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**XL burgers, shiny pizzas, and ascending drinks: primary metaphors and conceptual interaction in fast food printed advertising**

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Abstract: The experiential, embodied nature of primary metaphors endows them with a universal flavor of interest to the present-day global advertising needs. Based on the analysis of 500 printed advertisements corresponding to the top ten fast food brands currently in the market, this paper investigates the visual representation and functions of primary metaphors within this advertising genre. In contrast to what has been reported to be the case with resemblance metaphors used in advertising, primary metaphors do not have the product as their source or target domains. The connection between the primary metaphor and the product is established in a specific way, which reveals a close interaction with other cognitive (i.e., hyperbole and metonymy) and pragmatic (i.e., derivation of explicatures) operations. In addition, the paper explores how primary metaphors combine with one another and with other resemblance metaphors. The study of these interplays reveals new patterns of conceptual interaction (i.e., one-target and multiple-target primary metaphor clusters) and opens a window onto the varied functions performed by primary metaphors in the narrative of advertising (i.e., enhancing the conceptual layout of the product, highlighting one aspect of it, motivating, constraining and/or enriching lower-level resemblance metaphors).

**Keywords:** advertising, primary metaphors, visual metaphor, multimodal metaphor

**1 Introduction**

The role and effects of the use of metaphors in consumer preferences, product recall, and other marketing-related issues has attracted a lot of attention from advertising specialists (McQuarrie and Mick 1999; Kitchen 2008). Linguists have also looked into the metaphorical basis of advertising narratives with the purpose of deepening their understanding of the workings of metaphor in the rich variety of modes (audial, visual, textual) offered by printed advertisements and commercials (Ágnes 2009; Forceville 1996, 2017; Forceville and Urios- Aparisi 2009; Perez-Sobrino 2017); alternatively, they have investigated the role of metaphor in the creation of inferences and persuasion in the discourse of advertising (Lundmark 2005; Martín de la Rosa 2009).

“Metaphors [however] come in many forms: absolute, active, complex, compound, implicit, mixed, root and submerged…" (Sheth et al. 2008: 26). In his foundational work, Grady (1997) further distinguished between (1) *primary* metaphors, also referred to as *correlation-based* or *embodied* metaphors (i.e., those whose source domains are bodily grounded in sensory-motor concepts [e.g., upward/downward movements/locations, containment, etc., as in happy is up] or experiential notions [e.g., hunger, heat, closeness, etc., as in affection is warmth]), and (2) *resemblance* metaphors (i.e., those based on perceptual similarities, as in people are animals metaphors like *He is a pig*). Primary metaphors, which are present in our everyday life conceptualization of reality, can be combined with one another into larger structures to form *compound metaphors*. A well-known example is theories are buildings, which can be broken down into organization is physical structure, as in *He put together a new theory*, and persisting is remaining erect, as in *He pulled down all my arguments.*

Most studies on metaphor and advertising have focused on resemblance metaphors, while primary metaphors are still largely unexplored in this genre. As will be argued in this paper, however, primary metaphors, can also communicate meaning by themselves. In addition, they can interact with resemblance metaphors, forming *metaphorical complexes* in which they motivate, constrain, and/or enrich the interpretation of resemblance metaphors without being part of their conceptual layout as is the case with compound metaphors.[[1]](#footnote-1) Two or more primary metaphors can also cluster together to communicate a particular meaning or set of meanings. And finally, primary metaphors can enter into recurrent patterns of interaction with other cognitive operations, such as hyperbole and metonymy, for specific purposes. These issues, as well as the frequency of use of primary metaphors in advertising, the conceptual nature of their source and target domains, their interaction with the product/service being advertised, and the visual configurations used for their representation in the advertisements, have not yet been investigated in detail. Nevertheless, the embodied nature of primary metaphors endows them with a special status, and potentially turns them into powerful conceptual tools capable of activating target domains in a much less culture-dependent manner than is the case with resemblance metaphors. Due to their experiential, embodied quality, primary metaphors are likely to be understood similarly by speakers of different languages. They have a marked universal flavor, which is of interest to the present-day global advertising needs (Ortiz 2010, 2011; Pérez-Hernández 2011, 2013a, 2013b, 2014), and call for an exhaustive analysis with a view to achieving a better understanding of their idiosyncrasies within the genre of advertising.

This paper thus offers an in-depth analysis of multimodal primary metaphors in fast food printed advertising. It is organized as follows. Section 2 defines the key notion of primary metaphor, highlights its relevance for the advertising industry, offers a brief overview of the yet scarce literature on embodied metaphors within the advertising genre, and establishes the research objectives. Section 3 describes the corpus and the metaphor identification methodology used for the study. Section 4 reports on the results of the analysis and offers a discussion of the data. The final section summarizes the results and establishes new lines for further research.

**2 Primary metaphors: Definition, state of the art and research objectives**

**2.1 Primary metaphors: Definition, traits and relevance for global advertising**

In his foundational work, Grady (1997) identified a special type of cognitive mapping which had already been hinted at in Johnson's (1997) *Conflation Theory*, and which was later on to find support in Narayanan's (1997) *Neural Theory of Metaphor*. Labelled as *primary metaphor*, this type of conceptual projection involves a cognitive operation of correlation between two domains that tend to co-occur in our human experience and, therefore, conflate in the human mind since the early stages of childhood. Thus, we often experience the fact that the larger the quantity of water added to a glass, the higher the level of the water inside the glass is. This recurrent co-occurrence of quantity and height in everyday life experiences serves as the experiential grounding for the primary metaphor more is up (e.g., *Prices are soaring)*.

If compared to resemblance metaphors (i.e., *Achilles is a lion*), whose motivation for metaphorical transfer is based on the perception of physical or conceptual similarities between two distinct domains, primary metaphors are special in several ways. Stemming as they do from bodily and/or experiential events, the experiences that both their source and target domains refer to are relatively basic concepts. As noted by Valenzuela (2009: 239):

[...] source domains [of primary metaphors] are embodied experiences, typically related to perceptual or force-dynamic schematizations of experience (e.g., up/down, in/out, hot/cold, etc.), while target domains are normally subjective fields of evaluation, for example, something being important or not, good or not, etc.

Embodied metaphors are learned unconsciously and automatically, simply by interacting physically with the surrounding world. Just as people’s bodies and physical experiences are similar for all humans regardless of the culture they belong to, so are primary metaphors based on bodily-grounded notions. They emerge not just in language, but also in virtually any mode and output of human cognition (visual, audial, gestural, etc.) and, though not innate, they are firmly and unconsciously entrenched in human reasoning (Valenzuela 2009). Their universal character turns them into deeply interesting constructs for the purposes of cross-cultural communication in general, and for the design of global, culture-independent marketing and branding campaigns, in particular (Pérez-Hernández 2011, 2013a, 2013b, 2014).

Grady (1997) has defined over 100 primary metaphors with their corresponding verbal expressions. Below is a selection for illustration purposes:

**Table 1:**Examples of primary metaphors (Grady 1997).

|  |  |  |
| --- | --- | --- |
| **PRIMARY METAPHOR** | **MOTIVATION** | **EXAMPLE** |
| THE NATURE OF AN ENTITY IS ITS SHAPE | The tendency to draw inferences about an object from its shape. The correlation between an object’s shape and its behavior. | Democracy takes very different forms in different countries. |
| SIMILARITY IS ALIGNMENT | Objects may be oriented in the same way because they serve similar functions, are involved in similar processes or acted on by similar forces. | Her new dress is very much in line with those worn by her coworkers. |
| IMPORTANT IS CENTRAL | Being in a central position allows maximum access to, control over, causal effect on surrounding objects. | That issue is central to these negotiations. |
| IMPORTANCE IS SIZE/VOLUME | The correlation between size/volume of objects and the value, threat, difficulty, etc. they represent as we interact with them. | Tomorrow is a big day for this organization. |
| GOOD IS BRIGHT | Correlations between light and safety, dark and danger. | The outlook has brightened since the new council took office. |
| HAPPY IS UP  (Related metaphors: HEALTHY IS UP, BEING CONSCIOUS IS BEING UP) | The correlation between happiness and erect body posture. And/or correlation between being in a higher position (e.g., on a hill) and feeling safe, in control, etc. | I was feeling low yesterday, but the good weather has really picked me up. |
| KNOWING/UNDERSTANDING IS SEEING  (Related metaphors IMPORTANCE IS BEING IN FOCUS, IMPORTANCE IS BEING IN THE FOREGROUND, IMPORTANCE IS BEING NEAR) | The correlation between visual perception and the conscious awareness of information. | I see what you mean. |

**2.2 Primary metaphors in advertising: State of the art and research objectives**

Resemblance multimodal metaphors have been amply studied in relation to printed advertising (Forceville 1996, 2013, 2017; Forceville and Urios-Aparisi 2009; Pérez Sobrino 2017). However, specific studies on the workings of multimodal primary metaphors within this genre are scarce and mostly directed at evincing the existence of embodied metaphors in other modes beyond their already attested linguistic manifestations, rather than at investigating their configuration and functions in the advertising narratives.

Morris and Waldman (2011) carried out a cross-cultural analysis of two primary metaphors (i.e., orientational and container metaphors), only to conclude that their representation in the advertisements is mostly textual. Visual container primary metaphors were less frequent than their linguistic counterparts, and their corpus retrieved no instances of primary orientational metaphors (e.g., happiness is up).

This conclusion clashes with Ortiz’s (2010, 2011) findings. Focusing on the analysis of the similarity is alignment primary metaphor in printed advertisements, she explains how the alignment of two or more differing objects constitutes a formal structure that triggers a metaphorical interpretation of one of them in terms of the other (*pictorial simile* in Forceville’s [1996] terminology). Thus, Ortiz points to one of the functions of primary metaphors in the realm of advertising: facilitating multimodal resemblance metaphors by leading the viewer to establish a conceptual projection between two different domains:

The symmetric alignment of differing objects creates a pictorial simile. In such cases, the observer perceives a cognitive dissonance in the grouping because perceptually it is suggested that the objects belong to the same class, but conceptually they are different. To overcome this incongruence, it is necessary to infer common characteristics (Ortiz 2010: 163).

As will be argued in Section 4, our data confirms Ortiz’s findings and offers additional information about the functions performed by primary metaphors in printed advertisements.

In his incursion into multimodal metaphors of food, Ming-Yu (2017: 227) states that primary metaphors of food “contribute to bridging potential gaps between cultures due to their relative universality.” He also highlights the fact that primary metaphors often interact with proposition schemas and cultural assumptions, thus serving as the basis for the construction of creative complex multimodal metaphors. This is in line with our findings about the need for contextual/cultural parametrization of the target domains of primary metaphors to suit the advertising requirements of each specific product. This issue will also be shown to be narrowly connected with the interaction between primary metaphors and metonymy, since such parametrization has been found to be achieved via the metonymic reduction of the target domains of primary metaphors (see Section 4.2).

Much in the same vein, Yu (2011) and Pérez Sobrino (2017) have provided evidence on the workings of metaphorical complexes in TV commercials and printed advertisements respectively. Primary metaphors are found to be part of these complexes and understood either as building blocks of the resulting metaphorical compounds in Yu’s account, or as elements of metaphorical chains or donor metaphors enriching resemblance mappings in Pérez Sobrino’s proposal. Section 4 looks in depth into the nature of the metaphorical complexes and interaction patterns in which primary metaphors take part within the genre of printed advertising, offering additional data on how embodied metaphors combine with one another or with resemblance metaphors into metaphorical complexes. As shall be argued, the functions of primary metaphors in these metaphorical complexes are more varied than those reflected in the literature up to date.

Previous research has so far also assumed that primary metaphors function similarly to resemblance metaphors as regards conceptual interaction (Hidalgo and Kraljevic 2011; Pérez Sobrino 2017; Urios-Aparisi 2009). In this regard, Urios-Aparisi (2009: 110) and Hidalgo and Kraljevic’s (2011: 175) conclude that metonymy limits the possible correspondences between domains by highlighting the features of both domains that are to be matched metaphorically, and it can also motivate a related metaphor. Similarly, Pérez Sobrino (2017: Ch. 6) identifies metaphtonymy as the most frequent pattern of conceptual interaction in advertising. These conclusions are largely based on the analysis of resemblance metaphors. The nature of the conceptual domains at work in primary metaphors and their connection with the products being advertised, however, differ from those of resemblance metaphors in significant ways. As our analysis reveals in relation to those primary metaphors found in fast food printed advertising (see Sections 4.2 to 4.4), this has an effect on the interaction of primary metaphors with metonymy, as well as on the types and productivity of the metaphorical complexes in which they are involved.

All in all, specific literature on primary metaphors within the genre of advertising is scarce and many questions remain unanswered. How frequent is the use of primary metaphors in printed advertisements as opposed to that of resemblance metaphors? Do primary metaphors always have an ancillary role in advertising (i.e., prompting further metaphorical mappings, as revealed in Ortiz [2010], or combining into creative manifestations of complex metaphors, as shown in Ming-Yu [2017]), or do they play a relevant role in communicating messages about the product/service on their own? Is the product being advertised the target domain of a primary metaphor as is usually the case with resemblance metaphors used in advertising (Forceville 2017: 28), or is the formal relation between the product and the primary metaphor of a different nature? Which patterns of conceptual interaction do primary metaphors exhibit in multimodal advertising? From these questions stem the following research objectives for the analysis of primary metaphors in the discourse of fast food printed advertising:

* 1. to assess the pervasiveness of multimodal primary metaphors and compare their frequency of occurrence to that of resemblance metaphors.
  2. to provide an inventory of the source and target notions that are communicated by multimodal primary metaphors.
  3. to describe the formal structures adopted by multimodal primary metaphors with a view to spell out how they are connected with the product being advertised.
  4. to explain the functions of multimodal primary metaphors in the discourse of advertising.
  5. to investigate the patterns of conceptual interaction involving primary metaphors (i.e., primary metaphor clusters, primary metaphor-metonymy interactions, and primary-resemblance metaphor interplays).

**3 Corpus and metaphor identification method**

**3.1 Corpus selection**

A corpus-based analysis has been conducted including both a quantitative and a qualitative exploration of the multimodal primary metaphors found in fast food printed advertising. To guarantee the diversity of the corpus, we have compiled a collection of 500 printed advertisements of the top ten global fast food brands according to *Forbes*:[[2]](#footnote-2)

1. McDonald’s
2. KFC
3. Subway
4. PizzaHut
5. Starbucks
6. Burger King
7. Domino’s Pizza
8. Dunkin’ Donuts
9. Dairy Queen
10. Papa John’s > Hardees

The analyst’s bias in the choice of the data has been avoided by selecting the first 50 advertisements that appear in a simple *Google Images* search (e.g., “McDonald’s printed advertisements”) for each of the trademarks. The last of the brands in the Forbes classification (i.e., *Papa John’s*) has been substituted by another popular one, *Hardees*, due to the fact that the searches performed on that brand did not retrieve the established number of 50 printed ads. To guarantee the variety of the data, the resulting collection of advertisements includes meal products (e.g., *Pizza Hut*), drinks (e.g., *Starbucks*), and deserts and snacks (e.g., *Dunkin’ Donuts*).

Fake advertisements sometimes appear in Google searches. The authenticity of the data has been attested by manually checking the source of each of the items included in the corpus.

**3.2 Primary metaphor identification**

Metaphors cannot yet be retrieved by means of automatized corpus searches, therefore, their identification still needs to be manually carried out by the analyst despite the inherent risk of subjectivity involved. The only method at hand for multimodal metaphor identification was proposed by Forceville (1996), and later on developed by the linguists in the Vismet project (www.vismet.org). This method, however, is not infallible and, as their own proponents admit, it “still remains largely based on experts’ opinions” (http://www.vismet.org/VisMet/annotation.php). One of the major drawbacks of the Vismet procedure in relation to our research objectives is that it proposes a unified method for the identification of both primary and resemblance metaphors, which fails to take into consideration potential differences between them. In fact, as revealed in our analysis, their behavior, both in terms of form and function, differs considerably. The Vismet procedure has therefore been followed for the identification of those resemblance metaphors in our corpus, but it has then been slightly modified to make it operative in our search for primary metaphors. To identify these, the following steps have been followed. We have started by locating the advertised product, which our study has revealed to be somehow formally connected with the source domains of primary metaphors (see Section 4.2). We have then proceeded to explore the product as represented in the advertisement, together with its verbo-pictorial context, in search for possible manifestations of source domains of primary metaphors which are visually or verbally associated with it. Finally, we have turned to the list of primary metaphors in Grady (1997) for potential matches. For example, if the product exhibited a disproportionately big size, we have listed those primary metaphors in Grady’s list that had the notion of ‘size’ (i.e., important is big) as their source domains. Only clear-cut instances of primary metaphors have been included in the analysis because these are the ones that are intentional and reflect the aim of the advertisers to say something about the product/service.

**4 Results and discussion**

**4.1 Frequency of use of primary vs. resemblance metaphors**

Out of the 500 advertisements in our corpus only 24 display no metaphors at all. The remaining 476 advertisements include one or more instances of metaphorical mappings, yielding a total of 2092 metaphors, of which 152 instances are resemblance metaphors and 1940 are primary metaphors. As shown in Table 2, the total number of primary metaphors is markedly higher than that of resemblance metaphors. In addition, the number of primary metaphors (1940) is higher than the number of advertisements displaying metaphors (476), which reveals that many of the advertisements under analysis contain not just one, but several embodied mappings. The data thus unveils the pervasiveness of primary metaphors in the specific subgenre of fast food printed advertising.

**Table 2:** Primary vs. resemblance metaphors.



It could be argued that, if compound metaphors can be deconstructed into multiple primary metaphors, then the pervasiveness of primary metaphors in our corpus should come as no surprise. What is revealing about these results, however, is that the number of primary metaphors in Table 2 does not include those that function as primaries of compound metaphors (such as organization is physical structure in relation to theories are buildings, in which the former is a necessary building block of the latter). It refers exclusively to primary metaphors which communicate a meaning on their own, form clusters of primary metaphors, or interact with resemblance metaphors in metaphorical complexes (see Sections 4.2, 4.3 and 4.4). Their attested high frequency of occurrence should lead to their consideration as a phenomenon worthy of further analysis. Nevertheless, primary metaphors in printed advertising have received very little attention in the literature (see Section 3). This leads to a gap in the understanding of the nature and functions of embodied metaphors in this genre. As shall be illustrated in the next sections, however, the primary metaphors found in the advertisements are highly effective in communicating and highlighting basic evaluative and emotional notions on their own, and they have a relevant function in motivating, constraining, and/or enriching resemblance metaphors. Their connection with the advertised product, their formal configurations, and patterns of interaction with other cognitive operations (i.e., metonymy, hyperbole) also present some idiosyncrasies that set them apart from resemblance metaphors within the genre of advertising.

**4.2 Primary metaphors and their connection to the advertised product**

Zooming in on the collection of primary metaphors contained in our corpus, Table 3 shows a total of 16 types of embodied metaphors, of which four clearly stand out from the rest (i.e., important is central, important is big, good is bright, and important is being near).

**Table 3:** Number and percentages of primary metaphors per type.



The source domains of these embodied metaphors are mostly perceptual notions involving size (big), space/location (central, near, alignment, etc.), visual properties of objects (brightness, shape), and experiential concepts (hunger, taste). Target domains are of three distinct types: basic notions of evaluation (important, good, appealing, essential), abstract generic concepts (similarity, roles, nature, existence), and emotions (happiness, desire, intimacy). The meanings of the target domains of primary metaphors are useful for marketing purposes since they correlate with some of the basic ideas that need to be communicated about a product: its nature, its functions (roles), its evaluation (good, important, essential), and the emotions it may arouse (intimacy, desire, happiness).

The literature has concluded that the genre of advertising has strong conventions regarding the use of metaphors. One of them is that “most metaphors in commercial advertising have the advertised product/service […] as the metaphor’s target domain” (Forceville 2017: 28). The data in Table 3 reveals that this genre convention is not followed in the case of primary metaphors in fast food advertisements, since the product/service functions neither as their source, nor as their target.

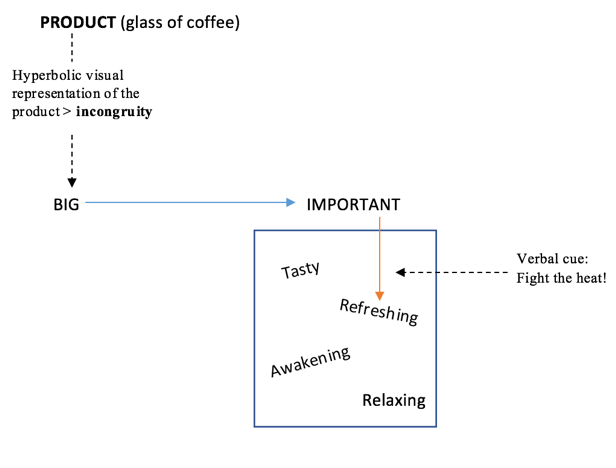
This could only be expected, since primary metaphors are experiential correlations between sensory-motor, perceptual notions (e.g., up, central, big) and highly abstract concepts of evaluation and emotion, among others (e.g., important, good, similarity). The conceptual domains represented by the products under analysis (e.g., hamburgers, donuts, pizzas, etc.) do not qualify as either of them. Grady (1997: 150) stated that the domains of primary metaphors are relational in nature, rather than nominal. He further argued that “all the source concepts in primary metaphors [...] refer to properties of, relations between, or actions involving objects, rather than to objects themselves.” Following this line of reasoning, we maintain that the product (=object) can be neither the source, nor the target domain of the primary metaphors in our corpus. Still, as shall be argued below, primary metaphors do relate to the advertised products and are understood as conveying meaning about them, and not about other elements in the advertisement. It is necessary, therefore, to explain how this link between the product and the primary metaphor is established, since it is not as straightforward as in the case of resemblance metaphors, where the product functions as the target domain of the metaphorical projection. By way of illustration, consider the following advertisement:



**Figure 1:** important is big [[3]](#footnote-3)

The product (i.e., glass of coffee) is presented by means of a closeup that leads the consumer to perceive it as big relative both to the entire frame, and to objects which are inherently bigger than it (i.e., the buildings, carriages, and people in the background). This hyperbolic visual representation of the glass of coffee (1) draws the consumer’s attention towards the notion of size (i.e., big), and (2) creates an incongruity that needs solving (i.e., in real life coffee glasses are not as big as the image suggests).[[4]](#footnote-4) What guarantees a plausible interpretation is the existence of an underlying embodied conceptual mapping from ‘size’ to ‘importance’ (i.e., the primary metaphor important is big), whereby we understand the big glass of coffee as important in some unspecified way. This resulting explicature is straightforwardly connected with the product, because it is precisely the glass of coffee that functions as the vehicle for the representation of the attribute (i.e., big) conforming to the source domain of the metaphor. The ability of resemblance metaphors to generate this type of explicatures has been amply attested in the literature (Ruiz de Mendoza and Pérez 2003).[[5]](#footnote-5) However, while resemblance metaphors generate culture-dependent explicatures, which may not be understood by members of different communities, primary metaphors, since they are grounded on experiential embodied correlations, are expected to generate similar explicatures worldwide. This trait makes primary metaphors especially worthwhile for the needs of the present-day global advertising industry.

The concept of ‘importance’, however, like most of the notions functioning as target domains of primary metaphors is rather generic and unspecific in meaning. The consumer thus perceives the glass of coffee as having a special significance, but in order to reach a final and relevant interpretation, the importance of the glass of coffee still needs to be further parametrized.[[6]](#footnote-6) This parametrization has to be compatible both with the conceptual nature of the advertised product (i.e., the type of attributes that turn a glass of coffee into something important/relevant for a consumer), and with other contextual parameters (i.e., a glass of coffee may be important to a consumer for different reasons in different contexts). Such parametrization requires a metonymic projection of the effect for cause type. Thus, of all factors that can make a given brand of coffee appear as important to a consumer, they will pick up the one(s) that match the context provided by the advertisement. In the case under scrutiny, since the advertisement contains a verbal element (“Fight the heat!”) hinting towards the need to undertake actions to keep oneself cool in the hot summer weather, the importance of the glass of coffee may be understood as stemming from its refreshing capabilities. Consequently, a domain reduction metonymic mapping of the effect for cause type will lead the consumer to parametrize the importance of the glass of coffee as caused by its refreshing potential.[[7]](#footnote-7) Figure 2 schematizes the process by which a link is established between the product and the primary metaphor, as well as the final interpretation of the resulting explicature, via a metonymic reduction of the target domain of the metaphor.



**Figure 2:** Schematization of the interpretation of the advertisement in Figure 1. The blue arrow represents the explicature-generating primary metaphor important is big. The red arrow represents the effect for cause metonymic operation.

As advanced at the beginning of this section, in resemblance metaphors, the product represents the target domain of the metaphorical projection. Thus, in a resemblance metaphor like donuts are the lips of a sexy woman (see Figure 10), donuts (product) is the target and the lips of a sexy woman is the source of the metaphor. As argued above, in the primary metaphors found in our corpus of printed advertisements (e.g., important is big, good is bright, etc.), the product is strictly speaking neither the source, nor the target domain. Rather, it is linked to the source domain of the metaphor in diverse ways (e.g., by means of a hyperbolic incongruent representation of its size, as in the previous example). The primary metaphor thus cued enriches the representation of the product by generating an automatic explicature stemming from the embodied/experiential correlation between its source and target domains. This explicature can at a later stage of the interpretation process be conveniently parametrized for each advertisement through domain reduction metonymic operations.

It could be argued that products have properties (like importance) and that, therefore, it would be entirely legitimate to interpret the target domain of the primary metaphor (importance) as referring to the product (i.e., the glass of coffee), and not just to a property. However, it should be noticed that, following the same line of reasoning, the properties described by the source domain of the primary metaphor would also have to be interpreted as referring to the product. This would result in mappings like an important glass of coffee is a big glass of coffee, which amounts to stating that the product, or rather its properties, are both the source and target domains of the metaphor. Still, the scenario is quite different from the one in resemblance metaphors, where a distinct domain of experience (source: woman’s lips) is mapped onto the product (target: donuts). In the case of primary metaphors, as shown in relation to the advertisement in Figure 1, what is at work is a ready-made prêt-à-porter cognitive mapping with its own source and target domains (i.e., important is big) which, when linked to a product, enriches its interpretation by generating explicatures about it. Therefore, it seems more reasonable to look at primary metaphors in advertisements as correlations of properties which are predicated about products, rather than taking the properties of the product as the source and target domains of the metaphor itself.

**4.3 Formal configurations, functions, and patterns of interaction of multimodal primary metaphors**

As argued in Section 4.2, a link needs to be established between the primary metaphor and the product, so that the information conveyed by the former is understood as referring to the latter and not to other elements in the advertisement. Our corpus reveals six formal configurations in which the product serves as a vehicle for the representation of the source domain of a primary metaphor, thus establishing a connection with it. While offering a description of each of these formal layouts in turn, we shall also illustrate some instances of conceptual interaction (i.e., primary metaphor clusters, primary-resemblance metaphors interactions), and consider the different functions performed by primary metaphors in the advertisements under consideration.

**4.3.1 The product/service serves as physical support for the representation of the source domain of the primary metaphor**

Source domains of primary metaphors are often perceptual attributes (i.e., size, focus, brightness), which need a concrete, material object to allow their visual representation. This physical support is offered by the product being advertised. The connection with the source domain is thus straightforward. The glass of coffee in Figure 1 served as physical support for the representation of the attribute ‘big’ corresponding to the source domain of the primary metaphor important is big. Since the product functions as the vehicle for the representation of the source domain, once the corresponding target domain (i.e., important) is activated in the minds of the consumers, it is also straightforwardly associated with the product. As shown in Section 4.2 in relation to Figure 1, when the product acts as physical support for the representation of the source domain, the function of the primary metaphor is to communicate basic evaluative meanings (i.e., importance) about the product. These generic meanings can later on be conveniently parametrized via metonymic reduction operations to fit the nature and context of the advertised product, thus enriching its portrayal.

Our corpus yields numerous examples (see Section 4.4 for quantitative data) in which the product serves as the vehicle for not just one but several source domains of primary metaphors sharing the same target domain. Figures 3, 4 and 5 illustrate this pattern of interaction of several primary metaphors clustering together to communicate a specific idea.

The advertisement in Figure 3 combines five primary metaphors in which the target domain (i.e., important) conveys the higher value that correlates with the corresponding source domains: important is being focused, important is being in a central position, important is big, important is near, and important is being in the foreground.



**Figure 3:** One-target primary metaphor cluster with 5 source domains highlighting the *NEW Onionburger* target domain

important is being focused and important is being in a central position are highly productive primary metaphors in our corpus. The latter finds its motivation in the fact that being in a central position allows more access to, control over and causal effect on surrounding objects. The former assigns a higher value to those entities that are in focus because they can be discerned and, therefore, provide a better access to information (i.e., a corollary of the understanding is seeing primary metaphor). As can be observed in Figure 3, the use of clear and sharp images of the hamburgers against the unfocused background, together with their location right in the center of the photograph, makes the product stand out from the rest of the elements in the advertisement, and guides the viewers’ attention towards what is important and relevant in it.[[8]](#footnote-8) In addition, one of the three burgers in the advertisement (i.e., the New Onionburger) is presented as ostensively bigger in size and closer to the front than the others. This hamburger is thus perceived as being somehow more relevant than the rest through the activation of three additional visual primary metaphors: important is big (which correlates the size of objects with their value), important is being in the foreground and important is being near (which correlate visual perception with conscious awareness of information –objects that are in the front and closer to the viewer are more visible and, therefore, more relevant). In this way, the Onionburger is presented as having a special status, whose specific nature is verbally communicated by the label ‘New’.

The novelty of the Onionburger could have been conveyed by a combination of the verbal input (i.e., label ‘New’) and just four additional primary metaphors (i.e., important is being focused, important is being in central position, important is being in the foreground and important is being near), as in Figure 4, in which the size of the burger has not been manipulated. Or mainly through linguistic means, as illustrated by the advertisement in Figure 5, where its average size and location at the back do not activate any of the aforementioned primary metaphors, and only its location against an unfocused background and in the central position of the image trigger the important is focused and important is being in central position embodied mappings.



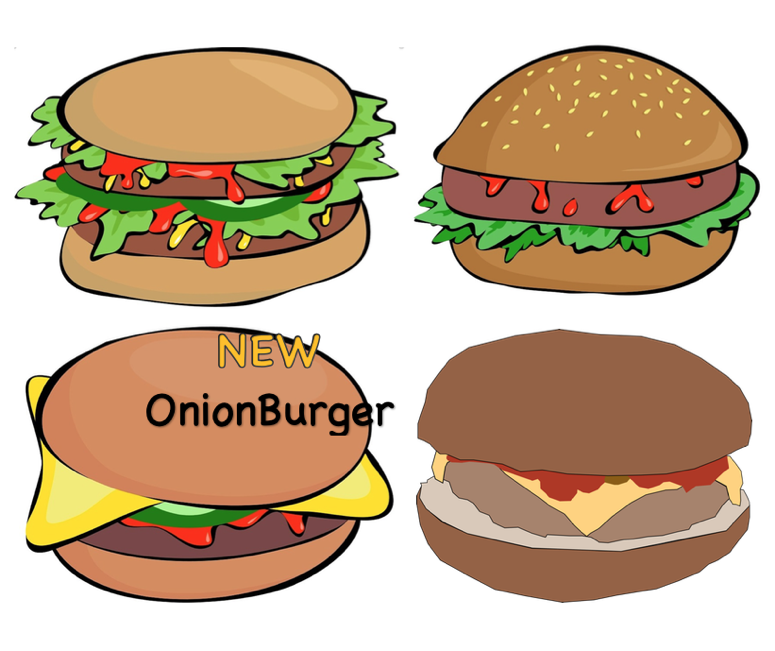
**Figure 4:** One-target primary metaphor cluster with 4 source domains highlighting the *NEW Onionburger* target domain



**Figure 5:** One-target primary metaphor cluster with 2 source domains highlighting the *NEW Onionburger* target domain [[9]](#footnote-9)

Metaphorical complexes involving the interaction of several metaphors have already been attested in the discourse of advertising (Pérez Sobrino 2017: Ch. 6). Those reported until now involve either metaphoric chains, in which the target of a metaphor functions as the source domain of another, or metaphoric complexes, in which the source-target layouts of up to three different metaphors (donors) are incorporated into another metaphor (receptor), thereby conceptually enriching it.[[10]](#footnote-10) As examples in Figures 3, 4 and 5 illustrate, in the advertisements under scrutiny a different type of interaction is at work, whereby several source domains are mapped onto the same target domain. This specific type of interaction (henceforth, *one-target primary metaphor clusters*) serves the purpose of highlighting and intensifying the meaning conveyed by the shared target. As a comparison of the advertisements in Figures 3, 4, and 5 reveals, the number of primary metaphors conforming the clusters may vary. Pending experimental confirmation, it can also be hypothesized that the effectiveness in conveying an intended meaning and the communicative impact of one-target primary metaphor clusters may be a function of the number of source domains involved.

It is also possible to imagine alternative advertisements where none of the primary metaphors considered so far is activated. Consider Figure 6, for example, where all the hamburgers are the same size, none of them occupies a central position or is closer to the front than the others, etc. In this case, the novelty of the Onionburger is communicated in a non-metaphorical way exclusively through the verbal label “New”. If this alternative advertisement is compared to the one in Figure 3, however, it becomes apparent that the combination of the linguistic input ‘New’ with the set of visual primary metaphors serves better the purpose of emphasizing the relevant condition of the New Onionburger.



**Figure 6:** Non-metaphorical NEW Onionburger advertisement.

**4.3.2 The product/service is presented as the cause/origin of the attribute conforming to the source domain of the primary metaphor**

In other advertisements, the connection between the primary metaphor and the product is established by presenting the latter as the cause or origin of the notion conforming to the source domain of the metaphor. This is the case with the embodied mapping good is bright in the advertisements in Figure 7, where the brightness (i.e., source domain) seems to emanate from the products (i.e., hamburger, tea, and pizza).



**Figure 7:** good is bright

The experiential grounding of the good is bright metaphor stems from recurrent correlations between experiences of light and safety, and their opposite (i.e., darkness and danger). The products in Figure 7 give off brightness, which triggers an explicature licensed by the primary metaphor good is bright. As a result, they are simultaneously perceived as the origin of the goodness associated with their luminosity. Additionally, as with previous examples, the goodness conveyed by the primary metaphor good is bright can be further metonymically parametrized in order to match the nature of each product (i.e., in the absence of any explicit hint, the goodness of the hamburger and the pizza will most probably be linked to their taste/nutritional values, and that of the warm tea to its comforting and/or relaxing effects).

As was the case with the formal structure depicted in section 4.3.1, primary metaphors in this type of configuration communicate a message about the product on their own. Their function, far from being instrumental, is essential in enriching the conceptual representation of the product.

**4.3.3 The product/service is located in the position specified by the source domain of the primary metaphor**

Some of the primary metaphors in Section 4.3.1 displayed spatial notions as their source domains (e.g., near/far, center/periphery). The advertisements in Figure 8 illustrate another topological embodied metaphor of this kind: happy is up. The experiential basis for this primary metaphor is found in the correlation between happiness and an upright bodily posture (Lakoff and Johnson 1980: 15), as opposed to the downward bodily posture which generally characterizes a person who is feeling sad or depressed. In the advertisements in Figure 8, the connection between the primary metaphor and the product is established by locating the latter (i.e., the soda drink and the hamburger, respectively) in the location specified by the source domain of the metaphor (i.e., occupying a high position as a result of an upward movement). The target domain of the primary metaphor (i.e., happiness) is also made explicit verbally in both advertisements through descriptors such as: “*Fun*burger. Release *happiness*!” and “Sodax. *Joy*! Let it out!”.



**Figure 8:** Multiple-target primary metaphor clusters.[[11]](#footnote-11)

Together with the happy is up mapping, the advertisements in Figure 8 activate additional primary metaphors. Both the soda bottle and the hamburger are visually represented by means of closeups (i.e., important is being near) and situated in the center of the image (i.e., important is being in a central position). Additionally, the soda bubbles are particularly sparkling, the black bottle is especially shiny, and the hamburger is also surrounded by a bright halo in the background (i.e., good is bright). If the advertisements in Section 4.3.1 revealed the existence of clusterings of several primary metaphors sharing the same target domain (i.e., *one-target primary metaphor clusters*), those in Figure 8 show that it is also possible to find clusters of primary metaphors with different target domains working together in the same advertisement (henceforth, *multiple-target primary metaphor clusters*). One-target primary metaphor clusters serve to highlight and intensify the meaning conveyed by the shared target domain. Multiple-target primary metaphor clusters are used to further enrich the conceptual representation of the product by conveying a set of diverse ideas about it, corresponding to the different target domains of the primary metaphors conforming to the cluster (i.e., happiness, importance, and goodness in the advertisements under scrutiny). Section 4.4 offers quantitative data about the productivity of each of these types of primary metaphor clusters. As shown in Table 6, multiple-target primary metaphor clusters are more frequent (N=212) than one-target primary metaphor clusters (N=84), which may be due to the fact that they are more useful in conveying a richer conceptual image of the product.

**4.3.4 The product/service adopts the shape of another entity thus activating the primary metaphor the nature of an entity is its shape**

Alternative formal configurations (Sections 4.3.4 to 4.3.6) lead to instrumental uses of primary metaphors, whose main function is no longer to enrich the conceptual representation of the product by communicating or highlighting an evaluative or emotional meaning about it, but rather to motivate, constrain and/or enrich further resemblance metaphors aimed at highlighting one or more relevant aspects of the product. This is the case with those formal structures in which the product takes the shape of another entity, as illustrated by the hamburger buns in Figure 9, which are presented in the shape of a person’s buttocks.



**Figure 9:** the nature of an entity is its shape.

The consumer perceives these similarities and establishes a metaphorical mapping between the buns of the hamburger and a similar part of the human body (i.e., hamburger buns are a person’s buttocks). The interpretation of this resemblance metaphor is guided by the experiential correlation between shape and nature captured by the primary metaphor the nature of an entity is its shape. Since the buns have a shape similar to that of a person’s buttocks, they are expected to have a similar nature too. The advertisement further makes explicit the tender nature of a person’s buttocks (i.e., “Tender you!!”), which is projected onto the product.

The interpretation of the advertisement is not exhausted by determining the similarities between the nature of both entities. In fact, it displays some sexual overtones that ask for further explanation. In this connection, a cause for effect metonymic mapping makes the source domain of the resemblance metaphor (i.e., a person’s buttocks) stand for the notion of ‘sexual desire’, which in turn is the source domain of the primary metaphor sexual desire is hunger, thus presenting the hamburgers as irresistibly appealing.[[12]](#footnote-12) Food advertisements often contain sexual elements which, according to Reichert (2002), increase the consumers’ arousal, thereby motivating them to obtain the advertised product. In fact, a study carried out by Festjens et al. (2013) showed that sexual stimuli can make one feel sexy, greedy, and also hungry, thus providing a clear experiential basis for the primary metaphor sexual desire is hunger.

A chi-square test of independence was performed to examine the relation between each of the two primary metaphors at work in the example under consideration and the occurrence of resemblance metaphors in our corpus. A significant interaction was reported (X2 (1, N = 500) = 231.513, p > .01) for the nature of an entity is its shape, but no significant correlation was found for sexual desire is hunger. It should be noticed that the function of these two primary metaphors is also different. While the first one motivates and guides the interpretation of the resemblance metaphor based on the experiential correlation between the shape and the nature of an entity, the second enriches it by equating sexual desire with hunger, and thus presenting the product as highly tempting. Section 4.4.2 expands on this issue and attempts to determine why some primary metaphors are more prone than others to interact conceptually with resemblance metaphors.

**4.3.5 The product/service is overtly aligned to other objects thus activating the source domain of the primary metaphor similarity is alignment**

Yet another formal configuration linking the product to a primary metaphor consists in aligning the product with other differing, but somehow conceptually compatible, entities. The advertisement in Figure 10 depicts a beautiful woman with prominent brown rounded lips, which are aligned with a donut occupying the same position and displaying a shape and color similar to those of the woman’s lips. The conceptual clash produced by the alignment of differing objects needs to be resolved. Alignment experientially correlates with similarity, and thus the similarity is alignment primary metaphor motivates the resemblance metaphor donuts are the lips of an attractive/sexy woman. Since the donut and the lips are visually aligned, the consumer is urged to search for similarities between them, but this search is also guided by yet another experiential correlation. The donuts and the lips are not only aligned, they are also ostensively similar in shape. This perceived similarity of shapes calls for the nature of an entity is its shape primary metaphor, which helps to constrain the potential interpretations of the initial resemblance metaphor: the lips and the donuts have a similar shape; therefore, they also have a similar nature. Since the lips of the woman are sexy, so are the donuts. As in the previous example in Section 4.3.4, the source of the resemblance metaphor (i.e., sexy lips) metonymically stands for ‘sexual desire’, which in turn becomes the source domain of an additional primary metaphor sexual desire is hunger. The resulting metaphorical complex helps to present the product as irresistibly appetizing and desirable.



**Figure 10:** similarity is alignment, the nature of an entity is its shape, and sexual desire is hunger

As opposed to the sexual desire is hunger metaphor (and those other primary metaphors analyzed in Sections 4.3.1 to 4.3.3, which have as their main function to conceptually enrich the presentation of the product), similarity is alignment shares with the nature of an entity is its shape the fact that both are instrumental with respect to the resemblance metaphors that tend to co-occur with them, motivating them and guiding their interpretations. A chi-square test of independence performed on our data also suggests that there is a correlation between the use of the similarity is alignment primary metaphor and the occurrence of other resemblance metaphors in the same advertisement (X2 (1, N = 500) = 16.360, p > .01). The reasons why some of the primary metaphors in our corpus have a strong tendency to co-occur with resemblance metaphors will be dealt with in Section 4.4.2.

**4.3.6 The product/service is placed in the prototypical location of another entity thus activating the primary metaphor contextual roles are locations**

Primary metaphors can also be visually linked to the product by means of placing the latter in the prototypical location of a different entity. This constitutes a radical form of alignment in which one element overlaps with another, and hence, an extreme case of the similarity is alignment mapping. Such overlapping or full alignment creates a conceptual incongruity, and the consumer is forced to search for a plausible interpretation. Since locations experientially correlate with the functions performed in them, the contextual roles are locations mapping is further activated to make sense of the otherwise absurd visual configuration. Let us consider the advertisements in Figures 11 and 12.

Figure 11 recreates an advertisement by a popular brand of hamburgers which depicts a baby who is breastfeeding. The first thing that strikes the consumers attention is the fact that the location where the mother’s breast should be found has been occupied by a hamburger bun. Since the hamburger is occupying the position of the mother’s breast, it is also fulfilling its function of nurturing and feeding the baby, as licensed by the primary metaphor contextual roles are locations. Grady (1997: 284) explains the motivation of this metaphor as “the tendency for people/objects filling certain functions to be in particular locations (e.g., *We’re drinking lemonade in place of beer tonight*). The primary metaphor paves the ground for a metaphorical projection between the domains of ‘hamburger’ and ‘mother’s breast’ (i.e., a hamburger is a mother’s breast) in terms of their functions, which are similar (both are used to feed someone). However, the resemblance metaphor also transfers notions of softness, tenderness, and nurturing from the domain of mother to the target domain represented by the product. This is motivated by the nature of an entity is its shape primary metaphor which is activated by the obvious similarity of shape between the hamburger and the mother’s breast. The different primary metaphors, therefore, not only motivate the resemblance metaphor at work, but also guide its interpretation towards particular aspects of the product that need to be highlighted (e.g., its nature, its functions).



**Figure 11:** contextual roles are locations

Similarly, in Figure 12, a pizza is occupying the place of a CD player. Licensed by the similarity is alignment, contextual roles are locations and the nature of an entity is its shape primary metaphors, a further resemblance metaphor is activated (i.e., a pizza is a cd player), which metaphorically endows the target product (i.e., pizza) with some of the stereotypical functions and effects of a CD player (i.e., bringing happiness and pleasure to the consumer).

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**Figure 12:** contextual roles are locations.

Our analysis also yields a significant correlation (X2 (1, N = 500) = 125.224, p > .01) between the contextual roles are locations primary metaphor and the occurrence of additional resemblance metaphors in the same advertisement, highlighting once more the ancillary function of some embodied mappings.

**4.4 Primary metaphors and conceptual interaction**

The last of the research questions driving this study was concerned with the patterns of conceptual interaction involving primary metaphors in the subgenre of fast food advertisements (i.e., primary metaphor clusters, primary metaphor-metonymy interactions, and primary-resemblance metaphor interplays). In section 4.2 it was shown how primary metaphors interact with metonymy and hyperbole. In Section 4.3 it was reported that primary metaphors can combine with one another to yield conceptual clusters of two types: one-target primary metaphor clusters (Figures 3, 4 and 5) and multiple-target primary metaphor clusters (Figures 8). It was also attested that primary and resemblance metaphors interact with each other producing metaphorical complexes, some of them being so pervasive that further explanation is required (Figures 9, 10, 11 and 12). This section offers quantitative data about the aforementioned phenomena and discusses those aspects of the conceptual interaction of primary metaphors that differ from those of resemblance metaphors as already attested in the literature.

**Table 4:** Number and percentage of cognitive operations.



As captured in Table 4, both primary and resemblance metaphors appear more frequently in interaction than on their own in our corpus. Individual primary metaphors amount to a 2.2% of the total of cognitive operations found in our data. Individual resemblance metaphors only represent 0.1%. Most attested instances of primary metaphors correspond to specific types of conceptual interaction with other cognitive operations, either metaphtonymies (78.2%) or metaphorical complexes (19.5%).

**4.4.1 Primary metaphor-metonymy interactions**

In accordance with previous studies on this issue (Pérez Sobrino 2017: Ch. 6), the most frequent pattern of conceptual interaction in our corpus involves metaphtonymies (i.e., metaphor-metonymy interactions). Previous work on the interaction of resemblance metaphors and metonymy in printed advertisements has shown that metonymy expansion or reduction can take place both in the source and target domains of resemblance metaphors (cf. Hidalgo and Kraljevic 2011; Pérez Sobrino 2017; Urios-Aparisi 2009). The specific interplay of primary metaphors with metonymy, however, yields some interesting findings.

**Table 5:** Metaphtonymies in relation to the source and target domains of primary metaphors.



1765 out of a total of 1940 primary metaphors in our corpus display metonymic reductions of their target domains (e.g., the glass of coffee advertisement in Figure 1). By contrast, only 20 primary metaphors display further metonymic operations in relation to their source domains. These overwhelming quantitative results give rise to two questions: Are there some target domains of primary metaphors that are more dependent on metonymic operations for their final interpretation to be reached than others? Why are the target domains of primary metaphors more prone to interacting with metonymy than their source domains?

In connection to the first question, it has been observed that the small group of primary metaphors in our corpus that requires no metonymic elaboration of their target domains corresponds to three specific mappings: happy is up, existence is visibility, and desire is hunger. The rest of the primary metaphors in the advertisements (see Table 3), displaying target domains like importance, good, essential, nature, similarity, roles, appealing, or social intimacy, all ask for further metonymic elaboration of their target domains to reach a fully-fledged interpretation of the advertisement. It seems that some target domains of primary metaphors, especially those involving feelings or emotions (e.g., happiness, desire) are specific enough to grant a satisfactory interpretation. Others, such as those involving evaluation (e.g., importance, good, essential, appealing) or high-level abstract notions (e.g., nature, roles, similarity, intimacy), require further conceptual elaboration to parametrize their meanings in relation to the advertisements (i.e., to determine in which way a particular product is important, good, essential or appealing, or which specific nature, role, similarity or intimacy [friendship/love/etc.] is at work). Target domains of primary metaphors are far from constituting a homogenous category, some being more abstract than others, and thus displaying different levels of genericity. These differences correlate in our corpus with the need for further conceptual elaboration via metonymic operations.

The second question arising from the quantitative results asked for the reasons why the source domains of primary metaphors in the corpus are not generally found in interaction with metonymy. Source domains of primary metaphors represent either very basic sensory motor and perceptual notions (e.g., up, big, hunger, etc.) referring to basic-level attributes, feelings, and spatial relations, or abstract high-level notions (e.g., shape, location, alignment, etc.), neither of which is amenable to metonymic representation or exploitation in the visual mode. It could be argued that in the case of primary metaphors, it is the product that serves as the vehicle for the representation of their source domains (see Section 4.2), and that it could in fact be rendered metonymically. Nevertheless, our corpus yields an insignificant number of instances of metonymic representation of the product. Alternatively, it is often the case that the latter is hyperbolically represented in terms of size, brightness, foregrounding, focus, etc., with hyperbole being present in the source domains of 1650 out of the total of 1940 primary metaphors in the corpus. Source domains of primary metaphors in printed advertising favor interaction with hyperbole rather than with metonymy as a means of attracting the consumers’ attention towards those attributes of the product that function as the vehicle for the representation of the source domain of the primary metaphors at work.

**4.4.2 Primary metaphor complexes: Clusters of primary metaphors and primary-resemblance metaphor interactions**

Pérez Sobrino (2017: 161) reported metaphorical complexes to amount to 9% of the conceptual interactions in her data. As reported in Table 4, our data reveals that, when primary metaphors are taken into consideration, the percentage of metaphorical complexes rises to 19.5% of the total amount of conceptual interactions. In this regard and as evidenced in Table 6, our data also reveals that clusters of primary metaphors (N=296; 66.4%) are more frequent in fast food advertisements than interactions between resemblance and primary metaphors (N=128; 28.7%), or between resemblance metaphors exclusively (N=22; 4.9%).

**Table 6:** Metaphorical complexes.



Primary metaphor clusters, therefore, deserve especial attention. In Sections 4.3.1 and 4.3.3, we have reported on two new patterns of conceptual interaction: one-target vs. multiple-target primary metaphor clusters, each of them fulfilling different functions in the advertisements. The source domains of primary metaphors are well fit to this type of interactions, especially in the visual mode. We can represent a product as being up, bright, and big simultaneously, thus activating a set of diverse primary metaphors. Clusters of resemblance metaphors activating different aspects of the target domain (product) are also possible, but less likely, amounting to just 4.9% of the instances of metaphorical complexes in our data. Since the source domains of resemblance metaphors are conceptually more complex, their simultaneous visual representation in the advertisement would be more complicated.

It should be noticed that even the interaction with resemblance metaphors involves clusters of primary metaphors (N=99) to a larger extent than individual primary metaphors (N=29). All in all, clusters of primary metaphors arise as the most frequent type of metaphorical complex in the context of fast food printed advertising, playing an essential role in communicating and highlighting basic assessments and emotions in connection to the product.

Metaphorical complexes comprising both a primary and a resemblance metaphor come second in our corpus (N=128; 28.7%). In spite of their comparatively lower rate of occurrence, this type of conceptual interaction pattern offers an interesting fact for reflection. As shown in Sections 4.3.4, 4.3.5 and 4.3.6, some primary metaphors in our corpus are more prone to conceptual interaction with resemblance metaphors than others. These primary metaphors (i.e., the nature of an entity is its shape, similarity is alignment and contextual roles are locations) constitute a specific subgroup, whose source and target domains abstract away from a number of more concrete conceptual domains belonging to lower levels of categorization. shapes, roles, locations, similarities, etc. are high-level abstract notions which need the basic level categories provided by resemblance metaphors to be visually represented in the advertisements. In turn, as shown in Sections 4.3.4, 4.3.5 and 4.3.6, resemblance metaphors find in those primary metaphors the motivation and experiential grounding needed for their interpretation. The correlation based on this mutual dependency does not affect other primary metaphors whose source domains are not high-level concepts, but rather specific attributes (e.g., big, bright) or particular locations (e.g., up, central). Again, as discussed in Section 4.4.1 in relation to metaphtonymies, the analysis of the data reveals that the primary metaphors in Grady’s (1997) list do not constitute a homogeneous category. Its members differ as to the level of genericity and abstractness of their source and target domains, and these differences are reflected on the functions they perform in the advertisements, and on their degree of dependency on further conceptual interaction both for their visual representation and final interpretation. Although beyond the scope of this paper, such differences also ask for reflection on the actual conceptual nature of some of the mappings included in Grady’s list of primary metaphors (see Section 5).

**5 Conclusions and suggestions for further research**

In the present paper, we set out to investigate the workings and idiosyncrasies of primary metaphors in fast food printed advertising. We now bring together the most relevant findings reported in Section 4.

The quantitative analysis of the data has revealed that primary metaphors are more frequent in fast food printed advertising than resemblance metaphors, both in isolation and when entering into patterns of conceptual interaction. In connection to the latter, primary metaphors have been shown to interact with (1) hyperbole, as a means to draw the consumers’ attention to the product, which has further been argued to function as the vehicle for the representation of the source domain of the metaphor, and also with (2) metonymy, in order for consumers to reach a relevant and contextually-compatible interpretation of the target domains involved. In addition, two new types of metaphorical complexes (i.e., one-target and multiple-target primary metaphor clusters) have been attested and found to be more productive than other patterns of interaction between primary and resemblance metaphors already documented in the literature.

The qualitative analysis of the data has resulted in the description and explanation of the formal configurations that primary metaphors adopt in relation to the product, as well as of the functions they perform in the advertisements. As has been argued, primary and resemblance metaphors interact differently with the advertised product. Primary metaphors establish a formal connection with the product through their source domains, the former often functioning as a vehicle for the expression/representation of the latter. By contrast, resemblance metaphors make use of the product as their target domains. Significant differences have also been found in relation to the functions performed by these two types of metaphors in the advertisements. Resemblance metaphors are used to build a rich conceptual representation of the product through an analogy between the latter and a different, independent concept. Primary metaphors may perform several distinct functions: they can be used (1) to directly convey axiologically positive evaluations (e.g., good, important, etc.) and/or emotions (e.g., hunger, social intimacy, attraction, etc.), about the product, (2) to highlight a particular aspect of it (e.g., one-target primary metaphor clusters), or (3) to motivate, constrain and/or enrich the interpretation of additional resemblance metaphors.

Some limitations of the use of resemblance metaphors, such as the need to understand the culture-specific dimensions of the source domain in order to be able to project the relevant positive attributes onto the product (see Forceville 2017), are not present in the case of primary metaphors, which due to their bodily, experiential basis are largely (possibly universally) understood by speakers of different cultures and social backgrounds. Primary metaphors have proved useful in the task of communicating basic evaluative meanings and emotions in a highly globalized market, but their use in advertising is not free from risks. On the contrary, lack of awareness of the potential interpretations triggered by the source domains of primary metaphors may lead marketing professionals back to the “hell of connotation” that Mick and Politi (1989) described as the difficulty in getting across the intended meaning to potential consumers. In fact, primary metaphors often involve positive/negative axiological pairs (e.g., important is big / unimportant is small; good is bright / bad is darkness), and the inadvertently use of the negative manifestation of the metaphors could automatically lead the audience to the undesired interpretation, or simply make the advertisement less effective in the task of communicating a positive message about the product.

The study of primary metaphors in fast food printed advertising has also raised some general issues that would benefit from further investigation, such as the fact that some target domains of primary metaphors are not as much in need of metonymic operations for their final interpretation as others. These findings should lead to reconsider the homogeneity of the primary metaphors included in Grady’s list (1997) in terms of the abstractness and genericity of their domains. As shown in the present study, this matter is not without relevance, since it has implications for the need and/or potentiality of primary metaphors to enter into different patterns of conceptual interaction.

Another issue worthy of further attention is the co-occurrence of resemblance metaphors and some embodied mappings (i.e., the nature of an entity is its shape, contextual roles are locations, and similarity is alignment). At first sight, the strength of this correlation seems to suggest that multimodal resemblance metaphors are largely motivated by these three primary mappings. Nevertheless, a word of caution is in order. These embodied metaphors seem to differ from others in Grady’s list, not only as to the abstractness of their domains, but also as regards their actual conceptual nature. While other primary metaphors, like happiness is up, establish a correlation between two distinct domains of experience (i.e., a feeling and a location), the nature of an entity is its shape metaphor involves a mapping between two subdomains (i.e., nature and shape) of one single concept (i.e., an entity or object). This raises doubts as to the actual cognitive operation at work in this so-called primary metaphor. Is there actually a conceptual projection from the domain of ‘shape’ to that of ‘nature’, or rather a stand-for metonymic operation of the shape for nature type? In a similar vein, contextual roles are locations could be argued to be a reversed metonymy (i.e., location for role, place for function) forced into the formula of a conceptual metaphor (x is y). If these primary metaphors were recategorized as metonymies, the strong correlation found in our data between them and the occurrence of resemblance metaphors would be in line with and provide additional evidence in support of current proposals arguing that there is always a metonymy motivating a metaphor (Mittelberg and Waugh 2009). The metonymic origin of primary metaphors has already been dealt with in the literature (see Kövecses 2013). Our findings suggest that it would be possible to go one step further on this issue, since some mappings originally included in Grady’s list of primary metaphors have been found to be significantly different from others as regards the functions they fulfill in the advertisements. Such different behavior provides further basis for reconsidering their conceptual nature.

In our corpus, the third of the primary metaphors under scrutiny, similarity is alignment, also differs from the functioning of primary metaphors like happiness is up or important is big. The latter provide an assessment of the product in terms of value or emotions, the former simply points to the existence of unspecified similarities between the product and a different entity. It could be argued that similarity is alignment is actually a general iconic principle, and that the abstractness of its domains necessarily triggers the launching of an additional resemblance metaphor in order to spell out the similarities involved between the two entities that are aligned in an advertisement (hence the reported correlation in our data).

There is, therefore, still room for further studies devoted both to assessing the status of these mappings as primary metaphors, and to exploring the heterogeneity of Grady’s initial list of primary metaphors, establishing a taxonomy of embodied mappings, and determining how different types of primary metaphors may have different functions and may correlate with different patterns of interaction in multimodal messages.

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**Additional advertisements sources**

For additional real advertisements exploiting the metaphors analyzed in Figures 1-12, please visit the following sites [last accessed 5 June 2019]:

**Figures 1-5:** important is big, important is central, important is being focused, important is being in the foreground, important is being in a central position metaphors

<https://2.bp.blogspot.com/-KsXNetWtbS8/UmUc74NVmyI/AAAAAAAAYlU/SqLNfKF5Fds/s1600/burger-king-mix-and-match-2-for-5-fall-2013.jpg>

<https://www.brandsynario.com/wp-content/uploads/hardees-print-ad-10.jpg>

<http://bk-emea-prd.s3.amazonaws.com/sites/burgerking.es/files/BigKingXL-carrusel-web_descubremas.jpg>

**Figure 7:** good is bright metaphor

<https://kristinetalusan.files.wordpress.com/2013/08/kfc-double-decker-kv-hr.jpg?w=601&zoom=2>

<http://3.bp.blogspot.com/_qyUHOBJhhLo/S7sX9FhJ0VI/AAAAAAAAAKw/W4XqoYOuGvQ/s1600/banner.jpg>

<https://image.shutterstock.com/z/stock-photo-minsk-belarus-april-bottle-of-heineken-beer-over-yellow-background-special-edition-400200457.jpg>

**Figure 8:** happy is up metaphor

<http://www.adbranch.com/coca-cola-ads-from-campaign-open-happiness/> <https://www.huffingtonpost.com/2012/11/01/kfc-philippines-mac-and-cheese-bites_n_2058375.html>

<https://usatsneakhype.files.wordpress.com/2016/07/sdfpfdt.jpg?w=1000&h=600&crop=1>

**Figure 9:** the nature of an entity is its shape metaphor

https://i2.wp.com/[www.brandsynario.com/wp-content/uploads/hardees-1.jpg?resize=620%2C296](https://i2.wp.com/www.brandsynario.com/wp-content/uploads/hardees-1.jpg?resize=620%2C296)

<http://www.brandsynario.com/wp-content/uploads/hot-bun-hardees.jpg>

<https://d3nuqriibqh3vw.cloudfront.net/styles/aotw_detail_ir/s3/pap-mcdonald-bonbon-happy_aotw.jpg?itok=OFUfZpxW>

**Figure 10:** similarity is alignment metaphor

<https://i.pinimg.com/originals/06/45/b7/0645b7f970d7b94e08094fef9780be37.jpg>

<http://3.bp.blogspot.com/-MasYLvPkNYo/UdsaaX0a9cI/AAAAAAAASlk/Z2quoavSp-U/s1600/BK_Swiss_Gold.jpg>

<https://4c448342d6996fb20913-fd1f9dc15ff616aa7fa94219cb721c9c.ssl.cf3.rackcdn.com/b4/cd/445096_4834528708574f119fb9a510e8463f0e.jpg>

**Figures 11 and 12:** contextual roles are locations metaphor

<https://wallpapercave.com/w/wp1919569>

[*https://www.reddit.com/r/funny/comments/23bed3/saw\_this\_mcdonalds\_ad\_on\_facebook\_i\_took\_it\_as/*](https://www.reddit.com/r/funny/comments/23bed3/saw_this_mcdonalds_ad_on_facebook_i_took_it_as/)

1. This paper makes use of the distinction between compound metaphors and metaphorical complexes (Ming-Yu 2017; Ruiz de Mendoza and Pérez-Hernández 2011; Yu 2011) and focuses on the analysis of primary metaphors involved in the latter. In metaphorical complexes there is an interaction between primary and resemblance metaphors to the effect that the former motivates the latter, whose set of correspondences are but specifications or parametrizations of the more abstract elements of the primary metaphor, and/or enriches it with additional semantic material. By contrast, in compound metaphors (Grady 1997: 58), primary metaphors function as necessary building blocks of the metaphorical compound. [↑](#footnote-ref-1)
2. [https://[www.forbes.com/pictures/feji45hfkh/top-10-global-fast-food-brands-](http://www.forbes.com/pictures/feji45hfkh/top-10-global-fast-food-brands-)2/#69732bc0580c] [↑](#footnote-ref-2)
3. The real advertisement cannot be reproduced due to lack of permission. All fabricated advertisements included in this paper display the same visual characteristics as the real ones in terms of size, location, sharpness, and brightness of the product. See the *Image Sources* section at the end of the paper for specific sources and copyright permissions. See the *Additional Advertisements Sources* at the end of the paper for more examples of real advertisements displaying the metaphors analyzed in Figures 1-12.

   Regarding the important is big primary metaphor, only those clear-cut instances in which the object is presented in such a way that it can be perceived as big by the consumer have been considered. Such perceived oversize can be attained in several ways: (1) by presenting objects which are ostensively bigger in all dimensions than other elements in the picture, (2) by presenting them as oversized relative to the entire frame (e.g., closeup), and/or (3) by manipulating the object so that is looks bigger than objects which are inherently bigger. The perceived bigness of the glass of coffee in Figure 1 stems from criteria (2) and (3). [↑](#footnote-ref-3)
4. Pérez Sobrino (2017: 112–13) has also discussed the role of hyperbole in drawing the consumer’s attention to a specific element of an advertisement. Hyperbole, as a persuasive device in advertising, has been amply dealt with in the literature (Callister and Stern 2007). Its interactions with other cognitive operations (i.e., metaphor, metonymy) are yet to be studied in detail. [↑](#footnote-ref-4)
5. The notion of *explicature* derives from the relevance-theoretic account of language (Sperber and Wilson 1995), where it was defined as the development of the logical form encoded by an utterance in the absence of contextual information. Ruiz de Mendoza and Pérez (2003) provide arguments supporting the view of conceptual metaphors and metonymies as explicature-generating operations. [↑](#footnote-ref-5)
6. *Parametrization* is another explicature-generating operation, which consists in adapting the conceptual layout of an expression to other textual or contextual clues (Ruiz de Mendoza and Galera 2014: 94). [↑](#footnote-ref-6)
7. In the absence of a contextual clue like the one in this advertisement, the consumer will map as many attributes as needed from the domain of coffee to reach a satisfactory interpretation of its relevance/importance, giving rise to a (multiple target)-in-source metonymic projection (i.e., coffee is important because it is awakening, tasty, warming/refreshing, etc.). [↑](#footnote-ref-7)
8. Spatial configurations (e.g., centrality, alignment) and visual salience features (e.g., size, focus) have been dealt with by visual social semioticians (Kress and van Leuween 1996). As pointed out by Pérez Sobrino (2017: 24–27), however, their account is mostly geared towards revealing underlying ideologies and power relations, overlooking the mental processes that motivate linguistic and visual messages. As the examples in Section 4 illustrate, most of the spatial configurations and visual salience features that are the object of visual semiotic studies represent source domains of primary metaphors. [↑](#footnote-ref-8)
9. An alternative metaphorical interpretation of this advertisement may take the earlier products familiar to the consumer as those closer to the viewer (KNOWN IS NEAR), and the new hamburger as FOLLOWING those earlier products (metaphorically representing succession). In fact, this supplementary interpretation would help parametrize the relevance of the foregrounded hamburger in Figures 3 and 4, where the New hamburger seems to be ‘leading’ the group of earlier products. [↑](#footnote-ref-9)
10. The concepts of *metaphoric chain* and *metaphoric complex* have been coined by Ruiz de Mendoza and Galera (2014: Section 4.1). [↑](#footnote-ref-10)
11. The use of the happy is up primary metaphor is also recurrent in the well-known Leo Burnett campaign for *McDonald’s Happy Meal* [https://[www.adsoftheworld.com/campaign/mcdonalds-leo-burnett-09-2013](http://www.adsoftheworld.com/campaign/mcdonalds-leo-burnett-09-2013)], which cannot be reproduced here due to copyright issues. In this campaign, the source domain of the metaphor is realized in two different modes: verbally (i.e., by means of the ‘stack up’ descriptor) and visually (i.e., the red happy meal box invariably situated at the top of the image in all the advertisements of the campaign). The target domain (i.e., happiness) is made explicit in the brand name itself (i.e., *Happy meal*). [↑](#footnote-ref-11)
12. So far, metaphoric chains like the one in this advertisement have been identified in target domains (i.e., the target domain of a metaphor becomes the source domain of another; Ruiz de Mendoza and Galera 2014: 104–107). The examples in Figures 9 and 10 show that they can also stem from the source domain of a metaphor. [↑](#footnote-ref-12)