

# THE CONCEPTUAL AND THE LINGUISTIC FACTORS IN THE USE OF METAPHORS

(Os Fatores Conceituais e os Lingüísticos no Uso de Metáforas)

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*ABSTRACT: The purely cognitive representation of metaphor poses some difficulties. It is proposed that these difficulties can be tackled down in the alternative view proposed in this article, according to which there is an interdependence of conceptual and linguistic factors in the use of metaphor. Some linguistic regularities are identified in the interpretations of some types of metaphor, such as personification, and is argued that a richer description of these types of metaphor is obtained if the linguistic knowledge and semantic compositionality of topic and vehicle are taken into account.*

*KEY-WORDS: metaphor, personification, semantic knowledge, lexicon.*

*RESUMO: A representação puramente cognitiva da metáfora apresenta alguns problemas. Propõe-se que essas dificuldades podem ser superadas pelo enfoque alternativo apresentado neste artigo, de acordo com o qual há uma interdependência de fatores conceituais e lingüísticos no uso da metáfora. Identificam-se algumas regularidades lingüísticas na interpretação de certos tipos de metáforas, como a personificação, e tenta-se mostrar que uma descrição mais rica desses tipos de metáfora pode ser obtida se o conhecimento lingüístico e a composicionalidade semântica de tópico e veículo são levados em conta na descrição.*

*PALAVRAS-CHAVE: Metáfora, personificação, conhecimento semântico, léxico.*

## 1. Interdependence of conceptual and linguistic factors in metaphor

In this paper, I will present two hypothesis concerning metaphors. Firstly, I argue that conceptual and linguistic factors are interdependent in

the production and interpretation of metaphors. Secondly, I consider that metaphor, at least in some cases, involves a compositional process. Metaphors involve the ability of perceiving or apprehending new concepts or new aspects of old concepts, and in this sense they are indisputably a conceptual process. Metaphors involve new arrangements of the conceptual structure into which our language is framed. But the question is: how are we capable of producing and interpreting these new concepts in the structured frames of our language? Or what mechanisms do we have at our disposal for the production of metaphor?

A possible answer to these questions is to consider that metaphor involves an ability that goes beyond language. It would be connected to a larger cognitive mechanism by which different conceptual domains can be put together in a single representation. This answer imposes the logical priority of the conceptual factor over the linguistic domain.

This position is held by, among others, Lakoff and Johnson (1980), who made a distinction between metaphor as a conceptual mapping and metaphor as a linguistic expression, which corresponds to the linguistic coding of the conceptual process. The conceptual metaphor underlies most of our use of metaphorical expressions, whereas the linguistic coding is supposed to be only the final stage in the construction of metaphors, with no bearing on the conceptual mapping in which the metaphor is grounded. The conceptual factor imposes itself upon the linguistic factor.

This purely cognitive representation of metaphor, however, faces a couple of difficulties. My claim is that in the alternative view proposed here, according to which there is an interdependence of conceptual and linguistic factors in the use of metaphor, some of these difficulties can be tackled down. I will consider three difficulties faced by the purely cognitive representation of metaphor and how they are avoided in the alternative view presented here.

First of all, the cognitive representation of metaphor presupposes that the cognitive domains involved in metaphors are structured a priori, independently of the linguistic representation. The priority of the conceptual over the linguistic in the mapping between different conceptual domains imposes the view that these domains are organized independently in the mind.

For instance, in the analysis of a metaphor like (1) below, Turner (1987) assumes that the biological relation provides the grounds for the kinship relation of 'mother':

- (1) Death is the mother of beauty.

That is to say, the interpretation of this metaphor would be dependent on a conceptualization prior to language, namely, a biological representation. The experiential basis for this metaphor would be mothers giving birth to their children, and taking care of them. However, it is easy to show that kinship relations are determined not in biological terms, but derive from complex cultural systems, organized through language. As Leezenberg (2001:144) puts it, kinship "notions do not emerge from mere physical experience, but require an intermediate level of socially organized and therefore linguistically communicated experience."

On the other hand, if the interdependence of conceptual and linguistic factors is assumed, there is no need to postulate two steps in the interpretation of metaphor, the first one purely cognitive, and the second one consisting of the verbal expression of the conceptual mapping. From my own view, the linguistic knowledge interferes both in the organization of literal concepts (such as kinship terms) and in the figurative use of them.

A second difficulty faced by the purely cognitive representation of metaphor is that this theory allows that any property or element of a conceptual domain can be mapped onto another domain, resulting in a metaphorical expression. If this is so, how can we explain that just one single property of a domain may be relevant to a metaphor? Consider for instance the metaphor below, which characterizes a kind of shampoo in the Brazilian cosmetic industry:

- (2) Shampoo disciplinador (a disciplining shampoo).

In this metaphor, we have two different conceptual domains: a physical domain in which we have the shampoo and a human domain in which we have people enforcing discipline on others. Not all properties of the physical domain are relevant to the interpretation of this metaphor of personification. Only the function of the shampoo is important to the metaphor (a disciplining shampoo is a shampoo whose function is to *discipline* your hair), and the mapping occurs not between the two domains taken as bunches of properties, but between specific properties of the two domains.

Besides, these relations are regular and common in many cases of personifications, where the functional role is the prominent one (other examples will be given in the next section). It is not at all clear if such regularities in the interpretations of metaphor could be assigned to the conceptual representation alone, without any reference to the linguistic knowledge.

A third difficulty faced by the purely cognitive representation of metaphor is that it disregards conventional usage in the creation of metaphor. As the conceptual metaphor is supposed to occur in the mind, conventional linguistic usage, specific of certain contexts, is considered to be marginal. Consider for instance the metaphor below, from Brazilian Portuguese:

- (3) João é um galinha. (literally, John is a hen).

In Brazilian Portuguese, it is a conventional usage to create metaphors grounded on the alleged promiscuous sexual behavior of animals. Many other properties could be associated to an animal, as shape, habits, tendencies, etc, but it is only by means of convention that, in metaphors like (3), the sexual behavior is chosen to produce the metaphor. The stereotyped contexts in which these metaphors are used force the sexual and normally offensive interpretation of these expressions.

It is difficult to see how these metaphors could be derived strictly in conceptual terms, since it depends upon the usage and the social context, linguistically expressed. The assumption of the interdependence of the linguistic and conceptual factors in the use of metaphors renders possible the analysis of metaphors like (3) in terms of linguistic convention.

Another interesting point concerning this kind of metaphor is the nature of the property “a hen is sexually promiscuous”, upon which the metaphor is grounded.

Surely, this property is not a necessary trait of the definition of *hen*. It is a stereotype, in Putnam’s terms (Putnam, 1975). Whatever nature (conceptual, social or inferential) is attributed to a stereotype (cf. Marconi, 1997:26-28), it is noteworthy that conventional metaphors like (3) reinforce the stereotype. That is to say, the metaphor is grounded on the stereotype and forces, at the same time, the activation of it. The conceptual and the linguistic interact and reinforce each other.

My claim is that the three difficulties pointed out here can be surmounted if we accept the hypothesis of the interdependence between the

conceptual and the linguistic factors in the use of metaphors. For instance, the personification of artifacts involves not only the conceptual frame of the relevant domain, but also the linguistically codified information that artifacts have always a specific functional role. This functional role directs and organizes our apprehension of metaphors involving artifacts, as in (2). The conceptual mapping is filtered out by the linguistically organized meaning. In another words, the structured lexicon offers, for the interpretations of metaphors, more fine-grained distinctions of meaning than would be possible by the mere consideration of the conceptual domains alone.

## 2. Lexical regularities in the use of metaphors

Two kinds of regularities in the interpretation of metaphors are shown in this section. Firstly, consider the following examples, from Brazilian Portuguese:

- (4) porta estressada (stressed door)
- (5) carro temperamental (temperamental car)
- (6) disquete autista (autistic floppy disk)

Like example (2) considered above, examples (4)-(6) involve a combination of an artifact in the position of the head noun with an adjective indicating a human property. We are bound to interpret these metaphors as applying to the functional role of the artifacts. A stressed door is a door that opens and closes abruptly, a temperamental car is a car that sometimes runs well and sometimes does not, and an autistic floppy disk can not be read.

The first point to be examined is how we perceive the metaphorical mapping in these examples. There is a source domain (psychological properties of human beings) which is projected into the target domain (artifacts), but the resulting of this mapping is directed by the semantics of the head of the noun phrase. In another words, the functional role forces the interpretation upon the way the artifact works, and establishes the possible analogies between these ways of functioning and human behaviors. The metaphor of personification has clear bounds, imposed by the semantics of the head noun. For instance, we do not attribute an inner life to the floppy disk in (6). Our attention is driven to external aspects of artifacts, and it is the way the artifacts achieves its function which is taken metaphorically as human.

The functional role of artifacts is available through linguistic knowledge. The fine-grained distinction of meaning which separates the objects into two different ontological classes, the artifacts and the non-artifacts, renders possible the interpretations of metaphors like (4)-(6).

This analysis has two consequences that are in conflict with the conventional view of cognitive semantics. First, the source domain is supposed to be much more structured than the target domain, but it is difficult to say that artifacts like shampoo, door, car and floppy disk pertain to an unstructured conceptual domain. All these objects have specific shapes, materials and functions well known to the speakers. The role of the metaphor in this case is not to bring new knowledge to unstructured conceptual domains, but to make analogies across different domains already structured. Authors like Ortony (1988) and Murphy (1996) have already remarked that the target domain (topic) can be, in some metaphors, more structured than the source domain (vehicle).

The second point to be noted is that the traditional view of cognitive semantics assigns to metaphor the role of organizing our knowledge and perception of reality in conceptual terms, the linguistic form having no power to intervene in the organization of this knowledge. But the picture that comes out of my analysis is very different. The conceptual mapping is perceived through the glasses of linguistic structure. For instance, the personification of artifacts is interpreted, in many cases, as an analogy between the ways an object performs its function and the ways a human being acts under different circumstances.

However, the combination of a head noun designating an artifact with an adjective indicative of a human property do not always falls under the functional interpretation proposed above. Consider for instance the example below:

(7) Alimento ético

As I have remarked in Moura (2002:31), this is a case of selective binding (Pustejovsky, 1995): the moral adjective *ético* (*ethical*) activates and modifies an event which is contained in the semantic representation of *food*. *Alimento ético* (ethical food) is food which is produced according to reportedly fair ecological and economic conditions.

*Selective binding* is a semantic device which treats the adjective as a function and applies it to a particular quale<sup>1</sup> within the noun that it is in composition with. This device creates new lexical meanings by the activation of some features (qualia) contained in the lexical representations of the words being modified. The qualia are inherent to our semantic knowledge and they “drive our basic understanding of an object or a relation in the world. They furthermore contribute to (or, in fact, determine) our ability to name an object with a certain predication” (Pustejovsky, 1995: 85).

The following examples of selective binding are given in Pustejovsky (op. cit., 44):

- (8) A fast typist
- (9) Rackets is a fast game

Pustejovsky assumes that the adjective *fast* is polysemous, being able to modify individuals (as in (8)) or events (as in (9)). This polysemy is brought about in context, since the interpretation of *fast* depends on the semantics of the noun it modifies. For instance, *fast typist* is interpreted as ‘a typist who performs the act of typing quickly’, but this interpretation depends crucially on the semantics of *typist*. So, the adjective *fast* can modify an individual if the semantic representation of the head noun contains an event. In (8) the selective binding makes this event available, by activating the functional role of the noun *typist*: ‘the function of a typist is to type’. In other words, the speaker can interpret the application of the adjective *fast* to individuals if the lexical representation of the head noun contains some event. If this event was not available, there would be a semantic clash, since an event (*fast*) would be predicated of an individual (*typist*).

In the case of (7), I suggest that the adjective *ético* (ethical) applies to an event contained in the lexical representation of the head *alimento* (food). This representation must indicate that someone has produced the food. In this case, *food* would be an artifact, not a natural class. In (07), the adjective *ético* (*ethical*) modifies, by selective binding, the event of someone producing food, not the food itself.

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<sup>1</sup> Quale is the singular form of qualia (cf. Pustejovsky, 1995)

It is important to note that maybe (7) is not a metaphorical expression, even if it puts together two different conceptual domains. Maybe *alimento ético* (ethical food) indicates a denotational class of food and not a metaphorical property. Anyhow, similar semantic combinations (artifacts plus human qualities) allow different interpretations. In the case of (4)-(06), the functional role is prominent; in the case of (07), the origin (the way by which the artifact has been produced) is the semantic trait selected for the interpretation.

Another interpretation of (7) is as a metonymy of the type PRODUCT FOR PROCESS. But this analysis does not help in the identification of the metaphoric nature of (7), since there are many metonymy-based metaphors (cf. Barcelona, 2003).

A second example of lexical regularity in the use of metaphor is shown below, in the sentences from Brazilian Portuguese:

- (10) João é azedo. (John is sour).
- (11) João é amargo. (John is bitter).
- (12) João é doce. (John is sweet).
- (13) João é escorregadio. (John is slippery).

A linguistic regularity can be noted in the use of all these dead metaphors. Properties applying to substances or mass terms are used to predicate over the temperament or mood of human beings. By contrast, this kind of properties does not predicate over intellectual characteristics of persons or their physical appearance.

Let's call reification the conceptual metaphor that presents a person as the target domain and, as the source domain, a property or a name concerning non-humans entities. My hypothesis is that we need a more fine-grained semantic distinction in order to represent the interpretation the speakers assign to such metaphors. We have to define the semantic classes of the noun or adjective pertaining to the source domain in order to ascribe an interpretation to the conceptual metaphor. In this paper I propose the following distinction: (a) if the source domain is given by an adjective applying to substances or mass terms, the interpretation is driven to the temperament or mood of human beings (the target domain); and (b) if the source domain is given by an artifact, the interpretation is driven to the way the person in the target domain performs a task, or to her/his physical appearance.



Examples (10)-(13) exhibit condition (a), whereas, on the other hand, example (14) below exhibits condition (b):

(14) *Maria é uma máquina.* (Maria is a machine).

This metaphor is used to indicate that either Maria is very effective in her activities, or that she is gorgeous. Only a specific context can define one or the other interpretation, but neither interpretation of this metaphor is supposed to be connected to Maria's temperament or mood.

These linguistic regularities also explain the different interpretations of the two metaphors (15) and (16) below, the first a dead metaphor and the second a novel metaphor used in the Brazilian marketing field:

(15) *João é um vaselina.* (John is a Vaseline).

(16) *Ana não é nenhuma Brastemp.* (Anna is not any Brastemp\* (\* a Brazilian trademark of a refrigerator industry)).

Whereas (15) indicates a trait of John's personality, his slippery character, (16) indicates the unsatisfactory way Ana performs her daily activities or her bad look, the trademark Brastemp indicating the prototype of a good product. Considering that Vaseline is also, in its origin, a trademark, how can we explain the different interpretations? The answer is that vaseline, in Brazilian Portuguese, denotes a substance and in this case the first condition of interpretation defined above applies. This condition is that if the source domain is formed by an adjective applying to substances or mass terms, the interpretation is driven to psychological aspects of human beings. In the case of (16), the second condition of interpretation applies, by which if the source domain is formed by an artifact, the interpretation is driven to the way the person in the target domain performs a task, or to her/his physical appearance.

If the analyses presented in this section are correct, more attention has to be paid to linguistic distinctions in the description of metaphors.

### 3. Metaphor and semantic composition

I've so far discussed the first hypothesis presented in the introduction, concerning the interdependence of linguistic and conceptual factors in the use of metaphors. I will now consider my second hypothesis, according to

which metaphor, at least in some cases, involves a compositional process. This second hypothesis is, in fact, a consequence of the first one. If the linguistic factor is crucial to the interpretation of metaphors, it reveals itself as a compositional process. The idea is that different semantic combinations allow different interpretations of the same conceptual metaphor (see Moura, 2002a, 2002b and 2005).

The interpretation of *disquete autista* (autistic floppy disk), for instance, arises out of the combination of the functional role of *disquete* (the function of a floppy disk is to store data that can be read) with certain characteristics of autistic persons. I argue that, in this case, there is a semantic composition of behavioral properties of autistic persons with the functional role of a floppy disk.

It could be argued that there is no composition here, but only the identification of a similarity between two different domains. Murphy (1996:179) says that “metaphors arise out of the similarity of pre-existing conceptual structures ... Metaphors such as ARGUMENT IS WAR arise out of the structural similarity of the concepts of arguments and the concepts of war”. In this case, a metaphor such as *disquete autista* would point to a similarity between the domains of floppy disks and of autistic persons.

I assume here that the contribution metaphor makes to meaning derives from a non literal class inclusion (Glucksberg, 2001) and not from a mere literal similarity. The expression *disquete autista* informs us that “the floppy disk IS an autistic person” and not that “the floppy disk is LIKE an autistic person”. As (part of) the class of floppy disks is, metaphorically, included in the class of autistic persons, some new property is inherited by the topic, i. e., the floppy disk. My assumption is that this new property involves not a whole mapping of conceptual structures from the source to the target domain, but a much more specific transfer of meaning, regulated by lexical semantic distinctions. This transfer of meaning is made available through semantic composition, by which, for instance, the behavioral properties of autistic persons are mingled together with the functional role of floppy disks, generating a new property.

The metaphor adds a new characteristic to the topic. Metaphors like (4)-(6) point to entities with intrinsic difficulties to perform their tasks. They drive our attention to the irregularity and fallibility of the artifacts. Together with Murphy (1996), I believe that the conceptual structure is

literal and previous to any metaphorical link. But the use of a metaphor highlights certain aspects of a concept or presents it under a new light. Metaphors like (4)-(6), for instance, show that an artifact can be characterized not by its function, but by its failure to achieve its function.

Murphy (1996:179) argues that concepts are directly represented, and so the metaphorical representation is said to be untenable. The criticism of Murphy targets the assumption that a conceptual mapping such as ARGUMENT IS WAR structures the target domain by metaphorical links, and I consider that his position is correct. His criticism does not concern, however, linguistic metaphor in actual discourse. In my own view the linguistic metaphor highlights certain aspects of the concepts or presents them under new lights. Metaphor adds something that we did not have before. The interdependence of linguistic and conceptual factor may perhaps explain how this gain is obtained.

It could be argued against my proposal of semantic composition in metaphor that compositionality of meaning predicts all the senses a complex expression can assume, and that the sense of a metaphor is not predictable at all. I would like to hold here a position similar to that held by Nunberg et alli (1994) in their analysis of idioms. They say that even if the meanings of idioms can not be directly predictable from the meanings of their parts, a semantic analysis of idioms can be made a posteriori. For instance, if you hear the sentence *John was able to pull strings to get the job, since he had a lot of contacts in the industry*, and if that sentence is said in a specific context, you will be able to assign to the expression *pull strings* a meaning like *exploit personal connections*, “even though you might not have been able to predict that the phrase had this meaning if you had heard it in isolation. At this point you will be able to establish correspondences between the parts of the structured denotation of the expression (the relation of exploiting, the connections exploited) and the parts of the idiom (*pull* and *strings*), in such a way that each constituent will be seen to refer metaphorically to an element of the interpretation. That is, the idiom will be given a compositional, albeit idiosyncratic, analysis.” (Nunberg et alli, 1994:496).

Interpretations of metaphor, like that of idioms, are conventional and cannot be predicted a priori. Old usages allow new metaphors. The lexical regularities seen in the previous section are conventional and it is hard to see how these rules could be represented in purely structural terms. These

are conventional rules, but semantic rules nonetheless. In metaphors, the compositional process is more patent than in idioms, since we have class of metaphors like (4)-(6), whose correct interpretation is dependent upon a previous rule, whereas in the case of idioms only a specific collocation produces the meaning intended, and no previous rule is available.

#### 4. Some indications for future research

The analytic alternative presented here, based on the assumption that metaphor is construed through conventional usage, which is dependent on previous lexical knowledge, opens new directions for future research in the description of metaphors.

The first direction is that, if we consider that conceptual mappings such as OBJECT IS A PERSON is a valid label to group a large number of metaphorical expressions, more fine-grained classifications are needed to describe the various interpretations of this mapping, according to the linguistic knowledge associated with the words which occupy the positions of target and source domains, respectively. Since we consider that there is no logical priority of the conceptual structure over the linguistic structure, we can get more satisfactory descriptions of the metaphorical usage. For instance, a metaphor such as *autistic floppy disk* pertains to a subclass of the OBJECT IS A PERSON mapping, and it calls our attention to the fallibility of the artifacts. The reversal possibility is a kind of metaphor which focuses on the efficiency of artifacts, as for instance the metaphor in (17) below:

(17) Vinho impetuoso (Impetuous wine)

This phrase was used in a Brazilian wine advertisement. The metaphor's interpretation in (17) is grounded on the function associated with wines (and the effects they produce in the human palate) and it asserts the special property of this specific wine to achieve its function satisfactorily. In short, if we pay attention to the contributions that the meanings of the lexical items which occupy the target and source domains positions make to the interpretation of metaphors, we can obtain a richer description of kinds of metaphor.

The second direction for future research which I would like to emphasize here is the necessity of pinpointing the convergence (or not) of the

alternative proposed in this article and the class inclusion theory (cf. Glucksberg, 2001). Glucksberg and collaborators argue that a metaphor creates a new class of things, an *ad hoc* category. This new category is designated by the vehicle (the source domain) of the metaphor. For instance, in *autistic floppy disk*, the adjective *autistic* designates a new category and acquires by that a non-literal meaning. The topic (in this case, the *floppy disk*) is said to be included in this new category. The question is whether this theory can provide types of metaphors, or is circumscribed to a token analysis. My own analysis assumes that metaphors are class inclusions predications and that new properties are created in metaphorical usages, but it presupposes that metaphors are grouped in types. But these are questions to be tackled down in future research.

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## REFERENCES

- BARCELONA, A. 2003. Introduction, in *Metaphor and metonymy at the crossroads*, Barcelona, A (ed), Berlin-New York, Mouton de Gruyter.
- GLUCKSBERG, S. 2001. Understanding figurative language. From metaphors to idioms. Oxford: Oxford University Press.
- LAKOFF, G. & JOHNSON, M. 1980. *Metaphors we live by*. Chicago, Chicago University Press.
- LEEZENBERG, M. 2001. *Contexts of Metaphor*. Amsterdam, Elsevier.
- MARCONI, D. 1997. *Lexical competence*. Cambridge, Ma, MIT Press.
- MOURA, H. 2002a. Lexicon and context in the production of meaning. *Révue de sémantique et pragmatique* 12. 17-35.
- \_\_\_\_\_. 2002b. Linguagem e cognição na interpretação de metáforas. *Veredas* 10. 153-161.
- \_\_\_\_\_. 2005. Metáfora: das palavras aos conceitos. *Letras de Hoje* 40(139).
- MURPHY, G. 1996. On metaphoric representation. *Cognition* 60. 173-204.
- NUNBERG, G.; SAG, I.; WASOW, T. 1994. Idioms. *Language* 70. 491-538.
- ORTONY, A. 1988. Are emotion metaphors conceptual or lexical? *Cognition and Emotion*, 2, 95-103.
- PUSTEJOVSKY, J. 1995. *The Generative lexicon*. Cambridge, MIT Press.
- PUTNAM, H. 1975. The meaning of meaning. *Mind, language and reality*. Cambridge, Cambridge University Press.
- TURNER, M. 1987. Death is the mother of beauty: mind, metaphor, criticism. Chicago, Chicago University Press.