

Metaphors in Cognitive Linguistics

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The first part of the article offers an historical overview of metaphors, starting from Aristotle and the classical definition of metaphor. Chomsky's contribution to cognitive psychology is also mentioned together with Rosch's and Kay and McDaniel's research concerning categorization. The end of the first part contains new theories of metaphor, thus establishing the link to the second part, which presents the last three decades regarding metaphors in cognitive linguistics, trying to highlight the revival of studies on metaphor. The pervasiveness of metaphors cannot be overlooked in human understanding, and the classical debate is also mentioned (dead versus live metaphors). Our conclusion is that they offer an insight into our everyday experience and may help us in exploring the unknown.

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Historical Overview

As metaphor has been the subject of various inquiries throughout the centuries, we start by presenting the major thoughts connected to it. The nature of metaphor has been an ardent subject of debate back to Aristotle, who discussed it on the level of noun (*name*), stating that metaphor typically 'happens' to the noun, and it is presented as motion:

...the application of a strange (alien, *allogrios*) term either transferred (displaced, *epiphora*) from the genus and applied to the species or from the species and applied to the genus, or from one species to another, or else by analogy (1982:1447b).

After a name is applied to an alien thing, it may express something much more clearly, which is otherwise difficult to grasp. Aristotle's four possibilities of creating a metaphor are: genus to species, species to genus, species to species, and by analogy or proportion; *resemblance* is explicitly mentioned. However, in what was probably his later work one can find that the major goal of rhetorical speech is persuasion, which is of less importance from our point of view.

Nevertheless, the virtues of metaphor include *clarity*, *warmth*, *facility*, *appropriateness* and *elegance*, and finally “metaphor sets the scene before our eyes” (Aristotle 1954:1410b).

Scholars argued that even the definition of metaphor is itself metaphorical, so the explanation for metaphor is thus circular. For instance, Derrida (1982) realized that any explanation relies heavily on the physical – and in this way on the metaphorical –, as our thinking is basically metaphorical; this led to the conclusion that metaphors could be only explained based on other metaphors. Researchers might have slowed down with their interest in metaphors throughout the centuries, leaving them to thrive ‘only’ in stylistics, as a basic ‘figure of speech’, a trope, trimming ordinary language, taking away monotonousness by ‘picturesque’ replacements. Aristotle’s *Rhetoric* encouraged this approach, and things stayed more or less undisturbed until the twentieth century, when Chomsky directed back the attention of many to linguistics. In his *Language and Mind*, he states that linguistics is a branch of cognitive psychology:

I think there is more of a healthy ferment in cognitive psychology – and in the particular branch of cognitive psychology known as linguistics – than there has been for many years...if we are ever to understand how language is used or acquired, then we must abstract for separate and independent study a cognitive system, a system of knowledge and belief (1972:1-4).

Chomsky admits that “we are as far today as Descartes was three centuries ago from understanding just what enables a human to speak in a way that is innovative, free from stimulus control, and also appropriate and coherent” (1972:12-13), and he turned to the analysis of deep structure. Instead of deep structure and transformations, cognitive linguistics focuses on language in terms of the concepts, and it is interested in meaning and the uncovering of a network with interconnected elements, which may offer explanation about the nature of metaphor. It is to the merit of cognitive linguistics to have the idea of including metaphor within natural language widely accepted, thus pioneering a way of understanding metaphors by tracing their roots back to ordinary, concrete words, reinterpreting *resemblance*, and explaining the need for metaphors, which were constituents only in stylistics.

The Saussurean classification must have had its merit, whatever nature this classification was, as the idea re-emerged towards the end of the century. Brugman highlights the importance of categories (another type of classification), based on Rosch (1977) and Kay and McDaniel (1978), reaching the verdict: sensory elements in categorising human experience represent a possibility to describe language, although a single word is but a narrow investigation, not revealing great truths about the language itself (1981:1).

Still, by analyzing metaphors, it became obvious that they are grounded in our everyday physical experience and they are not as close to similes as was rooted in the western tradition ('Metaphor is an abbreviated simile'). Instead, cultural stereotypes should be accounted for when metaphors are investigated, for instance, metaphors with snow in Eskimo trigger different associations than in any African language (cf. Sapir-Whorf hypothesis and more recently, the neo-Whorfian hypothesis). On the other hand, diachronically viewed, metaphors dating decades or centuries ago might have changed as well, and similarities that were important or easily observed may be forgotten.

The '*seeing as*' becomes problematic within cognitive linguistics, as metaphors usually try to shake category boundaries, and this friction cools with continuous usage. Black (1962) took into parts the constituents of metaphors, stating that only the common elements would select each other and 'reconcile'. This comes close to Rosch's prototype theory of semantic features, where we have marginal members instead of tension, or we can also mention Mac Cormac's fuzzy set theory (1985).

Whereas concrete categories are much better defined and relatively well-separated from others (although boundaries are flexible and they often depend on the point of view, as members have various characteristics), the abstract entities are often made more explicit via metaphors, which make use of the concrete categories (cf. Aristotle). Consequently, metaphors do not describe reality, but they create one where strange elements intermingle with more familiar ones, thus revealing a part of how we see our surrounding world and ourselves.

Langacker (1999:208) states that we are able to conceive of one situation against the background afforded of another. Regarding new information, previous discourse functions as a background to the current expression, and when speaking of metaphors, the source domain serves as a background for structuring and understanding the target domain. More recently, there are studies in which the theories of metaphor are undermined by theories of metonymy. According to Barcelona (2003) and Taylor (2003), metonymy is an operation that may be more fundamental to the human conceptual system than metaphor. Barcelona (2003:31) even suggests that 'every metaphorical mapping presupposes a prior metonymic mapping.' The so-called primary metaphors are argued to be motivated by experiential correlation (Evans and Green, 2006:320), but correlation is basically metonymic (Taylor 2003).

We could see that an historical account of metaphors already encapsulates a cognitive interpretation as well, as the past three decades contributed significantly to present-day approach to metaphors. Now let us examine recent interpretations.

Metaphors Reloaded

Lakoff and Johnson (1980, 1999) may be considered the first passionate supporters of metaphors, as in their view metaphors are conceptual, as many of the ways in which we think and act are basically metaphorical (Evans and Green, 2006:44). Descartes' rationalist approach is evident in formal approaches, such as Chomsky's generative grammar or Montague's framework, according to which language can be studied as a formal or computational system, irrespective of human experience or the nature of the human bodies. The Lakoffian (empiricist) concept is based on the importance of human experience, the centrality of the human body without which the human mind and language "cannot be investigated in isolation from human embodiment" (Evans and Green 2006:44).

According to Moran (1997), issues regarding metaphor in poetics, rhetoric, aesthetics, epistemology, philosophy of mind and cognitive studies cannot be wholly isolated from each other. So far we have tried to present metaphors starting from their beginnings, and we have to accept that the sparkle to recent studies on metaphor belongs to Brugman, who based her work on Rosch's findings. Ever since cognitive linguists have been arguing that metaphor is central to human language (cf. Evans and Green 2006). The basic idea is that metaphors (metaphorical expressions) are based on our physical experience, and offer a background to the analysis of metaphors in a synchronic frame. The comprehension of figurative language is dependent on the literal understanding of the words used, unlike in the case of idiomatic expressions:

Literal language is precise and lucid, figurative language is imprecise, and is largely the domain of poets and novelists. While literal language is the conventional 'ordinary' or 'everyday' way we have of talking about things, figurative language is 'exotic' or 'literary' and only need concern creative writers (Moran 1997:249).

According to this view, most ordinary language is literal. However, on a closer inspection, much of our ordinary everyday language turns out to be figurative in nature (Evans and Green 2006:287). Gibbs contradicts this ancient distinction (1994:75), as he differentiates conventional literality, non-metaphorical literality, truth condition literality and context-free literality. He also adds that certain concepts are impossible to describe non-metaphorically; for instance, time without recourse to space and motion is hard to describe.

We will not enter another debate regarding the differences between metaphors and iconicity, but it may be interesting to mention Gentner and Bowdle's experiment (2001) presented by Hasson and Giora (2007). They studied the differences between metaphors and similes (cf. Johnson's 1996 research: comprehension times for metaphors and similes), and concluded that when the sources are novel, similes can be more quickly understood than

metaphors, but when we face conventionalized sources, the comprehension of metaphors is quicker. These findings are completed by Kövecses's preface (2002) where the author contradicts five traditional concepts regarding metaphor, e.g. one must have a special talent to be able to use metaphors; in fact, they are used effortlessly in everyday life by ordinary people, as they are an inevitable process of human thought and reasoning.

More recently, Gibbs (2007:16) discusses metaphoric understanding based on research conducted in 2006 by Wilson and Gibbs, and his conclusion is that "people were faster in responding to the metaphor phrases having performed a relevant body movement than when they did not move at all". Another finding was that "real movement is not required to facilitate metaphor comprehension, only that people mentally simulate such action", as generally speaking, people do not understand the non-literal meanings of metaphorical expressions as a matter of convention.

Kövecses's forerunners, Lakoff and Johnson, also mention persistent fallacies (1980:244-245), stating that metaphor is a matter of words not concepts; but the locus of metaphor is in concepts not words. Moran states (1997:251) that in metaphor we interpret an utterance as meaning something different from what the words would mean, if we took them literally. This means, that the same words or utterances change their meaning when taken metaphorically (Moran 1997:251).

Metaphors transport the images, feelings, values, thought patterns, etc. entrenched in our cultures, as Mittelberg (2007:34) states based on Dirven, Wolf, Poltzenhagen; Kövecses (2005) also accepts this view. Furthermore, metaphor is based on similarity; but it is based on cross-domain correlations in our experience, which give rise to the perceived similarities between the two domains within the metaphor. These two domains lead to the many interpretations outlined below; we would only like to mention here Ricoeur's theory of metaphor, which is based on icons (standing for something) concerning cognitive notions, and he adopts Wittgenstein's proposal (1958), namely "seeing as" (mentioned by Mac Cormac). Lakoff and Johnson also say that all concepts are literal and none can be metaphorical; but even our deepest concepts (time) are understood and reasoned about via multiple metaphors, so they conclude that, in short, metaphor is a natural phenomenon (1980:247).

According to Coulson (2007), many empirical studies have compared reading times for literal and non-literal utterances, and found that when the metaphorical meaning was contextually supported, reading times were roughly similar. Gibbs (1994) notes, parity in reading times need not entail parity in the underlying comprehension processes, and he also mentions that literal and metaphorical meaning might take the same amount of time to comprehend, but that the latter required more effort or processing resources.

On the other hand, classical accounts of metaphor comprehension (cf. Grice 1975 or Searle 1979) describe a two-stage model, in which literal processing is followed by metaphorical processing. The real support in favour of Lakoff and

Johnson regarding their theory about the central importance of metaphors comes from Pynte and colleagues, who could not find qualitative differences in brain activity associated with the comprehension of literal and metaphoric language (Coulson 2007:414), which is consistent with Gibbs (1994) or Glucksberg (1998).

The pervasiveness of metaphors in human understanding can be best characterized by the phenomenon whereby a target domain is structured and understood with reference to another (more basic) source domain (cf. '[P]hysical experience shapes our understanding'). Here we seem to reiterate the idea that physical experience is central, though we cannot say that it is more basic than other (emotions or time), although at a given point Langacker (1999) considers that *time* is more important than *space*, as the former is needed to perceive changes in the latter (*motion*). Anyway, a reasonable conclusion would be that the source domain serves as the background for structuring and understanding the target domain (Langacker 1999:208). At this point we can mention W. Bedell Stanford's summary on metaphors:

The essence of metaphor is that a word undergoes a change or extension of meaning. In simile nothing of this kind occurs; every word has its normal meaning and no semantic transference is incurred (cited by Mac Cormac 1985:37).

To Lakoff and Johnson, the essence of metaphor is understanding and experiencing one kind of thing in terms of another, and we act according to the way we conceive of things (1980:5). The problem is that one can easily remember those school days when the difference between metaphors and similes were explained with a set of examples:

Her cheeks are like red roses. (simile)
Her rosy cheeks ... (metaphor)

The explanation was that metaphor is a shortened or compressed simile, without the *like* element; we now know, that this is not as simple as it may seem, as the only similarities relevant to metaphor are the ones experienced by people, which differs based on culture and personal previous experience (Lakoff and Johnson, 1980:154), and metaphors force us to wonder, compare, note similarities and dissimilarities, and then seek confirmation or lack of confirmation regarding the suggestions posed by metaphors (Marconi, 1997:76). Mac Cormac completes the picture about metaphors by stating that resemblance and difference are also constituents when metaphor is at stake, together with similarity, as they are all involved in the knowledge process. One of the consequences is that the separation of metaphors from everyday language becomes impossible, and it is worth mentioning that Mac Cormac places the so-called dead metaphors within ordinary language.

We would only say that 'dead metaphors' (which are nevertheless alive by constant usage, cf. Lakoff and Johnson 1980) create a fuzzy category in-between figurative and literal language, of course, if we accept this rather controversial dichotomy.

Another problematic aspect (under the controversion theory) is that metaphors are meaningful, but false. This falsity comes from semantic contradiction and not from empirical test (folk theory gladly passes them) and, interestingly enough, Mac Cormac offers an approach of degrees. He discusses the relativism of metaphors, and observes that they could be false when taken literally and true when taken figuratively. Hence the truth or falsity of the metaphor is relative to its context of interpretation, as there is a degree to which their referents have similar properties and false to the degree that their referents have dissimilar properties. His fuzzy-set theory (1985:216, 220) is consistent with it, so we have F (false), D (diaphor), E (epiphor), T (truth). In his view, we have epiphors (metaphors that express more than suggest) and diaphors (metaphors that suggest more than they express). Diaphors can become epiphors as their hypothetical suggestions find confirmation in experience/experiment, so they turn commonplace.

Although this seems plausible, we cannot really accept his argument, as the case of 'dead' metaphors remains unsolved. Remember that on the one hand we have metaphors we live by (Lakoff), on the other hand we have dead metaphors. Stylistically Mac Cormac is right, but cognitive grammar deals with understanding, motivation, nature and origin; the way Lakoff presents them offers an explanation to these. Dictionaries contain dead metaphors (Mac Cormac), but when reading a dictionary, one can often find explanatory remarks, such as (*fig.*), standing for figurative, which Mac Cormac omits to mention. So it seems plausible to us when Mac Cormac criticizes Lakoff & Johnson (1985:58-60), saying that they are adamant when it comes to the status of metaphors: even when figurative metaphors become conventional or literal metaphors, they retain their metaphorical status (otherwise dictionaries could not have identified them as metaphors!).

By considering hundreds of dead metaphors, Lakoff and Johnson succeeded in showing that natural language presumes and expresses many hidden conceptual meanings arising from the use of these metaphors. But they transformed these dead metaphors into live ones by redefining the notion of dead metaphors. For them, metaphors are alive because they are used in ordinary language as parts of the systematic metaphoric expression. So they have no method left for distinguishing between metaphoric and non-metaphoric utterances, they have literal metaphors and figurative metaphors. Moran correctly observes that the meaning of the metaphor in general will be confined to the intentions of the speaker if the meaning of a metaphorical utterance is the speaker's meaning, and the latter is a function of the intentions of the speaker in making the utterance. Thus the interpretation of the metaphor will be a matter of the recovery of the intentions of the speaker (1997:264). If Moran is right, the so-called 'live'

metaphors can be difficult to interpret, as the interpreter is dependent on assumptions about the beliefs and intentions of the speaker (Cooper 1986:73, cited by Moran 1997).

We can only say that once categorising is accepted, there is a degree of membership, including views upon language itself. So Lakoff and Johnson can only embed non-metaphorical concepts in direct experience, which emerges through interaction of the agent with their environment. Kövecses indirectly answers the question of 'dead' metaphors later (2002, Preface):

...dictionary entries are full of that, but there is an important point: they are deeply entrenched, hardly noticed and thus effortlessly used, they are most active in our thought. So they are 'alive'. According to the cognitive approach, both metaphorical language and thought rise from the basic bodily (sensori-motor) experience of human beings, and it is a key instrument in organizing human thought.

Conclusions

Metaphors bring about changes in the ways in which we perceive the world, and these conceptual changes often bring about changes in the ways in which we act in the world, accepts Mac Cormac (1985:149). Metaphors appear to be so common and so regular a part of ordinary language that instead of contending that they deviate from a normative grammar, it is worth considering that any grammar, which cannot account for metaphor, is too limited in comprehension to be useful (Mac Cormac 1985:32). On analysing the relationship between metaphor and communication, Moran concludes:

...metaphorical speech counts as genuinely communicative (of a content beyond the literal) because, among other things, the figurative interpretation of the utterance is guided by assumptions about the beliefs and intentions of the speaker, intentions which, among other things satisfy the Gricean (1975) formula (1997:261).

The success of metaphor in communication may also be explained by the fact that metaphor is beyond language, as it is to be found primarily in thought and action (e.g. *killing wax dolls*, Lakoff and Johnson 1980:153). The danger of pervasiveness of metaphor lies in the fact that there are many ways of creating it: extending, elaborating, questioning, combining and personification (Kövecses 2002:47-50). Metaphors produce new insights and new hypotheses internally, whereas externally they act as mediators between the human mind and culture, states Mac Cormac (1985:2). This correlates with Moran's statement (1997:252), according to which the words employed in a metaphor undergo a 'meaning-shift', but when an expression is interpreted metaphorically, the literal one is not cancelled or removed from consideration. The constraint that limits the

excessive production of metaphors is that there must be a similarity between the two entities compared. In Moran's words:

In metaphor...if we are to speak of a new meaning, this meaning will be something reachable only through comprehension of the previously established, literal meanings of the particular words that make it up (1997:253).

Davidson, on the other hand, denies the non-literal meaning regarding metaphors. His famous statement attracted serious criticism: "... metaphors mean what the words, in their most literal interpretation, mean, and nothing more" (1979:246).

Cognitive linguistics breaks away from the notion of predictability of generative grammar, and replaces this notion with motivation. Our remark is that when we have a metaphorical view, we employ only a part of a source domain, not the whole (when needed), in other cases other parts. The mappings that deviate from the widely accepted ones are either considered as bad ones, or literal ones! This partial mapping (only a part of a concept is mapped, and only a part of target is involved) peaks in metaphorical highlighting (Kövecses 2002:67, 75, 79), and the unconventional use is called 'unutilized parts of the source' (e.g. *the chimney of a building*).

Moreover, many metaphors do map additional knowledge from the source onto the target, and one can pick out distinct pieces of knowledge associated with the source domain of a metaphor, which is already connected to the scope of a metaphor. This means that abstract concepts are characterized by a large number of distinct source domains, and a single concept can characterize many distinct target domains (war is both *argument* and *love*, cf. Kövecses 2002:94, 107). The previously mentioned motivation comes into picture again, as truth value is connected to motivation (purpose in mind when dealing with categories, fuzzy sets), which ultimately helps in successful communication to be realized by well-established meaning foci of words (cf. Kövecses 2002). The conclusion is that Plato's and Aristotle's objectivism and subjectivism are only myths (cf. cave and "the greatest thing by far is to be a master of the metaphor", *Poetics*, 1459a). Lakoff and Johnson conclude that metaphor unites reason and imagination, creating an imaginative reality (although 'virtual reality' is a contradiction in terms, nobody seems to care too much about it, and we all seem to perfectly understand and use the expression).

All in all, we can say that metaphors indeed give an insight into everyday experience; the way we have been brought up to perceive our world is not the only way and it is impossible to see beyond the "truths" of one's particular culture (Lakoff and Johnson 1980:239). These metaphors, after all, contribute to the differences between humans and animals by the systematicity of analogies and disanalogies. Even the unknown is felt closer this way, and major advances in metaphor theory preserve these findings (cf. Joseph Grady's complex

metaphors, Srinivas Narayanan's metaphors as neural phenomenon. And the subject is not closed, as Mac Cormac's (1985:56) statement leaves the question open: "not all language is metaphorical, only the theories about metaphors are metaphorical".

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