudia. 1990. "What is the Invariance Hypothesis?", in *Cognitive Linguistics*, 1-2, 257-67.
- Croft, William. 1993. "The Role of Domains in the Interpretation of Metaphors and Metonymies". *Cognitive Linguistics*, 4-4, p. 335-371.
- Chapman Robert L. (ed). 1992. *Roget's International Thesaurus*. New York: HarperCollins.
- Fillmore, Charles. 1982, "Frame Semantics", in Linguistic Society of Korea (ed), *Linguistics in the Morning Calm*. Seoul: Hanshin.

- Gibbs, Raymond W, Jr. 1994. *The Poetics of Mind. Figurative Thought, Language and Understanding*. Cambridge: Cambridge University Press.
- Gibbs, Raymond W Jr and Herbert L. Colston. 1995. "The Cognitive Psychological Reality of Image Schemas and their Transformations". *Cognitive Linguistics* 6-4: 347-79.
- Gilmour, Loma (ed). 1995. *Collins Thesaurus*. Glasgow: HarperCollins.
- Goossens, Louis. 1990. "Metaphonymy: The Interaction of Metaphor and Metonymy in Expressions for Linguistic Action.". *Cognitive Linguistics* 1.323-340 (also reproduced in Goossens *et al.* (1995)).
- Goossens, Louis, Paul Pauwels, Brygida Rudzka-Ostyn, Anne-Marie Simon-Vanderbergen, and Johan Vanparys. 1995. *By Word of Mouth. Metaphor, Metonymy and Linguistic Action in a Cognitive Perspective*. Amsterdam/ Philadelphia: John Benjamins.
- Green, Jonathan. 1986. *The Slang Thesaurus*. London: Elm Tree.
- Johnson, Mark. 1987. *The Body in the Mind: the Bodily Basis of Meaning, Imagination, and Reason*. Chicago: University of Chicago Press.
- Kovecses, Zoltan. 1986. *Metaphors of Anger, Pride and Love*. Amsterdam: John Benjamins.
- Kovecses, Zoltan. 1988. *Language of Love. Semantics of Passion in Conversational English*. Lewisburg: Bucknell University Press.
- Kovecses, Zoltan. 1990. *Emotion Concepts*. New York: Springer Verlag.
- Kovecses, Zoltan. 1991. "A Linguist's Quest for Love", in *Journal of Social and Personal Relationships*. 8: 77-97.
- Kovecses, Zoltan. In press. "The Scope of Metaphor". In: Antonio Barcelona, ed., p. 79- 92.
- Kovecses, Zoltan and Gunter Radden. 1998. "Metonymy: Developing a Cognitive Linguistic View", *Cognitive Linguistics*, 9-1: 37-77.
- Lakoff, George. 1987. *Women, Fire and Dangerous Things. What Categories Reveal About the Mind*. Chicago: Chicago University Press.
- Lakoff, George. 1990. "The Invariance Hypothesis: is Abstract Reason Based on Image-schemas?" *Cognitive Linguistics* 1-1: 39-75.
- Lakoff, George. 1993a. "The Internal Structure of the Self". A paper presented at the Annual Berkeley-UCSD Cognitive Linguistics Conference. October 1993. La Jolla, California.
- Lakoff, George. 1993b. "The Contemporary Theory of Metaphor" (in Ortony, Andrew (ed.) 1993 [1979] *Metaphor and Thought*. Cambridge: Cambridge University Press. 202-251
- Lakoff, George and Mark Johnson. 1980. *Metaphors We Live By*. Chicago: University of Chicago Press.
- Lakoff, George and Mark Turner. 1989. *More than Cool Reason: A Field Guide to Poetic Metaphor*. Chicago: University of Chicago Press.
- Langacker, Ronald. 1987. *Foundations of Cognitive Grammar. Vol. I: Theoretical Prerequisites*. Stanford: Stanford University Press.
- Langacker, Ronald. 1991. *Foundations of Cognitive Grammar. Vol. II: Descriptive Application*. Stanford: Stanford University Press.
- Mandler, Jean. 1992. "How to build a baby; II, Conceptual primitives". *Psychological Review*, 587-604.

- Panther, Klaus-Uwe and Gunter Radden, (eds). 1999. *Metonymy in Language and Thought*. Amsterdam, Philadelphia: Benjamins.
- McNeill, D. 1992. *Hand in Mind*. Chicago: University of Chicago Press.
- Radden, Gunter. 2000. "How Metonymic are Metaphors?". In: Antonio Barcelona (ed.), 93-109.
- Reddy, Michael J. 1979. "The Conduit Metaphor: A Case of Frame Conflict in our Language about Language". In Ortony, Andrew (ed.). (1993) (1979). *Metaphor and Thought*. Cambridge: Cambridge University Press. 284-324.
- Spencer, T.J.B. 1967 (ed.) *William Shakespeare. Romeo and Juliet*. Harmondsworth, Middlessex: Penguin Books.
- Sweetser, Eve. 1991. *From Etymology to Pragmatics. Metaphorical and Cultural Aspects of Semantic Structure*. Cambridge: Cambridge University Press.
- Taimy, Leonard. 1988. "Force Dynamics in Language and Cognition". *Cognitive Science* 12:49-100.
- Taylor, John. 1995 [1989]. *Linguistic Categorisation*. Oxford: Clarendon.
- Turner, Mark. 1987. *Death is the Mother of Beauty. Mind, Metaphor, Criticism*. Chicago, etc.: University of Chicago Press.
- Turner, Mark. 1990. "Aspects of the Invariance Hypothesis", in *Cognitive Linguistics*, 1-2, 247-257.
- Turner, Mark. 1991. *Reading Minds. The Study of English in the Age of Cognitive Science*. Princeton, N.J.: Princeton University Press.
- Ungerer, Friedrich and Hans-Joerg Schmid. 1996. *An Introduction to Cognitive Linguistics*. London: Longman.
- Urdang, Laurence. 1991. *The Oxford Thesaurus. An A-Z Dictionary of Synonyms*. Oxford: Clarendon Press.