ABOUT PRIMARY METAPHORS
(Sobre Metáforas Primárias)

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ABSTRACT: One important contribution to the Contemporary Theory of Metaphor is Grady’s Primary Metaphor Hypothesis (1997), which claims that the emergence and nature of conceptual metaphors are often grounded in more experiential metaphorical patterns, called primary metaphors. The new hypothesis changes considerably the ideas concerning the generation of metaphors, in comparison to the former view. In this paper we discuss some of these main changes, namely the characteristics of source and target domain, the fundamental construct, and the licensing of metaphorical expressions.

KEY-WORDS: conceptual metaphor; primary metaphor; primary scenes; metaphor licensing.

RESUMO: Uma contribuição importante para a Teoria Contemporânea da Metáfora foi a Hipótese da Metáfora Primária de Grady (1997), que sugere que a geração e natureza das metáforas conceituais geralmente baseiam-se em padrões metafóricos mais experientes, chamados metáforas primárias. A nova hipótese muda consideravelmente as ideias sobre a geração de metáforas em comparação com a visão anterior. Neste artigo, discutimos algumas das mudanças principais hipotetizadas por Grady com relação às características dos domínios fonte e alvo, ao construto fundamental e ao licenciamento de expressões metafóricas.


Introduction

Since the beginning of the Contemporary Theory of Metaphor in 1980 (Lakoff & Johnson, 1980), many important contributions have been added
to the theory. One of them is Grady’s Primary Metaphor Hypothesis, that appears fully integrated to the theory in 1999, in Lakoff & Johnson’s latest book, *Philosophy in the flesh*. The new hypothesis constitutes an important advancement to conceptual metaphor theory, since it tries to explain the main controversial points of the traditional view taken by Cognitive Linguistics, such as the circularity on the identification of a conceptual metaphor, the lack of experiential basis between some source and target domains, and the poverty of some mappings. However, besides the attempt to search for explanations of the emergence of all metaphors from our direct bodily experiences, another interesting aspect in the refinement proposed is the fact that it opens possibilities of falsifying the theory.

Grady (1997) claims that the emergence and nature of conceptual metaphors are often grounded in more experiential metaphorical patterns, called primary or primitive metaphors, which express recurrent correlation in our embodied experiences, in such a way that intimacy co-occurs with closeness (e.g. *I’m very close to him*), considering correlates with weighing (e.g. *I’ll have to weigh your proposals carefully before getting back to you*), and analyzing is related to cutting (e.g. *He quickly dissected the problem*). Coherent primary metaphors can be combined, resulting in compound or complex metaphors, such as THEORIES ARE BUILDINGS, formed by the primitives ORGANIZATION IS PHYSICAL STRUCTURE and PERSISTING IS REMAINING ERECT.

Before 1997, metaphors were thought to be generated as a result of the abstractness level of some domains of our experiences. More abstract, not clearly delineated domains needed more concrete, physical, and well-delineated domains in order to be expressed. That is why an abstract concept like desire is often expressed in terms of a more concrete, and physical experience, such as “hunger” (e.g. *be’s hungry for recognition*), or “itch” (e.g. *I’m itching to get to the concert*). However why certain concrete domains are used to talk about certain abstract domains had not been explained by the theory.

In Grady’s hypothesis, such metaphors arise because there is a tight correlation between the two distinct dimensions of experience involved. Thus, the DESIRE IS HUNGER metaphor is generated because of the correlation between the physical sensation of hunger and the simultaneous desire for food that accompanies it; and the DESIRE IS AN ITCH metaphor,
because of the correlation between the itching sensation and the desire to perform an action.

All this implies a new way of understanding the many aspects involved in the emergence of conceptual metaphors. Although Lakoff & Johnson have included this idea of primary metaphor in their latest book (1999), they do not go deeply into it. Primary metaphors, as Grady has conceived them, change to a great extent what has been said about conceptual metaphors, but scholars do not seem to be very much aware of primary metaphors in the first place, and of the implications of Grady’s idea for the theory, in the second place. There is much more in the primary metaphor hypothesis than just the “correlation between distinct domains of experience”. Lakoff and Johnson say nothing, for instance, about the primary scene, a very important element in Grady’s hypothesis, for its role in the metaphoric language licensing.

The purpose of this paper is to discuss some of the main changes proposed by Grady concerning the generation of primary metaphors, such as the characteristics of source and target domains, the fundamental construct, and the licensing of metaphorical expressions, in contrast to the traditional conceptual metaphor theory.

**Source and Target Domains**

The difference between the former and the new views starts with the characteristics of source and target domains. In the traditional view of the Contemporary Theory of Metaphor, they varied from the simplest and most schematic (such as vertical elevation) to the richest and most vivid ones (such as food, cooking, eating). In the primary metaphor view, they are narrower, more localized domains of experience, with very specific characteristics (ibid: 139-156), which I have tried to understand by analyzing some of the primary metaphors suggested by Grady, such as DESIRE IS HUNGER, ORGANIZATION IS PHYSICAL STRUCTURE, DIFFICULTY IS HEAVINESS, ANALYZING IS CUTTING, CONSIDERING IS WEIGHING and EMOTIONAL INTIMACY IS PROXIMITY.

While in the former view both source and target domains were very similar in terms of structure (both has image schema) and the difference between them were in terms of familiarity, complexity, consciousness and
abstractness, in the new view they are different in nature: one is defined by a sensory content while the other is a response to this sensorial input.

Concerning primary source domains, Grady claims that:

a) they are defined by sensation or sensorial input, so they have image content.

This image schema is a schematic element of many images and not of rich or specific ones, a little different from the notion of image schema as defined by the former view of conceptual metaphor. In the primary metaphor hypothesis, image schemas are less abstract, more restrict, and cannot include concepts highly dependent on culture as in the former view.

All primary domains I have analyzed are defined by some kind of sensorial input. WEIGHING, for instance, is experienced whenever we try to lift/carry any kind of object and the WEIGHING image schema is schematic enough to include all cases of weighing experiences (e.g. burdens, pieces of papers, the human body).

b) Primary source domains refer to simple experiences in a phenomenological sense, i.e., they do not involve many details nor many scenes, which could be used as source concepts.

This means that only things we are aware of and that do not involve many details can count as domains for primary metaphors. For instance, phenomenologically, WEIGHING involves the act of lifting an object and the experience of its weight. COOKING, on the contrary, involves many details such as slicing/cutting food, putting items into containers (e.g. pans), stirring sauces, etc.

Nevertheless it is not the case that any kind of simple experience can serve as a primary source domain:

c) they should be related in predictable ways to our goals or actions directed to attainment of the goal, for they must be tightly correlated with some other experiential domains.

If what Grady means is that the experience should be something recurrent but often in function of, or related to, another experience (or experiences), then all the cases I have analyzed are congruent with a primary domain. For instance, WEIGHING, CUTTING, HUNGER and PHYSICAL
STRUCTURES are tightly correlated to other experiential domains, such as CONSIDERING, ANALYZING, DESIRE and ORGANIZATION, respectively. However, the idea of experiences “related in predictable ways to goals or actions directed to attainment of goals” is rather unclear, since it does not seem to apply to all cases. While domains such as WEIGHING (an experience we have whenever we want to move/lift things) and CUTTING (an action we perform when we want to get more knowledge about an object) are related in predictable ways to goals, others, such as HUNGER and PHYSICAL STRUCTURES do not seem to be related to goals at all, at least in a simple phenomenological sense: for instance, we do not feel (or decide to feel) hungry when we want to eat, but on the contrary, it is the depletion of sugar in our bodies that provokes hunger. Actually, the predictability seems to be related to the co-occurrence of experiences: whenever we are hungry we also experience the desire for food, or whenever we see a physical structure we also perceive the logical relation/organization between its parts.

d) Primary source domains should refer to universal elements of human experience.

This means that primary source domains should be inherent to human experience, in the sense that they are not learned. For example, everything around us, including our own bodies, has a certain weight that we naturally perceive when we lift or carry it. Lifting or carrying things are natural actions in any human being’s interaction with the world, so the weighing sensation is inherent to our nature.

e) Primary source domains are relational, not nominal concepts.

Primary source domains refer to properties of things (e.g. heaviness), relation among things (e.g. proximity) or actions involving things (e.g. cutting), but not to the things per se, i.e., they do not include things, such as cups or knives.

As far as primary target domains are concerned, , Grady claims that:

a) they are elements of the same experiences that give primary source concepts their meaning.

In the former view of conceptual metaphor theory, target domains were understood as unfamiliar, abstract domains, which needed another domain to be expressed. In Grady’s hypothesis, target domains are as
familiar as the source domains since they are common, recurrent experiences. DESIRE, DIFFICULTY, INTIMACY, for example, are experiences as familiar as those of HUNGER, HEAVINESS, PROXIMITY. Source and target domains are tightly related to our body experiences, without cultural particularities. The difference between them lies on their nature.

a) Primary target domains do not have image content. They involve responses, or evaluations, of the sensory input.

While source domains have image schemas, target domains are abstract concepts in the sense that they are more linked to mental operations, i.e., they are evaluations of the sensorial experiences. They correspond to operations over concepts that have image schematic structure (e.g. we judge that some objects have similar weights; we notice that emotional intimacy is caused by nearness), and operations per se do not have image contents, so, target concepts do not have image contents (Grady, 1997:188). All target domains we analyzed seem to be in accordance with that, e.g., DIFFICULTY involves the evaluation of the feasibility of doing something; ANALYZING involves the kind of information gained; CONSIDERING involves responses to the properties of something.

b) Primary target domains refer to basic units or parameters of the cognitive function, at the levels we have conscious direct access (or immediately below them).

According to Grady, target domains are not abstract in the sense that they are not at the conscious levels. Differently from higher constructs, target concepts seem to be in the lowest level of the cognitive processing consciously accessible, or at least in a distinct level of image schema level. Actually, we always perceive the level of difficulty/easiness in the realization of any kind of activity, or the desire that co-occurs with hunger, as well as the intimacy created with nearness.

One of Grady’s hypothesis (ibid:165) is that “the nature of our conceptual system manipulates images, of any modality and in any complexity level, more easily than the kinds of concepts that serve as target domains.” Thus, it is because of the tight correlation between the two domains as well as because our better ability to deal with images that we use an image content domain (the primary source domain) to talk about its assessment domain (the primary target domain).
The Fundamental Construct

Another very important difference between the former and the new views of the Contemporary Theory of Metaphor is related to the fundamental construct, which in the former view was thought to be the image schema, and in the new view it is the primary scene.

While image schemas are large structures, primary scenes are more local structures, motivated by particular moments in our experiences. For instance, all cases of containers can be included in the image schema of a container, but each case may involve many primary scenes, such as (a) going into a room or (b) taking something out of a box, which can generate distinct metaphors. Even if we can have a schematic mental representation that is abstract enough to include all cases, the experiences that generate the metaphors do not seem to be the same in all of them. For example, in scene (a) going into a room, we experience going into spaces with certain characteristics and certain limits; in (b) taking something out of a box, we experience interacting with a container and its contents.

In the former view, metaphors were believed to be generated by the mapping of a complete domain containing image schema onto another complete domain containing image schema. Such metaphorical mapping would preserve the cognitive topology of the source domain in a way consistent with the inherent structure of the target domain.

In the primary metaphor view, the process is totally different. As a matter of fact, for the source and target concepts to be cognitively unified, they should share schematic structures at some level. However, for Grady, such structures cannot be image schematic, since for him only those concepts directly related to our sensory experience (of any kind) have image content. As described above, source concepts correlate more specifically with sensory inputs of the physical world, while the target concepts are related to various kinds of responses to these inputs, such as judgement and analysis of individual stimuli and the relations among them. Thus, only primary source concepts have image contents; target concepts are more subjective, more tied to internal states.

In short, in the new view, the metaphor basis is the primary scene – a cognitive representation of a recurrent kind of experience (which might be characterized to a local level without many details) that involves a tight
correlation between two dimensions of experience. Both source and target domains are related because they have a tight correlation in their primary scenes (ibid:162). They do not involve co-shared characteristics but only co-occurrences. For instance, we often feel hungry. This experience – to feel hungry – is understood in some forms and one of them is related to the desire for food, experienced whenever one is hungry. Thus, the mapping between desire and hunger arises from recurrent scenes, in which the physical sense of hunger and the simultaneous desire for food are experienced. Similarly, we often lift things. Whenever we do this we also experience the easiness or difficulty of lifting them. That’s why metaphors such as DESIRE IS HUNGER and DIFFICULTIES ARE HEAVINESS are generated. In Table 1 we illustrate this cognitive operation.

<table>
<thead>
<tr>
<th>Cognitive Operation</th>
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<tbody>
<tr>
<td>source domain</td>
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<tr>
<td>experiential domain</td>
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<tr>
<td>[sensory content]</td>
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<tr>
<td>e.g. HUNGER</td>
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<tr>
<td>HEAVINESS</td>
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<tr>
<td>(direct experienced)</td>
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<tr>
<td>target domain</td>
</tr>
<tr>
<td>experiential domain</td>
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<tr>
<td>[responses to the sensory input]</td>
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<tr>
<td>DESIRE</td>
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<tr>
<td>DIFFICULTY</td>
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<tr>
<td>(experience derived from the recurrence of the events of hunger and weight lifting)</td>
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Grady’s assumption about primary metaphors is that they are part of our universal human experience, since they do not involve cultural aspects, therefore they should be common in all languages. However, that is controversial. It seems odd not to consider some cultural influences in our basic experiences, since they involve perceptual aspects.

Cultural aspects, for Grady, seem to include some forms of learning (e.g. making toasts) that do not involve any aspect of human experience, either inherent or universal. Things like dogs or trees are also learned and do not co-occur specifically in any of our experiences; besides, they are involved in many different activities and scenarios which we experience.
Differently, being hungry, swallowing, and lifting objects are universal experiences, inherent to any human being. If they involve any kind of learning, that is part of our biological heritage, according to the author (Grady, 1997:149-150). However, our bodily experiences, even the most direct ones (those considered as universal), might not be perceived in the same way in different cultures, so I question whether the correlation between the same recurrent or co-occurrent experiences could generate similar primary metaphors, slightly different ones, or even completely different ones, in each language. If this is the case, Lakoff’s claim that “the experiential basis motivates metaphors but does not predict them, because our experience with the body also involves cultural aspects” (1993:241) still stands. Grady’s new hypothesis is worthy and promising because it explains how metaphors such as DESIRE IS HUNGER and DIFFICULTIES ARE WEIGHING exist in certain languages; something that the former view could not do. Concerning the prediction of primary metaphors, an analysis in several languages could show whether our basic experiences, inherent to every human being, are really conceptualized in similar ways, with no cultural influences.

**Licensing of Metaphorical Expressions**

In the former view of the Contemporary Theory of Metaphor, the licensing of metaphorical expressions was thought to be a result of the mapping between the domains. The identification of conceptual metaphors departed from the analysis of linguistic expressions: first, some systematization was observed in the linguistic expressions; then, the conceptual metaphor underlying that systematization was identified; finally, more and more linguistic expressions were used to confirm the existence of such a conceptual metaphor. That is, the very same element that served for identifying the metaphor was used for its confirmation. Therefore, the linguistic expressions could be explained because of the underlying metaphors, but they could not be predicted.

In Grady’s hypothesis, it is the mapping of primary scenes that licenses the expressions, allowing great predictability of most of them. In the DESIRE IS HUNGER primary metaphor, for example, Lima (1999) and Lima, Gibbs & Françozo (2001) have found out that the mapping of its primary scenes suggests that words such as hunger, thirst, appetite, drool, mouth-watering and
their inflections or variations could be keys to the identification of the use of this metaphor in language. Departing from these key words, the authors have collected more than a thousand metaphorical expressions, in many different text genres and areas of knowledge. These key words were also very useful for the experiments that were carried out in order to investigate whether speakers of English and Portuguese would really conceptualize “desire” in terms of “hunger”.

DESIRE IS HUNGER is a good example of a primary metaphor as Grady has conceived, but there are many difficulties with other metaphors. So far, I have identified at least two different types of what Grady calls primary metaphor: some seem to be very generic, like ORGANIZATION IS PHYSICAL STRUCTURE, whereas others are more specific, like DESIRE IS HUNGER and DIFFICULTIES ARE BURdens.

Metaphors of the latter type, which are more in accordance to what Lakoff & Johnson have claimed to be a conceptual metaphor (at least before the 1999 book), have specific image schemas so that we can easily predict, from the primary scenes, the language licensed by the metaphor. Source and target concepts can be more clearly defined, one independent from the other, in dictionaries, for instance.

The domains in the generic type, on the other hand, cannot be completely dissociated in dictionary definitions. It is hard to talk about one without mentioning the other. For instance, in the ORGANIZATION IS PHYSICAL STRUCTURE metaphor, the definitions of organization always include the word structure and vice versa. Besides, this metaphor is very much like a generic level metaphor in that they do not have fixed source and target domains. Anything concrete in the world is physically structured in some way. Things include all sorts of material, shape, function, parts, relation between parts, etc., and these things can be completely unrelated. Grady mentions in his thesis that this metaphor would not be considered as a metaphor within the tradition of metaphor theory, because these domains may not be specific enough to count as experiential domains (Grady, 1997:71). However, for the author, the problem with the former view is that domains have been thought of as particular categories of human experience and perception (such as activities) and physical properties (such as temperature and size). In the primary metaphor hypothesis, as explained above, only certain categories of human experience and perception, and certain physical properties can be used as source and target domains of
metaphors. Very rich mappings, for example, do not work as primary domains. However I am afraid that too generic domains are not appropriate either because even though it is possible to identify the primary scenes, they do not help much with the prediction of the key words, unless some of their concrete examples could be included, as my analysis below has shown.

According to Grady, many or most of primary metaphors map concepts in a relatively generic level. ORGANIZATION IS PHYSICAL STRUCTURE, which is motivated by “the correlation between observing the part-whole structure of objects and forming cognitive representation of the logical relationships holding within them” (ibid:282), is a good example of a metaphor where a very general category of experience maps onto another category that is also very generic. The mapping of its primary scenes is as follows:

1. the physical parts are the elements in the organization
2. the relation/location between these physical parts is the logical and causal relationship between the elements in the organization
3. the purpose of the physical structure is the purpose of the organization
4. the functions of each physical part are the functions of the elements in the organization

The problem starts when we try to identify the lexical items licensed by the mapping. In principle, we should be able to think of any physical object and map our experience with it onto the domain of an organization, so that its physical parts will map onto the elements of the organization, the relation between these parts onto the relationship of the elements of the organization, and so forth. For example, if the object thought of is the human body, then the elements of the organization should be described in terms of head, members, body, etc.; the head should be in the highest position, whose purpose should be to maintain the organization functioning. The difficulty in this task (the identification of the lexical items licensed by the mapping) is that there are so many different kinds of physical objects that almost every word would be possible. Besides, it seems that if we do this we will actually be dealing with a compound metaphor (basic level metaphors). One solution could be to consider that only very generic terms are licensed by this metaphor, as I suggest in Table 2.
Table 2 – Metaphorical Language Licensed by the Primary Scenes
Mapping of ORGANIZATION IS PHYSICAL STRUCTURE

<table>
<thead>
<tr>
<th>primary scenes:</th>
<th>key words:</th>
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<tbody>
<tr>
<td>1. the physical parts are the elements in the organization</td>
<td>part, piece, element</td>
</tr>
<tr>
<td>2. the purpose of the physical structure is the purpose of the organization</td>
<td>purpose, objective, goal</td>
</tr>
<tr>
<td>3. the functions of each physical parts are the functions of the elements in the organization</td>
<td>function, work</td>
</tr>
<tr>
<td>4. the relation/location between these physical parts is the logical and causal relationships between the elements in the organization</td>
<td>place, relation, relationship, position</td>
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</table>

Words such as foundation, framework, base, footing, support, solid, strong, unraveled, tatters, as well as central, peripheral, marginal, before, after, put together, put apart, fixed, mobile, that seem to be part of an object we have in mind, will then be licensed by compounds having ORGANIZATION IS PHYSICAL STRUCTURE as one of their primary metaphors.

The question is whether it is the case that we have linguistic examples of this metaphor in such an abstract way as I propose in Table 2. How can one talk about the purpose of an organization in terms of the purpose of a physical structure if this physical structure is not known? How can we talk metaphorically about the relation between parts if we do not have a minimum of specificity of the whole structure? Are examples such as You’re part of the family, for instance, licensed by the ORGANIZATION IS PHYSICAL STRUCTURE metaphor or are they motivated by more specific experiences (i.e., a basic level metaphor)?

All those concepts regarding the emergence of correlated metaphors apply directly only to primary metaphors, since the compound ones are metaphorical complexes, composed of primitives, and therefore, generated through a different process. Unfortunately, it seems that Grady still does not have a clear explanation about this mechanism. However, cultural aspects should be strongly involved in the process of primary metaphor unification, i.e., in the construction of compound metaphors. While the underlying motivation to primary metaphor is more physical than cultural, then it would exist in several languages and in similar ways, the underlying
motivation for compound metaphor formation would have cultural aspects involved. Primary metaphors would combine themselves on the basis of certain cultural aspects, consequently, each language could have different compound metaphors. A more extensive study including the analysis of the metaphor unification process would certainly shed light on the role of culture in the emergence of metaphors.

Conclusion

In this paper I have discussed some of the main changes proposed by the Primary Metaphor Hypothesis, in contrast to the former view of the Contemporary Theory of Metaphor. In the new hypothesis, the emergence and nature of conceptual metaphors are seen as grounded in more experiential patterns, called primary metaphors, which can be unified, resulting in compound metaphors. The experiential basis of the metaphor, a fundamental element hardly explained in the theory, has in the new proposal a clear typology: it is the correlation between two distinct dimensions of experience that generates metaphor.

The fundamental construct, in the former view, was the image schema, large structures that map complete domains onto other complete domains, while in the new view it is the primary scenes, which, on the contrary, are more local structures, without many details motivated by particular moments in our experiences. They are cognitive representations of a recurrent experience, that involves a tight correlation between two dimensions of experience: a source domain, which has sensory contents, i.e., image schema, and a more abstract, target domain, which does not have image schema, but is related to various kinds of responses to the sensory inputs. Differently, in the former view, source and target domains had image schemas and varied from the simplest and most schematic to the richest and most vivid domains. The licensing of metaphorical expressions was thought to be a result of the mapping between source and target domains, so that the expressions could be explained but not predicted. In Grady’s hypothesis, it is the mapping of primary scenes that licenses the expressions, allowing great predictability of most of them.

Although there are still questions to be answered, such as the role of culture in the generation of primary metaphors or the plausibility of very
generic concepts as source domains, the primary metaphor hypothesis is an important step in the theory of conceptual metaphor, since it opens the possibility of using methods based on empirical evidence to show connections between embodiment and metaphor in thought and language.

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**Reference**


