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2

Multimodal Metaphor and Metonymy in Advertising

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Multimodal Metaphor and Metonymy in Advertising

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Volume 2

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by Paula Pérez Sobrino

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Preface

According to Ogilvy & Mather Germany's chief creative officer, Stephan Vogel, "nothing is more efficient than creative advertising; creative advertising is more memorable, longer lasting, works with less media spending, and builds a fan community … faster."[1] Indeed, a brilliantly designed campaign that sticks easily in the consumer's mind is one of the keys to a successful advert. However, advertisers must bear in mind that such creativity must not jeopardise the intelligibility of the message. All in all, advertising, artistic or not, has the clear and ultimate purpose of selling a service or a product. The challenge thus remains to find a middle ground between producing a straightforward selling-oriented message and conveying it in a sufficiently distinct and unique way so that it stands out from competitors.

The lexicographer Patrick Hanks (2014: 136) characterises linguistic creativity as a phenomenon that does not *follow* norms, but rather deliberately and knowingly *exploits* norms. This consideration sheds light on two important features of advertising as a creative medium: first, modern advertising departs from a number of genre conventions and consumers' expectations to produce more artistic adverts; and second, there is always an intention behind the artistic design of each advert that makes consumers look beyond and wonder what is being sold and why. Hence, advertising provides an excellent opportunity to investigate the individual routes of creative thought that are shared with the community of targeted consumers. This relates to Ripple's (1989: 189) coinage of the notion "ordinary creativity", which refers to identifiable but unique ways of thinking that are recurrent in people when they encounter incongruities in real-life, everyday situations. Therefore, ordinary creative thinking exists to a greater or lesser degree in everyone, but our inferential abilities will determine the extent, scope and potentiality of our creative thought.

Over the course of this book I argue that ordinary creativity[2] can be described and assessed according to a set of identifiable analytical tools: metaphor, metonymy,

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1. Retrieved on 9th March 2016 from: https://hbr.org/2013/06/creativity-in-advertising-when-it-works-and-when-it-doesnt

2. Creativity is a broad and elusive concept. For a definition and an exhaustive review of its dimensions, see Veale, Feyaerts and Forceville (2014). In this book, the scope is narrowed down to the study of metaphor, metonymy, and their combinations as a form to convey creative meaning in advertising in a fairly predictable way.

and their combinations in multimodal use. In doing so, this monograph brings together insights from several analytical strands of Cognitive Linguistics to approach the study of meaning (re)construction in advertising. In this regard, this monograph provides a novel contribution by gathering a set of analytical tools developed by cognitive linguists to describe different creative advertising manifestations and to analyse the conceptual structure beneath real-world persuasive messages. Cognitive linguists may thus find in this book a novel way of assessing and predicting the communicative impact of multimodal manifestations in terms of metaphor and metonymy, while creative designers and marketing scholars could strategically exploit the use of the same conceptual devices to construe more cognitively-effective and persuasive messages.

Recent statistics[3] show that the use of visual communication has increased over 400% in the literature since 1990, and 9900% on the Internet since 2007. This is also the case of advertising: a retrospective study of the rhetorical features employed by US magazine adverts from 1954 to 1999 (Phillips and McQuarrie 2002), showed that the incidence of visual metaphor increased over time. The amount, variety and speed with which information originates at the intersection of several modes (text, pictures, moving images, sound, music, etc.) require the operationalisation of a new set of variables of study and the adaption and/or development of appropriate analytical resources. In this context, the major aims of this book are (1) to reflect on the necessary steps to build a robust methodology for multimodal metaphor and metonymy research, and (2) to produce detailed qualitative and quantitative analyses of novel configurations of figurative language in multimodal advertising.

Ever since Forceville's (1996) pioneering monograph *Pictorial Metaphor*, and perhaps more intensely after Forceville and Uriós-Aparisi's (2009) edited volume *Multimodal Metaphor*, we have been witnessing a growth in the number of publications devoted to metaphor arising from the intersection of several modes. This work fulfils a long-standing need in Cognitive Linguistics (and more specifically in Conceptual Metaphor Theory) to confirm the conceptual status of metaphor by showing proof of its workings in non-verbal environments. However, it can be argued that a limitation of these studies is that their findings do not easily lend themselves to generalisation, as they are based on few selected (and sometimes, cherry-picked) examples. This limitation is, in my view, reasonable, given the relative youth of this field of study. The lack of automatised systems of multimodal metaphor identification, as well as the absence of well-established corpora of multimodal metaphors (equivalent to the BNC or the COCA), highly restricts the number of large-scale studies of multimodal metaphor.

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3. http://neomam.com/interactive/13reasons/, base don Google Trends: https://trends.google.com/trends/explore?date=all&q=%22infographic%22 Retrieved on 16th August 2016.

The work presented in this book, which is based on my PhD thesis written between 2011 and 2015, seeks to fill two methodologically important gaps in the literature on multimodal metaphor published so far. First, it presents a protocol to build a diverse and representative corpus of 210 real advertisements. Second, it offers a tentative proposal to identify and characterise multimodal metaphor. The book also sets special emphasis on the role of multimodal metonymy. Little attention has been devoted to the role of this figure of thought in multimodal settings. This is surprising given the wide attention that it has received in its verbal manifestations, and given its ubiquity in advertising. Metonymy facilitates the economic design of an advertisement, and more importantly, offers a way to make indirect claims about the product. In this book I make the case for the necessity of a proper theory of multimodal metonymy, and also for the relevance of its dynamic interplay with multimodal metaphor. As I will show, metaphor and metonymy very rarely appear in isolation in naturally-occurring data. Rather they tend to combine in many different ways, which can be identified and placed along a scale of increasing figurative complexity. This is relevant because it facilitates the formulation of hypotheses that are subject to empirical testing, thus favouring the exchange between cognitive linguists and cognitive scientists.

Before moving on to the *Introduction*, I would like to briefly tackle the issue of how I chose the labels for the metaphoric and metonymic domains. In the literature on metaphor and metonymy in verbal discourse, it is quite conventional to find a series of standardised labels. Most of them can be found in inventories such as Lakoff et al.'s (1991) *Master Metaphor List*. As will be argued, the methodological point of departure of this book is to start from the existing validated set of analytical tools and methods used in the literature on verbal metaphor, in order to lend this work coherence and validity. Therefore, when possible, I stuck to the labels that are recurrently used by the community of metaphor and metonymy experts. As it happens, many of the specific formulations motivated by the visual-verbal display in advertising are specifications of more generic conceptual metaphors.

That does not mean that it was always possible to do so. In some of the cases, ad hoc labels were created to account for all the potential inferences triggered by the creative scenario portrayed in each billboard. There are two justifications for this decision. First, assuming that the *Master Metaphor List* can be directly used for both linguistic and multimodal analysis is simply not accurate. The specificities of the advertising genre as a much more creative and less structured environment than everyday verbal communication call for a different analytical strategy (I have spelled out the labelling strategy followed in this book in Chapter 4). Whereas analyses of multimodal metaphor are not fundamentally different from those of conceptual metaphor, they are not exactly the same. These analyses have been compared and contrasted with the judgement of two other expert metaphor scholars.

When disagreements could not be resolved, I opted to remove the problematic examples from this book (although this was the exception rather than the rule). Second, the *Master Metaphor List* is not an exhaustive list and by no means a complete set of labels. On the first page of the List, the authors state that it "represents perhaps 20 per cent (a very rough estimate) of the material we have that needs to be compiled. […] The present list is anything but a finished product. This catalogue is not intended to be definitive in any way. It is simply what happens to have been catalogued by volunteer labour by the date of distribution" (Lakoff, Espenson, Schwartz 1991: 1). Therefore, it cannot be assumed that the *Master Metaphor List* is the ultimate tool for metaphorical labelling, although it is a very useful one. Basing my work *exclusively* on the labels appearing in this list would unnecessarily restrict my analyses of the advertisements, or could fail to account for some creative metaphoric mappings frequently encountered in advertising. For that reason, I have resorted to it whenever possible. Personally, I agree with the vast majority of multimodal metaphor experts that formulating specific labels facilitates analysing them (Forceville 2009a: 30), compared with using none. Verbalising multimodal metaphors (which are inherently non-verbal) is never a neutral task (Forceville 2009a: 30). Making explicit a protocol to label these metaphors, as I have advanced in this preface and will elaborate on in Chapter 4, makes this task somewhat more reliable, although never fully objective.

Ludwig Wittgenstein said, "Knowledge is, in the end, based on acknowledgement". If this books ends up containing some worthwhile knowledge it is because of the invaluable help and support of many individuals and institutions. At risk of omitting some, I would like to express my deep gratitude to those who have contributed to this project. First, I would like to express my thanks to the editors of the *Figurative Thought and Language* series, Angeliki Athanasiadou and Herbert Colston, for their support and interest in my work, as well as to Sabine de Knop and two anonymous reviewers for taking the time to read and comment on earlier versions of this book. I would also like to thank my three mentors Francisco Ruiz de Mendoza, Lorena Pérez-Hernández, and Jeannette Littlemore for their insightful feedback and constant encouragement over the years. The three of them are, in their different academic and personal idiosyncrasies, role models of selfless and wholehearted support. Additional colleagues and friends who played an important role in this project are: Alan Cienki, Anna Plater-Zyberk, Bodo Winter, Charles Forceville, Christian Sedlemeier, Dan Malt, Fiona McArthur, Gerard Steen, Leonie Assink, Margaret Dowens, Mario Serrano, all the lovely people involved in the Amsterdam Metaphor Lab, Nina Julich, Ray Gibbs, Szilvia Csábi, and Sarah Turner. This book has received financial support from the European Commission through a Marie Curie Individual Fellowship ("Exploring Multimodal Metaphor in Advertising",

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I cannot close these acknowledgements without dedicating this book to my mother and sister, who have been my greatest supporters over the years. This book is as much theirs as it is mine.

Logroño (Spain),
Amsterdam (The Netherlands),
Birmingham (United Kingdom),
Ningbo (China)
15th June 2017

CHAPTER 1

Scope of and need for this book

Alice: Where should I go?
The Cheshire Cat: That depends on where you want to end up.
(Lewis Carroll, *Alice's Adventures in Wonderland*)

1.1 About this book

Looking back at forty years of Cognitive Linguistics, much has been accomplished since Lakoff and Johnson's (1980) groundbreaking monograph *Metaphors We Live By*. In contrast with the traditional understanding of metaphor as a tool for skillful literary embellishment, Lakoff and Johnson's Conceptual Metaphor Theory (1980; later relabelled Contemporary Theory of Metaphor, Lakoff 1993) made a compelling argument for the centrality of metaphor to everyday language and thought: people draw on more concrete, basic concepts of everyday experience to understand, talk and reason about more abstract ones. Since then, Cognitive Linguistics has witnessed an exponential growth of interest in metaphor studies (to name but a few, e.g., Dirven and Ruiz de Mendoza 2010; Gibbs 1994; Gibbs, Bogdanovich, Sykes and Barr 1997; Kövecses 1990, 2000, 2002, 2005; Lakoff 1987; Lakoff and Turner 1989; Lakoff and Johnson 1999; for an assessment on these developments, the reader may refer to Gibbs 2011; and Ruiz de Mendoza and Pérez-Hernández 2011). Likewise, metonymy has yielded similar analyses as another pervasive conceptual device (Barcelona 2000, 2011; Benczes, Barcelona and Ruiz de Mendoza 2011; Kövecses and Radden 1998; Littlemore 2015; Panther and Radden 1999; Panther and Thornburg 2003; Ruiz de Mendoza 2000, 2013).

The traditional stance is that metaphor serves to establish correspondences known as cross-domain mappings between a source domain and a target domain by projecting representations from one conceptual domain onto corresponding representations in another conceptual domain. "Domains" are understood here in the same way as in Evans (2007: 62), that is, as "relatively complex knowledge structures which relate to coherent aspects of experience". For instance, the conceptual domain "war" includes representations of things such as the opponents, the possibility of winning or losing the battle, weapons, different offensive or defensive actions, etc. The structure of a metaphor acts as a *bridge* that connects the "war"

domain with the domain of debate, and helps us to reason about the actions we perform in arguing, such as winning or losing arguments, attacking our opponent's positions and defending our own, and planning and using argumentative strategies.

Cognitive linguists have traditionally acknowledged metaphor as a matter of similarity between source and target items, and metonymy as a matter of contiguity between them. An example of metonymy is the word 'Hollywood', that can be used to refer to mainstream US films because they are usually produced within that environment (Littlemore 2015). A metonymy can be thus better described as an *iceberg*, whose tip makes us think of the existence of the rest of the ice hidden below the level of the sea. However, several scholars have noted that the slipperiness of the notions of similarity and contiguity (Barnden 2010; Dirven 2002; Haser 2005; Norrick 1981) may compromise our ability to differentiate metaphor from metonymy. It is not the aim of this book to further elaborate on the boundaries between these two tropes, whether fuzzy or not. For the sake of practicality, I will adopt the general notion of metaphor as a mechanism involving the exploration of two discrete entities, and metonymy shifting our view from one entity to a related one.

Although it is widely acknowledged among cognitive linguists that metaphor and metonymy are conceptual devices, scholars have traditionally restricted their studies to the exploration of verbal metaphor and metonymy (i.e. those instances in which the conceptual mappings are realised exclusively through linguistic means). Neglecting alternative manifestations of metaphor ignores one of the most basic statements of the Conceptual Metaphor Theory, namely that "metaphor is primarily a matter of thought and action and only derivatively a matter of language" (Lakoff and Johnson 1980: 153). The initial, nearly exclusive attention to linguistic manifestations of metaphor necessarily limited the development of a complete theory of thought, since it failed to account for other levels of cognitive modelling (such as the visual, audial, olfactory and gestural). Furthermore, the aforementioned linguistic bias has largely prevented researchers from making use of such powerful mechanisms of analysis in multimodal contexts, i.e. printed advertising, commercials, films, music or Internet sites.

The widening of scope towards multimodality in metaphor theorisation has its roots in the pioneering work carried out by Forceville (1996–2009a). According to Forceville (2009a: 24), multimodal metaphors are those "whose source and target are each represented exclusively or predominantly in different modes". Hence, multimodal theorists hold that conceptual metaphor manifests itself not exclusively through verbal language, but also via alternative modes of representation. Advertising arises as a fruitful space for multimodal metaphor production and scholarly study (see Forceville 2009a; Uriós-Aparisi 2009; Hidalgo and Kralievic 2011; Pérez-Sobrino 2013a, 2016a, b for varied accounts of verbopictorial metaphors in billboards and commercials; Velasco and Fuertes 2006, for olfactorial

metaphors in perfume billboards). The inner logic of metaphor as a cognitive operation suits the specificities of advertising as a discursive genre: both consist in putting in correspondence two discrete domains (in the case of metaphor, the source and the target domain; in advertising, the product or service being advertised and the corresponding positive attributed values). There are complementary studies of multimodal metaphor in other non-verbal genres besides advertising, such as classical music (Zbikowski 2009; Pérez-Sobrino 2014a) and gesture (Müller and Cienki 2009), that provide further evidence of the existence of non-verbal manifestations of conceptual metaphor. Multimodal metonymy is still a fairly unexplored cognitive phenomenon, in much the same way as the theorisation of verbal metonymy is still a couple of decades behind that of verbal metaphor. A few illustrative exceptions are Forceville (2009b); Villacañas and White (2013); Pérez-Sobrino (2016a) for verbopictorial metonymy in printed advertising; Pérez-Sobrino (2014b) for verbomusical metonymy in classical and contemporary music.

In fact, the abovementioned research on multimodal metaphor and metonymy evinces the productivity of applying tools traditionally used in the analysis of verbal metaphor and metonymy to the study of multimodal environments. This working assumption has been labelled the *equipollence hypothesis* (Mairal and Ruiz de Mendoza 2009: 154), and it is central to the development of the present research work. This methodological principle states that the analyst should test whether conceptual processes that have been attested in one domain of linguistic enquiry may also be (at least partially) active in other domains and *encourages* the use of the same analytical tools (see Chapter 4, Section 4.2.1 for a detailed explanation of this methodological tool). In this spirit, the extension of the equipollence hypothesis to the exploration of multimodal environments may facilitate the analysis of multimodal metaphor with greater parsimony and systematicity. Hence, this work heavily borrows analytical tools from the existing literature on the conceptual interaction between verbal metaphor and metonymy, and applies them (with the necessary adjustments) to the analysis of multimodal contexts. Interestingly, it is reasonable to expect that the equipollence hypothesis could operate in a reverse way. It would be worth examining whether the novel findings arising from the study of metaphor and metonymy in multimodal environments are replicable in verbal discourse, thus further expanding our knowledge of metaphor and metonymy.

1.2 Research questions and working hypotheses

I formulate below six analytical inquiries to tackle the study of metaphor and metonymy in multimodal discourse from different fronts. These research questions combine the investigation of metaphor-metonymy interactions in multimodal

settings and the exploration of their communicative impact in the context of advertising. Accordingly, I have made a number of predictions which take into account the existent literature so far and that motivate and drive this study.

1. *How does multimodal metaphor interact with metonymy?*
   Does metaphor couple with other cognitive operations, such as metonymy and other metaphors, in a formal and standard way? If so, can we build a finite set of simple and complex conceptual operations in multimodal use?

   Hypothesis: I predict that it is possible to find the metaphor-metonymy combinations found in verbal discourse in my corpus of multimodal advertisements. Additionally, in the light of recent studies on metaphor in advertising (Pérez-Sobrino 2016a), the vast creative potential of advertising is likely to trigger new metaphor-metonymy variants still not found in verbal environments. This work holds that the observed patterns of interaction between metaphor and metonymy in verbal can be used as powerful tools to analyse multimodal environments, and ultimately, to explore their relationship with the reception of advertisements by cross-cultural audiences (see Chapter 8).

2. *How is multimodal metaphor related to metonymy and the complexes arising from their interaction?*
   This question seeks to find out if metaphor, metonymy, and the corresponding complexes arising from their interaction can be placed along a scale of increasing conceptual complexity.

   Hypothesis: Metaphor and metonymy, in spite of their morphological differences, can be placed along a scale based on their potential to trigger inferences. Previous work (see Gibbs 1984; Dirven 2002; and McArthur and Littlemore 2008) suggests the possibility of relating metaphor with metonymy in terms of a continuum with varying degrees of figurative complexity, yet in the light of verbal examples. If such a continuum can be replicated for multimodal settings, this would lend further support to the conceptual (and not just verbal) status of metaphor and metonymy.

3. *What are the theoretical implications offered by this work?*
   In other words, how does this book fill gaps in the existent research on conceptual metaphor and metonymy, be it verbal or multimodal?

   Hypothesis: If the hypothesis postulated for the second research question is confirmed, i.e., that there are new metaphor-metonymy combinations in multimodal use as yet unidentified in verbal discourse, these will deepen our understanding of these processes in verbal communication, in a reverse application of the equipollence hypothesis.

4. *Is multimodal metaphor (really) a crucial device in advertising?*
   And if so, can conceptual complexity, in terms of metaphor-metonymy combinations, be directly correlated with specific variables of advertising, such as the type of promoted product, the use of modes, the explicit or implicit representation of the product, and/or the inclusion of the product in the conceptual operation at work?

   Hypothesis: My working assumption is that significant correlations can be established between the conceptual, the discursive, and the communicative dimensions of advertising. I tentatively hypothesise that advertising will be more likely based on a complex operation combining metaphor and metonymy than on either of these mechanisms alone. This is because such an interaction will merge the highlighting power of metonymy (useful to connect products with brands) with the cross-domain correspondences of metaphor (a suitable way to borrow values from a well-connoted domain and ascribe them to the advertised product).

5. *What is the role of conceptual complexity (in terms of metaphor-metonymy combinations) in the interpretation of the advertisement?*
   This question explores the effect of conceptual complexity on the comprehension of the advertisement by audiences in terms of speed of processing, saliency of interpretation, depth of comprehension, and perceived appeal of a given advertisement.

   Hypothesis: I hold that conceptual complexity is a crucial factor greatly influencing the audience's interpretation of advertising, and should be treated as such by advertisers (alongside other variables such as graphic design, psychological profile, and socioeconomic status of the targeted audiences). I predict that the formulation of a list of conceptual operations with increasing degrees of conceptual complexity will allow us to determine its specific effect on the comprehension of advertisements in terms of speed of processing, depth of comprehension, and perceived appeal of the advertising.

6. *What are the practical applications of this research work?*
   How can this work benefit researchers and professionals outside Cognitive Linguistics?

   Hypothesis: I believe that metaphor and metonymy are conceptual mechanisms with a great but finite inferential power that guide and constrain the triggered inferential activity. In my view, metaphoric and metonymic mappings favour desired assumptions about the product while discarding faulty or misguided interpretations of the persuasive message. Advertisers can find in this book a set of feasible routes to incorporate metaphor and metonymy at the stage of advertising creation that will help to facilitate understanding of their messages.

In particular, a greater understanding of the use of metaphor and metonymy and the interplay between them in advertising could be particularly beneficial to cross-cultural understanding. Whereas metaphor in one language can result in difficulties for those whose native language differs (Littlemore and Low 2006), the degree to which this occurs in imagery and video advertisements is not yet established. There is likely to be a degree of cross-cultural variation in the amount of time required to understand the multimodal metaphors and metonymies, the ways in which they are understood, and their appeal. Moreover, although studies suggest differences between Western and Chinese participants in terms of the ways in which they respond to emotions as expressed through metaphor (Jolley, Zhi, and Thomas 1998) this line of investigation has never been extended to the field of advertising. The study in Chapter 8 provides some preliminary results of this line of enquiry.

1.3 Originality and potential impact of this book

As will be shown, the application of analytical tools designed for verbal metaphor to the study of its multimodal manifestations is not without problems. The work undertaken on multimodal metaphor so far emerges more as a kaleidoscopic array of personal speculations than as a unified theoretical account, due to the relative youth of multimodality as a strand of Conceptual Metaphor Theory. This is not due to any inadequacy in the research itself, but merely due to the lack of specific analytical tools designed for multimodal metaphor.

Within this framework, this book proposes a comprehensive framework to incorporate the investigation of multimodal metonymy and the patterns of interaction between metaphor and metonymy arising in advertising, while aiming to complement the existent monographs on multimodal metaphor (Forceville 1996; Forceville and Uriós-Aparisi 2009). The originality and potential impact of this book stems from several interdisciplinary factors and state of the art research techniques:

1. This research is *based on the analysis of a large corpus of authentic data*. 210 real advertisements released over the past two decades have been gathered and exhaustively analysed in order to gain further understanding of how metaphor and metonymy work in a real multimodal environment. The current challenge in the field of multimodal metaphor is combine the existing analysis of case studies with the statistical analysis of larger data sets. In order to do this, this book identifies a number of robust data collection techniques that eliminate researcher bias.

2. This book proposes a *step-by-step protocol to identify and characterise metaphor and metonymy in advertising*. Unlike for linguistic metaphor studies to date it is not possible to make automatic searches of multimodal metaphor and metonymy in naturally-occurring data. Therefore, a set of explicit instructions is needed to reduce the analyst's subjectivity in the process and promote replicability. There have been two proposals to identify multimodal metaphor in a systematic way by Šorm and Steen (forthcoming) and Forceville (2009a). In spite of their differences, they both emphasise that need for advertisers to invite the consumer to work out a visual incongruity in the advertisement to infer what it is being said about the product. In this book I take up on these accounts to formulate an expanded protocol to encompass additional figurative operations, such as metonymy.
3. This research work provides *quantitative evidence* of the nature, entrenchment, and workings of multimodal metaphor, metonymy, and their patterns of interaction in advertising. It also offers statistical correlations between the amount of conceptual complexity required to communicate effectively in advertising and other variables of more interest to advertising and marketing experts, such as type of the product advertised and the modes used to design the advertisement. In doing so, this work builds bridges between the conceptual, discursive, and communicative dimensions of advertising.
4. Additionally, the careful examination of non-verbal data yields *significant qualitative findings in terms of metaphor-metonymy combinations*. The interaction between multimodal metaphor and metonymy has been so far explored in the light of a very limited number of examples (Uriós-Aparisi 2009; Hidalgo and Kralievic 2011; and Pérez-Sobrino 2014a, 2016a, b). Besides supporting the analysis of this interactional pattern with a greater number of examples, the ensuing qualitative analysis brings to light other combinations rendering varying degrees of conceptual complexity, such as *(multiple-source)- in-target metonymy, metonymic chains, metaphoric amalgams and metaphoric chains*.
5. This research also *singles out and tests empirically different variables influencing the success of advertising,* such as figurative complexity, the linguistic and cultural background of the reader, and emotional responses. These factors may all affect the time and depth of comprehension, as well as the perceived appeal of the product.
6. The monograph *will raise advertisers' awareness* of the relevance of making conscious use of conceptual tools. This should lead to a strategic deployment of multimodal figurative language in the design of advertising campaigns in line with ethical selling plans.

1.4 Structure of the book

Each of the nine chapters of this monograph deals with these inquiries and premises in detail.

Chapter 2 (*Theoretical models to explore multimodal meaning*) provides a bird's eye view of the literature on figurative meaning construction in multimodal settings. Four theoretical perspectives are surveyed in order to highlight their suitability for this enterprise: *Visual Social Semiotics* (Kress and Leeuwen 1996, 2001), *Relevance Theory* (Sperber and Wilson 1985, 1995; Carston's 2002, 2010 and Carston and Wearing's 2014 developments of the theory, and its multimodal applications by Forceville 1996, 2014; Forceville and Clark 2014, and Yus 2009), *Conceptual Blending Theory* (Fauconnier and Turner 2002), and *Conceptual Metaphor Theory* (Lakoff and Johnson 1980, and its multimodal application by Forceville and Uriós-Aparisi 2009, and references therein). These four models are compared and contrasted, and their strengths and weaknesses evaluated. This chapter concludes by identifying a number of areas still in need of development, and provides preliminary insights into the way in which this book will overcome such theoretical deficiencies.

Chapter 3 (*An integrated approach to the study of multimodal metaphor and metonymy*) continues the discussion initiated in Chapter 2 and outlines how this work aims at framing the description and analysis of multimodal construction processes. The chapter presents a comprehensive set of metaphor-metonymy combinations that have been attested in linguistic research (Ruiz de Mendoza 2000, 2007; Ruiz de Mendoza and Pérez-Hernández 2011; Pérez-Hernández 2013a). These are subsequently placed along a continuum of increasing conceptual complexity, thus completing Dirven's (2002) notion of *figurative continuum*. The chapter concludes by pointing out a number of aspects to take into account for multimodal applications.

Chapter 4 (*Facing methodological challenges*) describes the issues related to the design of a multimodal corpus of 210 advertisements and commercials. Several methodological steps regarding the identification, characterisation, and analysis of multimodal metaphoric and metonymic domains are made explicit in order to establish a coherent and consistent protocol of analysis through the ensuing two chapters. This chapter presents and discusses an annotation scheme consisting of five categories: product type, explicit representation of the product, coincidence of the product with the conceptual operation target, modal cue for the conceptual operation and target, and mode of representation of the product.

Chapters 5 and 6 present the results of the qualitative analysis, broken down into two chapters for reasons of space. Chapter 5 (*Metonymy and metonymic complexes*) provides evidence that attests to the productivity of multimodal metonymy and its complexes (i.e. multimodal (multiple source)-in-target metonymy, multimodal

metonymic chains, multimodal (multiple source)-in-target metonymic chains). In turn, Chapter 6 (*Metaphor and metaphoric complexes*) presents a detailed study of multimodal metaphor and its complexes: multimodal metaphtonymy, multimodal (multiple source)-in-target metaphtonymy, multimodal single-source metaphoric amalgams, multimodal multiple-source/target metaphoric amalgams, and multimodal metaphoric chains. The direct application of the expanded figurative continuum proposed at the end of Chapter 3 to multimodal settings yields a series of variants and novel patterns that, combined with the verbal patterns of interaction, allow us to build an even more comprehensive notion of the figurative continuum. The finer-grained version of the multimodal continuum for metonymy and metaphor (and their respective complexes) is displayed at the end of each corresponding chapter.

Chapter 7 (*Figurative complexes in advertising (I): A corpus-based account*) presents the results from the first large-scale corpus-based study of multimodal metaphor and metonymy, and their patterns of interaction. I first offer an overview of the composition of the corpus by reporting frequencies of appearance of the identified conceptual operations, the characteristics of representation of the advertised product, and the use of modal cues. Second, I explore and discuss the significance of some factors that may determine the conceptual scaffolding of advertising, such as the likelihood of modal cues and product types to trigger different amounts of conceptual complexity in terms of conceptual operations.

Chapter 8 (*Figurative complexes in advertising (II): A cross-cultural investigation into the reception of advertisements*) reports the findings from an experiment set out to measure the extent to which different degrees of figurative complexity play a role in the understanding of advertisements by cross-cultural audiences. This experiment investigated the role of conceptual complexity in (a) the *time* invested in the identification of the product and its ascribed attributes, (b) the *availability* of the mappings involved in the conceptual complex structuring the billboard, informing an analysis of the extension and richness of the interpretation, and (c) the perceived *persuasive potential* of the message. 30 participants from three linguistic and theoretical backgrounds (English, Chinese, and Spanish) took part in this study.

Chapter 9 (*Closing notes*) summarises the main proposals made in this book and speculates on potential research lines to expand this work. The subsequent section (*References*) provides the reader with an exhaustive list of bibliographical material upon which this monograph relies.

CHAPTER 2

Theoretical models to explore multimodal meaning

It has been said that every man is born an Aristotelian or a Platonist. This is the same as saying that every abstract contention has its counterpart in the polemics of Aristotle or Plato; across the centuries and latitudes, the names, faces and dialects change but not the eternal antagonists.
(Jorge Luis Borges, *Deutsches Requiem*)

2.1 Introduction

This chapter presents a critical overview of the different theoretical approaches to multimodal meaning construction, through the pursuit of four main goals:

1. To outline the main proposals in the existing literature on multimodal meaning construction.
2. To assess the suitability of each of the four theoretical perspectives analysed hereby to account for the purposes of this research work.
3. To lend further support to the choice of Conceptual Metaphor Theory as the most appropriate theoretical framework to describe, explain and predict the intricacies of persuasive communication in advertising.
4. To identify areas of Conceptual Metaphor Theory in need of development to deal with multimodal communication. These shortcomings will pave the way to the introduction in Chapter 3 of some theoretical developments necessary for an adequate application of Conceptual Metaphor Theory to multimodal environments.

Multimodal studies have attracted sustained attention, especially in the last decade, which has led to the production of a large body of scholarly work. For instance, Gibbons (2010, 2012) offers a sophisticated set of critical tools to analyse the role and cognitive impact of multimodal elements such as typography, graphics, and illustrations in literature. Additionally, Jewitt (2009) successfully compiles a wide range of theoretical and practical views on multimodal communication and representation from different fields (visual studies, anthropology, and socio-linguistics, among others). Another insightful contribution to the circle of multimodal studies

is found in Ventola and Moya (2009), who compile a comprehensive collection of articles dealing with the systemic and structural relationships between visuals and texts "in today's media oriented world" (Ventola and Moya 2009: 1). Kress and Leeuwen (1996, 2001, 2006 [1996]) have developed a reputed grammar of visual design that accounts for the possibilities of visual representation in a systematic and comprehensive way. From a more cognitively-oriented perspective, the extensive work by Forceville (1996–2014) and the volume edited by Forceville and Uriós-Aparisi (2009) have awakened renewed interest in metaphors drawing on combinations of visuals, language, gestures, sound, and music.

At first glance, the analyst may be puzzled by the heterogeneous nature of this research panorama. Indeed, multimodality studies can be best described as a rich mosaic wherein each tile is an approach to multimodal communication focusing on different meaning-making features. To mention but a few, we find studies addressing specifically the role of metaphor in advertising within Relevance Theory (Yus 2009; Forceville 2014), Conceptual Blending Theory (Joy, Sherry, Deschenes 2009), and Conceptual Metaphor Theory (a representative sample can be found in the edited volumes by Forceville and Uriós-Aparisi 2009 and Hidalgo and Kralievic 2013). In turn, Visual Social Semiotics (based on Halliday's *Systemic Functional Grammar*, 1994), Intermedial Studies (former Interart Studies), and Cognitive Poetics have put forward their own proposals to address multimodal meaning making practices from a wider perspective. Finally, more empirically-oriented perspectives such as psycho- and neurolinguistics are devoted to testing the validity of these techniques.

However, and in spite of their diversity, these approaches share at least three defining attributes. First, they are concerned with the exploration of the regulating principles that motivate and govern multimodal knowledge in its three dimensions: construction, representation, and communication. Second, they hinge on the study of the communicative potential of different modes (image, gesture, sound, etc.) in isolation and in combination. Third, they are particularly committed to producing evidence of the synergic effect of multimodal communication. This is perhaps the key defining feature for experts working at the intersection of modes. Indeed, for a multimodal analyst, the overall output of a multimodal manifestation is more than the sum of the items making up such a manifestation since modes work both in isolation and in combination (as has been stressed by Kress and van Leeuwen 2001).

A complete critical discussion of the strengths and weaknesses of each framework is an ambitious research challenge that still needs to be undertaken. However, owing to space constraints I am compelled to select four models for the ensuing critical discussion. I have therefore selected four models that share a major interest in the understanding of meaning construction practices involving non-exclusively verbal modes and a major interest on metaphor (or related meaning construction practices).

In the first part of the chapter, I will briefly summarise the main arguments of the application of systemic-functional framework to the study of multimodal environments, as has been accomplished by Kress and van Leeuwen (1996, 2001, 2006[1996]) within Visual Social Semiotics. Systemic-functional analysts are concerned with the structural relationships of the multimodal message. For the sake of clarity, in what follows I will apply their insights to one of the examples of the corpus. Then, in the light of this analysis, I will highlight the theoretical affordances and limitations of this approach for the purposes of this book (independently of its already proven worth as a theoretical framework). The conclusion is that, despite offering an illuminating insight into the intricacies of multimodal meaning representation, a systemic- functional approach cannot adequately assess the individual subjective processes that govern meaning construction and communication.

The second part of the chapter concentrates on the critical revision of some pragmatic and cognitive-linguistic accounts of how multimodal metaphor works. I thus contrast the insights of three perspectives that have (traditionally) dealt with the problem of understanding figurative meaning: Relevance Theory (Sperber and Wilson 1985; revisited by Carston 2002, 2010; and further improved by Carston and Wearing 2014; and its multimodal applications, as in Forceville 1996, 2014; Forceville and Clark 2014; and Yus 2009); Conceptual Blending Theory (Fauconnier and Turner 2002), and finally, Conceptual Metaphor Theory (Lakoff and Johnson 1980; and its application to multimodal environments, as shown in the compilation of chapters by Forceville and Uriós-Aparisi 2009). Following the same structure as in the first part of the chapter, the explanatory power of the relevance-theoretic and the multiple space- structuring model will be evaluated to account for multimodal meaning construction. Even though I will argue that they do not succeed in providing us with a fine-grained view of meaning making processes, some aspects of their proposals will, however, be incorporated into the subsequent analysis. The chapter finally concludes with the critical assessment of Conceptual Metaphor Theory to deal with multimodal communication. While this theory of knowledge organisation is shown to overcome a great deal of the theoretical deficiencies diagnosed in the other competing models, it still has its own problems. As I have advanced, this theory may suffer from certain resistance to accommodate novel combinations of meaning. This observation facilitates the transition to the next chapter, in which I enrich current metaphor-based views with original theoretical material which, as will be evidenced, is necessary to build a fully-fledged model capable of explaining multimodal figurative thinking on the basis of a finite (yet complex) set of analytical tools.

2.2 The visual-semiotic model

Visual Social Semiotics emerged in the 1990s building on Halliday's *Systemic Functional Grammar* (1994). The label "systemic" makes reference to grammar as a system network made up of paradigmatic choices; "functional", in turn, refers to the ability of language to comply with three communicative purposes (or metafunctions): *ideational, interpersonal* and *textual*. Visual social semioticians, working on the basis of Halliday's observation that "there are many other modes of meaning, in any culture, which are outside the realm of language" (Halliday 1978: 4), have taken Systemic Functional Grammar a step further by acknowledging the existence of the same structuring principles in non-verbal contexts. Such recognition has developed metafunctional frameworks in multimodal environments: e.g. visual images (Kress and van Leeuwen 1996, 2001, 2006), architecture (O'Toole 2010), and mathematical symbols (O'Halloran 2005). The fact that these environments are deeply context-oriented, like verbal language, makes them particularly eligible to be analysed from a metafunctional perspective.

Given the issue under scrutiny, Kress and van Leeuwen's contributions are of vital relevance to this book. Within visual semiotics, multimodality is conceived as the use of several semiotic modes and their combination within a socio-cultural domain which results in a semiotic product or event (Kress and van Leeuwen 2001: 20). More specifically, these authors are particularly concerned with the study of any kind of text (either verbal or visual) and the social context in which it is created. Of particular interest for multimodal analysis is Kress and van Leeuwen's (1996) claim that visual images fulfill the metafunctions of representing the experiential world (representational meaning), interacting with viewers (interactive meaning), and arranging the visual resources (compositional meaning) to the same extent as verbal language does.

A semiotic multimodal analysis (in the same spirit as those carried out by Kress and van Leeuwen 1996, 2001, 2006) would need to consider the following methodological aspects. In *representational* terms (Kress and van Leeuwen 1996: 119ff.), the analyst must identify the represented participants (animate and/or inanimate), their attributes and qualities, and the processes and circumstances involved in the action. For instance, the analyst must pay attention to the narrative patterns implied in the multimodal manifestations (what someone does for the other), which hint at the unfolding of action and events within spatial sceneries. Regarding the analysis of *interpersonal* features (Kress and van Leeuwen 1996: 119ff.), the analyst needs to bear in mind the relations of interdependence between the multimodal manifestation, the producer and the viewer. Interactive meaning involves four parameters: symbolic contact, social distance, power relations, and involvement between viewers and visual participants. Contact is constructed by the nature of the visual

participants' gaze at viewers; social distance is constructed by shot distance (e.g. close or long shot); power relation is constructed by vertical camera angle (i.e. high or low angles); involvement is constructed by horizontal camera angle (i.e. frontal or oblique angles). Finally, the analysis of *compositional* features (Kress and van Leeuwen 1996: 181ff.) demands the exploration of coherence and cohesion between the verbal and the visual elements displayed in the page. Of particular interest are issues related to the informative value of each input, visual salience (in terms of size, colour, focus, etc.) and visual framing. Information value is realized by the placement of visual elements (e.g. top or bottom, left or right); salience deals with the prominence of visual elements, through size, sharpness of focus, colour contrast, and so on; framing is concerned with the connection between visual elements.

For the sake of clarity in our explanation and subsequent discussion, I will analyse a real example of the corpus (Example 1) in the context of systemic functional linguistics and visual social semiotics. This billboard is part of an advertising campaign in which 7UP releases a new diet formula with fewer artificial ingredients than other soft drinks. This version displays a big can of 7UP hanging from a tree branch in the place of a lemon.

Example 1. 7UP: Now 100% natural[1]

1. Text: *Diet 7UP, now more lemon-lime taste. The famously crisp, refreshing taste of 7UP is now better than ever, because it's been stripped of the artificial stuff found in most other soft drinks. Pick one up today.*

The *representational metafunction* of the visual part is revealed in the rendered objects within the landscape (i.e. can and lemons hanging from a tree branch). The main character of the billboard is the 7UP can, as deduced from its position in the right half of the billboard, and from its high definition, saturation and large size (compared to the other lemons in the background). The narrative displayed in this visual element represents quite a simple process: a soft drink can is hanging from a lemon tree branch in the same way as the rest of the tree's fruits. In addition, the verbal part "Now 100% natural" invites the viewers to infer that the soft drink must share some properties with lemons, in this case, its natural origin. As mentioned, the viewer is aware of this process because of the information provided by the surrounding spatial arrangement.

The *interactive function* is analysed in light of the way the depicted participants to attract the viewer's attention. For Kress and van Leeuwen (2006), the choice of the size in which the participants can be represented in relation with the picture frame can be understood as having meaning potential related to social distance with the viewers (or the lack thereof). For instance, the bigger the represented product in relation to the advertising frame, the closer the promoted commodity appears, as in some TV close-ups where the frame might not contain even the whole of a person's face; in turn, the smaller the advertised product is portrayed in relation to the frame, the more distant it appears to the viewer, as in panoramic shots of spectators at a sporting event where thousands of people fit inside a single frame.

To provide a framework for understanding social distance, Kress and van Leeuwen borrow terms from Edward Hall (1966). Hall outlined a number of *proxemic zones*, a scheme for understanding spatial relations between people in everyday life. Kress and van Leeuwen suggest that such zones and such responses apply not only to real life encounters but also to our mediated encounters with represented participants in images. Adapting Hall's zones slightly (see also Finnegan 2002: 104–109), they offer the following distinctions (all quotations are from Hall 1966: 110–120): (a) *Close personal distance* (where 'one can hold or grasp the other person'); (b) *Far personal distance* (that which 'extends from a point that is just outside easy touching distance by one person to a point where two people can touch fingers in they both extend their arms'); (c) *Close social distance* – (this situation involves looking a little further away, it is the distance of 'impersonal business'); (d) *Far social distance* (that is, 'the distance to which people move when somebody says "Stand away so I can look at you"); and (e) *Public distance* (that is, "the distance between people who are and are to remain strangers".

In the billboard under consideration, there are several elements that are relevant to determine the kind of social distance established between the product and the viewers. First, the can has been represented in a disproportionate size that makes it stand out over other underrepresented elements (such as the blurred lemons in

the background and the small-type fonts). Additionally, its odd placement hanging from a tree branch steers the viewers towards establishing a link with the can and not with the other elements. The fact that the can is represented in its full size seems to connect to Hall's notion of 'public distance' as it requires some detachment from the viewer to process the complete scene. Contrast this with the symbolic intimacy triggered by a hypothetic close-up of the can focusing on the brand name. Keeping such a distance works in favour of the objectivity of the message: although it is unusual to depict cans hanging from trees, the detailed representation of the can as if it were a lemon contributes to the credibility of the message. This impression of distance and objectivity is further reinforced by the information provided in the textual part, in which specific details about the nature of the new diet formula are specified. However, the disproportionate size in which the can is represented brings the product slightly closer to the viewer, thus reducing public distance to far social distance. As the product comes closer to the viewer and social distance is reduced, it is reasonable to think that the social tie with prospective consumers becomes stronger.

For obvious reasons, the study of gaze does not apply here and therefore the can represents a mere object of unidirectional contemplation. However, the imperative "Pick one up today" directly appeals to the audience, thereby strengthening the symbolic contact between them and the multimodal representation.

Finally, the study of the *compositional metafunction* requires the consideration of the communicative effects of the interplay between the various multimodal elements. As mentioned elsewhere, the exploration of conceptual salience requires the study of several elements, such as size and colour. According to the principle of size, the greater the size, the more important the represented participant is.[2] It comes as no surprise that, in consonance with the features surveyed earlier on, the can is considerably bigger than the rest of the lemons.

From Nikolajeva and Scott (2001: 83) it can be inferred that, the greater the size, the greater the amount of power the participant has over its competitors. In the context of advertising, the marketing power of the product is understood in terms of better quality, relevance, popularity, and/or preference over other similar products.

Likewise, the colour green plays a crucial role in the positive connotation of the advertised product. In fact, it is useful as a visual resource to emphasise the healthy effects of a product, since green cues the notion of nature (due to the ubiquitous presence of chlorophyll in natural environments). Moreover, green is considered

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2. In line with this rationale, Grady (1997) claims that the experiential conflation between size and the perceived value of an object gives rise to the primary metaphor IMPORTANT IS BIG metaphor, which underlies utterances such as "Tomorrow is a *big* day". For visual realisations of this primary metaphor, see Ortiz (2011: 1574).

the colour of growth and fertility and it implies calmness and serenity (Moya and Pinar 2008: 1615). Another interesting feature to be taken into account is the notion of *compositional axes* put forward by Kress and van Leeuwen (2006: 194). On to the horizontal axis, objects on the left-hand side of the page tend to be given or already known, whereas new information appears on the right-hand side. It could be further hypothesised that, since the can occupies the whole right half of the billboard, the new Diet 7UP is not only a new product in the market, but a paradigm-shifting novelty. On the other hand, the vertical axis places 'ideal things' on the upper part of the multimodal representation, whereas 'real things' lie at the bottom of it. It comes as no surprise, then, that the text occupies the lower half of the picture given that it addresses the actual information about the new soft drink. The fact that the picture of the can occupies the entire vertical axis could highlight the dual aspect of the new 7UP drink: it is a tasty new formula of a well and widely known soft drink. Finally, the absence of frames also builds on the construction of compositional meaning: as pointed out by Moya and Pinar (2008: 1615), such a strategy "creates an intersemiotic compositional cooperation between the visual and the verbal modes, which mesh one with each other and gives the message a sense of visual and written unity."

As evidenced by this basic systemic-functional oriented analysis, visual semiotics is particularly interested in the way structures of multimodal communication reveal underlying ideologies and power relations within a community and society. The careful attention that visual semioticians have devoted to the description of multimodal representation has insightfully shown that purely monomodal (that is, verbal) communication is the exception rather than the rule. Therefore, visual semioticians have contributed to a great extent to awaken the interest of linguists in non-exclusively verbal manifestations. Their approach to multimodal communication has additionally been proven useful to develop mode-specific tools for analysis. There is always a tendency to rely on the verbal mode to theorise about multimodal manifestations. This is only natural, since verbal communication is the most extensively studied mode (in fact, this is the rationale beneath the equipollence hypothesis, the driving methodological principle of this thesis; see Chapter 4, Section 4.2.1).

The effort undertaken by visual semioticians and systemic-functional analysts to develop a specific vocabulary to describe multimodal structures deserves additional acknowledgement. Forceville (2009c) has already highlighted that such notions as "modal density" and "modal configurations" (put forward by Norris 2009) prove beneficial to address the quantity and typology of modes involved in certain multimodal manifestations and to refer to their relative contribution to the intended inferential task, respectively. More specifically, these notions become extremely useful to address the differences between audiovisual time-based

environments (such as commercials) and printed contexts (such as billboards). Although the number of modes making up the advertisement may not determine the nature and complexity of the cognitive operations involved (see some interesting examples in Chapters 6 and 7), multimodal theorists should take into account that commercials often entangle more modes in interaction than printed billboards. For example, in the 7UP billboard briefly discussed above, there are just two modes in interaction, i.e. verbal and visual. In terms of modal density, the relationship between the text and the picture is quite simple since each of them occupies a different half of the billboard. The only interplay between text and picture in the billboard is found in the juxtaposition of the name of the brand around the can.

Nevertheless, this does not mean that this is a simple example. Rather, the analyst should look beyond the billboard and bear in mind additional informative features such as the communicative impact of such representation on the audience. This would contribute to investigate if (and if so, how) the complex interaction of modes either helps or hinders the proper interpretation of the message. In this respect, both cognitive linguists (Koller 2009; Pérez-Hernández 2011, 2013b, 2014) and marketing scholars (Ang and Lim 2006; Chang and Yen 2013; Gkiouzepas and Hogg 2011; Jeong 2007) have offered converging evidence that visual and multimodal representations (in contrast with verbal language) actually awaken a more positive attitude in the consumers and increase their motivation to interpret the persuasive message.

There are additional issues that prevent Visual Social Semiotics from becoming an adequately explanatory framework to deal with the study of multimodal meaning construction. As pointed out by Forceville (1999: 171), "a full-blown visual grammar should predict, or at least suggest, under what conditions certain 'rules' operate." Kress and van Leeuwen's work (and, by extension, all the work based on their insights) strikes as being largely dependent on the comparison of visual structures with linguistic manifestations, rather than on the mental processes that motivate both surface language and visual messages. Hallidayan-based analyses of multimodal messages focus more on the *representation* of multimodal meaning (yet with an impressive degree of granularity), thus disregarding the processes involved in the construction and motivation of multimodal knowledge. For example, how is it possible that the substitution of a lemon for a can may result in a positive portrayal of the product that would ultimately trigger a rise in sales? The nearly exclusive focus on the more material aspects of the message (i.e. the number of modes involved, their degree of combination, and the channel, among others) risks diverting the attention from the interpretation of the message within its contexts and genres. An exception is Norris (2009) who, as already shown, brings the notion of communicative success into his analysis.

Unfortunately, visual semioticians cannot account adequately for the synergic power of multimodal communication either. As mentioned at the beginning of this chapter, a basic assumption in multimodality is that the output of the message is more than the mere sum of the units, i.e. that visual communication is non-compositional by definition. This entails communicative aspects at play going beyond the mere description of the message. As pointed out by Forceville (1999), despite the fact that Kress and van Leeuwen interpret their analysis in terms of the combination of text and image, they do not devote much attention to the interaction between pictures and context (although it is clear that a grammar of visual design is quite heavily dependent on textual cueing and pictorial context; alternative models are provided by Cook 1992 and Forceville 1996). For instance, the systemic-functional analysis of 7UP made above has only dealt with issues such as colour, size, orientation and relation between text and picture, but it has left out other relevant features such as the notion of genre (advertising) and genre conventions (i.e., to render a positive image of the product) that may ultimately govern the display of multimodal structure in a billboard.

Genre and genre conventions play a vital role in the design of advertisements. For example, since advertisers need to produce appealing and shocking campaigns in order to stand out in a market crowded with products, the substitution of a lemon for a can seems rare enough to attract the consumers' attention. Moreover, given that there is a shared understanding between advertisers and consumers by which advertisements usually render positive portraits of their promoted products, consumers undertake the required cognitive adjustment to extract the possible positive message (i.e. the soft drink is much tastier and healthier), and immediately tend to disregard faulty interpretations (e.g. the soft drink tastes acidic like lemons). In conclusion, obviating the role of the genre and its conventions necessarily affects the observations about not only meaning *interpretation*, but also *representation* (which is seemingly the main focus of systemic-functional analysis).

Curiously, the adjective "social" brings in a different type of context to frame the multimodal message. Their commitment to social engagement leads visual semioticians to link their insights (sometimes rather automatically) to ideological criticism. As pointed out earlier on, a critical analysis of the 7UP campaign would raise a red flag for the misleading *greenwashing* practices (since by no means is a soft drink comparable in taste to a natural fruit, let alone in terms of its benefits to health). However, an alternative analysis based on a less politically engaged viewer would just assume that the new version of the diet 7UP is *more or less* like lemon juice in terms of taste (because, as mentioned, the conventions of advertising as a genre allow for the use of hyperbolic language). Forceville (1999, 2011b) has drawn attention to this analytical inconsistency by claiming that critical analysts do not systematically apply such a critical standpoint to all the pictures, a fact which

thereby yields insufficiently convincing results. Whereas socially engaged scholarship offers interesting ideas, it sometimes makes use of an inconsistent methodology due to its strong ideological commitment (Forceville 2011b: 3093).

Concluding this section at this point would not do justice to the contribution of systemic-functional analysis to the field. All in all, there are evidently shared interests between the systemic-functional and cognitive-linguistic approaches to multimodality that offer a promising opportunity to combine analytical efforts. One of the most clear examples is the work by Axel Englund (2010), who argues, within the framework of *Intermedial Studies* (formerly known as *Cognitive Poetics*), that musical compositions may derive their meaning from metaphorical connections with texts, or vice versa. This hypothesis is commensurate with the (scarce amount of) work on musical metaphor and metonymy within Cognitive Linguistics (as discussed in Forceville 1996, 2009a,b; Pérez-Sobrino 2014a,b; and Zbikowski 2002, 2009). Feng and O'Halloran (2013) have also brought the notion of conceptual metaphors into their systemic-functional analysis. They argue that the structural features of representation provide essential cues for the determination of visual metaphors, that is, that the context plays an important role in the identification of the source and target domains. This very same idea has been extensively acknowledged by Forceville (1996), who has developed the first taxonomy of verbopictorial metaphors precisely on the basis of the relationship between the pictorial context and the metaphorical domains. In fact, a studied carried out by Mulken, le Pair, and Forceville (2010) found that Forceville's (1996, revisited in 2008) taxonomy of different types of metaphor based on 'grammatical' or structural characteristics of the composition of the image not only had ecological validity (that is, participants not involved in the selection of the data were able to grasp the qualitative differences between different types of metaphors), but also brought up interesting results regarding the relationship between metaphor type and other comprehension variables such as perceived complexity and appreciation of the message (in this experiment, advertisements). The reader will find a related study in Chapter 8, yet with a different set of data, classification of metaphor and metonymy, and participants.

Another common interest shared by both frameworks is the centrality of the human body and of spatio-temporal dimensions in meaning making. Kress and van Leeuwen (1996: 186–192) point out that, for western speakers, a horizontal axis in the visual representation places "given things" on the left and "new" things on the right. This axis closely parallels timelines, where time runs from left to right, that is, from past to future. A timeline is a graphical representation of a sequence of related events. The shared properties of objects arranged along a line facilitates the interpretation of the relationships between the number of related events whose sequence the line represents (for a detailed account of the conceptual underpinnings of timelines, see Coulson and Pagán-Cánovas 2009). Verbal descriptions of events

are arranged chronologically, displayed on a horizontal line. For example, in English we can look forward to the good times ahead, or think back to past problems and be glad they are behind us. Not surprisingly, the left-right writing orientation plays a role in determining the spatio-temporal logic behind a timeline. In countries featuring this writing orientation, a speaker would start drawing a timeline from its far left extreme to the far right, the latter being more recent in time than the former.

Previous findings in psychology discussed in the literature on pragmatics and discourse analysis found that the default topical position (used for given information) in a sentence is the left and the focal position (used to introduce new information) is the right. This is also the case in Mandarin, where the spatial morphemes *qia'n* ("front") and *ho'u* ("back") also parallel the writing direction and are used very commonly to talk about time (Chun 1997a, b; Liu and Zhang 2009; Zhang and Ding 2003; Zhu 2006). As far back as the late 1970s and early 1980s psycholinguists (e.g. Clark and Clark 1977) argued that there are cognitive constraints on left and right sentence positions. The leftmost part of a sentence will typically include light (and given) elements, whereas "heavy" constituents (usually carrying new information) will normally occupy the right hand side of the sentence. This facilitates the processing of so-called heavy sentence constituents, by getting the mind ready for them. Interestingly, Boroditsky (2011) and Fuhrman et al. (2011) also found evidence that Mandarin speakers have an additional vertical top-to-bottom pattern which is congruent with vertical spatiotemporal metaphors in Mandarin. Earlier events are said to be *sha'ng* or "up," and later events are said to be *xia*' or "down", and this is conceptualisation is used to talk about the order of weeks, months, semesters, and more.

Kress and van Leeuwen's discussion of the compositional axis (left-right, but also top-down and centre-margin orientation) provides an interesting opportunity for theoretical cross- fertilisation with Johnson's (1987) observations on the centrality of a number of image schemas underlying human conceptualisation such as path (including left-right and top-down orientations), cycle, link, balance, and centre-periphery (to name just a few). In spite of this connection, it should be noted that Kress and van Leeuwen's observations could seem somehow "arbitrary" for the non-cognitivist reader given that they are formulated from a non- experientialist semiotic stance. There are alternative cognitive perspectives on embodiment (for example, Gibbs 2001) that are supported by real data from experimental subjects which provide a much more convincing explanation of the roots of the experiential basis of meaning making practices.

Forceville (2011b) finds an additional nexus between Kress's (2010) work and Relevance Theory (Sperber and Wilson 1985; Forceville 1996 Chapter 5). For instance, Kress (2010: 35) states that "a sign-maker issues a *prompt* (e.g. a gaze, a gesture, a spoken sentence) to an addressee or an audience; the addressee will then

start interpreting the sign and respond to the prompt according to his/her interest". However, I agree with Forceville in his observation that Relevance Theory has developed the extent of this type of inferential tasks with more precision and detail, as will be discussed immediately thereafter.

By way of interim conclusion, it is clear that systemic-functional approaches draw our attention to central components of a robust theory of multimodality, such as the description of multimodal structure, the relationships that hold between modes, and the interaction between the representation and the viewer. All in all, on the critical side, the nearly exclusive focus on the graphic representation of multimodality may blind analysts on other crucial aspects of meaning making, such as the principles leading to – and constraining – multimodal representations. Whereas systemic analysts ask themselves, "What do we see as recipients?" cognitive linguists are more interested in, "How do we construct and interpret this message?" As with many other theoretical debates, the core issue boils down to the formulation and interest of the research questions.

Still, if we recognise that the latter question necessarily involves the former, i.e. that the description of the multimodal message is a necessary pre-requisite to understand the motivation and predictable meaning effects underlying such a representation, we can assume that adopting a cognitively-oriented multimodal standpoint (including some valuable notions from the visual-semiotic model, as detailed above) is more appropriate to develop a fine-grained, consistent and fully-fledged theory of multimodality. A complete theory of multimodality should go beyond the detailed description of visual structure (i.e. the systematic categorisation of the inputs structuring the multimodal representation) and head towards the achievement of explanatory adequacy (i.e. the motivation of conceptual operations based on high-level generalisations that take the form of multimodal representations).

2.3 The relevance-theoretic model

In this section I explore the contributions of the relevance-theoretic view of pragmatic implication with a special focus on metaphor. In spite of their differences, Relevance Theory and the array of theoretical proposals that fall within Cognitive Linguistics are driven by a major common goal: the aim to model human understanding and reasoning and to explain how these processes surface in discourse (either verbal or multimodal) (see Barcelona 2000; Lakoff 1987, 1993; Lakoff and Johnson 1980, 1999; Lakoff and Turner 1989; Levinson 2009; Panther and Radden 1999; Sperber and Wilson 1986, 1987, 2006).

Most of the work undertaken by Sperber and Wilson has dealt with figurative meaning processing, touching only tangentially on metaphor. It was not until

Carston's 2002 *Thoughts and Utterances: The Pragmatics of Explicit Communication* that metaphor gained pride of place within relevance-theoretic circles. Relevance Theory and Conceptual Metaphor Theory are compatible to a large extent given that both models hold that metaphor requires a type of cognitive activity for interpretation that is somehow different from literal language. Relevance-theorists would argue that the amount of effort to be invested for interpretation is greater for figurative language than for literal language, and that this greater amount of cognitive activity is offset by a larger number of meaning effects. This assumption correlates with the cognitive-linguistic idea that metaphor interpretation involves a reasoning process based on the structure and logic of a system of correspondences.

One of the main tenets of Sperber and Wilson's (1986) account is that human comprehension unfolds in a two-step fashion. In the first stage, several interpretative hypotheses arise from the production of fully explicit assumptions or *explicatures* and the derivation of *implicatures* on the basis of premise-conclusion reasoning schemas. In the second stage, the interpreter will test the different meaning implications in order of accessibility until he/she finds one that satisfies relevance expectations. Roughly stated, with these two steps the addressee (A) undertakes an interpretative process of the speaker's (S) utterance only if A knows that S aims to be relevant to him. Additionally, A will stop testing hypotheses of the meaning of S's utterance once A has fulfilled his expectations of relevance (i.e. there is no need to bring to bear the full inference-triggering task upon interpretation). This is the reason why A's interpretation is *optimally* (and not *maximally*) relevant (Sperber and Wilson 1987: 747).

Interpretation arises from embedding the speaker's utterance within a context of previous utterances, against which the new utterance is confronted and processed. Interestingly, Conceptual Metaphor Theory and Conceptual Blending Theory have also drawn attention to the role played by context in the correct understanding of metaphorical expressions. On the one hand, metaphors can be activated as part of a certain context, easing the understanding of subsequent metaphorical expressions in discourse. Much in the same line, blending experts hold that the study of meaning is "the study of how words arise in the context of human activity" (Coulson, in Tendahl and Gibbs 2008: 1843).

In Sperber and Wilson's view, every kind of human communication is amenable to explanation from the standpoint of Relevance Theory. That is to say, all kinds of human communication conform to the presumption of cognitive and communicative relevance. This also implies that in the traditional relevance-theoretic view metaphor is not inherently any different from other kinds of communication, such as hyperbole and simile, precisely because they all are inferred by the hearer following a path of minimal cognitive effort until a relevant meaning is achieved. This has been labelled in relevance-theoretic circles as the *continuum view*, "on which there

is no clear cut-off point between 'literal' utterances, approximations, hyperboles and metaphors, as they are all interpreted in the same way" (Sperber and Wilson 2006: 406). For example, compare "Writing a thesis was a marathon Jane didn't want to repeat" with "My evening jog with Bill turned into a marathon" (Carston and Wearing 2014: 287). In the first example we may find a case of metaphor by which an intellectual event is understood in terms of a physical activity, while the second example could be literal or approximated if we understand that it features a hyperbolic use of the word "marathon", in which the speaker conveys that the run was highly demanding but was not actually marathon- length.

Similarly to metaphor theory, the relevance-theoretic model is designed to give shape to thought rather than describing verbal discourse. However, there has been a tendency over the past few years towards the nearly exclusive scholarly focus on the exploration of verbal comprehension and processing. There have only been two exceptions to date that have taken up the challenge of applying the insights of Relevance Theory to non-verbal human communication in general and verbopictorial advertising in particular: Forceville (1996: Chapter 5, 2014; Forceville and Clark 2014) and Yus (2009). In his chapter, Forceville (1996) shows that multimodal metaphor theorisation can benefit from two core insights of Relevance Theory: first, the distinction between strong and weak implication, and, second, the emphasis on the identities of the agents involved in the interpreting task. I can but concur with Forceville in his conclusion, as will be pointed out at the end of this section.

More ambitious is the proposal put forward by Yus (2009), in which a relevance- theoretic oriented model for multimodal communication comprehension and processing is suggested and then tested against the background of pictorial cartoons. In his account, the first phase of multimodal meaning interpretation is *decoding*. Following Fodor's (1983) theory of the modularity of the mind, this process takes place in the perceptual module (whereas text is decoded in the language module). In spite of obvious differences among the sensory inputs (visual vs. verbal), decoding is accomplished in commensurate ways in both the perceptual and language modules: they synthesise the perceived information into its more de-contextualised logical form, which is subsequently sent to a central processor where it is enriched inferentially and fully contextualised so that it becomes meaningful. In relation to the 7-UP advertisement under scrutiny, the addressee who finds this picture in a street billboard, a magazine, or newspaper, infers that the advertisers of the soft drink intend to communicate some information (i.e. that they want to sell their promoted product).

Additionally, the viewer perceives a series of visual features (namely the can, the lemons, their colour, brightness, and saturation, and the grammatical form of the text) that match with previously stored prototypical references of the item depicted. The more a certain sensory input coincides with its corresponding prototypical

referent, the less interpretive effort is involved (and vice versa). In the terminology put forward by Yus (2005), the anomalous display of elements has been labelled *ad hoc pointer*, in the sense that an ad hoc visual arrangement (devised for specific communicative purposes) alerts the reader to the need for a figurative reading. As a result of the decoding stage, a can and a lemon tree are identified. In this case, the incongruity is not of a referential nature, since the can preserves its original shape. It is rather *schematic* in nature, since there is a violation of the prototypical environment in which cans are found. The incongruity arising from the comparison of the visual input with the prototypical referent triggers the shift from decoding to *interpretation*. The impossibility of soft drink cans growing from trees as natural fruits would probably steer the addressee's interpretation toward a metaphorical reading in which a 7UP can is understood in terms of a lemon.

Once the necessity of certain conceptual adjustment is detected, the viewer enters in a preliminary interpretive stage (the *visual-conceptual interface*, in Yus' terminology) in which the reader formulates tentative connections between the perceived visual features (already identified in the perceptual module) and their corresponding prototypical encyclopaedic referents. The viewer's conclusions at this stage pave the ground to a subsequent fully conscious inferential stage. According to Yus (2009: 156), at this point the viewer should (a) identify the two domains that are related in the visual realm, and characterise them as source and target, (b) ascertain whether the depicted image coincides with its prototypical reference or whether it requires some sort of conceptual elaboration to access its corresponding referent, and (c) identify the relationship that holds between them (whether metaphorical or not).

Provisional answers to these three issues could be the following. As regards (a), the two domains involved are the 7UP can and the lemon, although the source-target characterisation is not self-evident at first glance. However, it is likely that the viewer, driven by a relevance-seeking procedure, would determine that the can is the target domain (since he is aware that 7UP sells soft drinks and not fruits). The lemon would thus be the source domain, since its features are mapped onto the can. In relation to (b), it is not clear from the information provided in the billboard whether the explicit and implicit images (a soft drink can and an absent lemon) are the author's intended prototypical referents or they are aimed at a broader referential entity via a metonymic mapping. Once again, a relevance-oriented interpretation would probably lead the viewer to conclude that the can stands for the beverage it contains (or even for the manufacturing brand), whereas the absent lemon stands for the lemon itself or for a wider range of natural citrus fruits. The corollary is that the prototypical qualities of lemons and/or citrus goods (natural, refreshing, healthy, acid, sugarless, tasty) are now assigned to the soft drink and/or advertising brand. Finally, the answer for (c) could possibly rely

on the juxtaposition of the can and the lemon, which would warn the viewer of the necessity of an *ad hoc* comparison between the two elements for the billboard to be optimally meaningful.

The information gathered in this first interpretive phase ultimately guides the viewer into the fully inferential stage (called *conceptual upload*, Yus 2009: 158) wherein the viewer computes the feasibility of a number of assumptions in the previous phase, always following a path of optimal relevance and least effort. If the viewer is still interested in the characteristics of the new soft drink formula, he will create an *ad hoc* broadening of the concept LEMON to make it *optimally* applicable to (i.e. fully or partially associated with) the soft drink. The new *ad hoc* concept *LEMON involves part of the original LEMON conceptual structure ("refreshing", "sugarless", "healthy", "natural") plus additional conceptual enrichment which is necessary for the successful interpretation of the new soft drink recipe (such as "being fizzy", "containing preservatives", "containing a sweetener"). The same process would make viewers reject the inclusion of other properties of lemons (such as "having pulp" or "having a yellow peel") because they are not compatible with their encyclopaedic knowledge of soft drinks.

As put forward in the introduction to this section and the application of the relevance-theoretic account to an example of visual communication, Relevance Theory's tenets are straightforward enough: the viewer engages in the processing of figurative meaning only if he expects a conceptual compensation for the effort invested in the interpretive task. Indeed, as argued by Sperber and Wilson (1986: vii), "the principle of relevance is essential to explain human communication." In a context in which the theory intends to embrace the explanation of all kinds of discourse, the effort of multimodal scholars, such as Yus (2009) and Forceville (2014), to extend beyond relevance-theoretic principles and adapt to non-verbal communication is commendable.

However, such an application poses some analytical challenges (as acknowledged by Sperber and Wilson (1987: 710), who are well aware that their theory "is very speculative and, as it stands, too general to determine directly either specific experimental tests or computer situations"). Roughly put, the potentiality of the principle of relevance to explain every kind of communicative situation may put at stake the discernment of different communicative situations (for a critical overview of Relevance Theory, see the reviews of Sperber and Wilson's *Relevance: Communication and Cognition* by Levinson 1989, and Seuren 1988). A closer examination of the relevance-theoretic approach to the understanding of the multimodal message in the 7UP billboard reveals a series of analytical inconsistencies.

First of all, it should be pointed out that the theory of the modularity of the mind is controversial within cognitive-linguistic and psychology circles. In opposition to the theory of the modularity of the mind, Cognitive Linguistics gives

prominence to the *embodied mind hypothesis*, according to which "the same neural mechanisms used in perception and bodily movement play a role in all forms of conceptualisation, including the creation of fields of abstract reasoning" (Ruiz de Mendoza 2005: 36). Likewise, visual semioticians (see previous section), in their extensive discussion of "what constitutes a mode" (Kress and van Leeuwen 1996, 2001; Jewitt 2009), cast doubts on the differences of visuals and text given that both are necessarily perceived by the same sense, namely, sight. What is more, psycholinguists and neurolinguists have produced empirical evidence disproving the existence of perception modules in the mind (even for the existence of a language/perceptual and an auditory module).[3]

The relevance-theoretic view on meaning interpretation cannot adequately address the intrinsic complexities of the inferential activity either. The principle of relevance regulates only the extent of the interpretive task, but it disregards the way in which it is achieved. No further explanation than the sole principle of relevance is offered to account for any of the crucial steps in metaphor interpretation: *metaphorical motivation, metaphorical identification,* and *metaphorical analysis*. First, Relevance Theory does not explain in sufficient detail why blatant semantic incongruity leads to metaphorical thinking instead of other types of figurative understanding, given that it does not count on an inventory of cognitive operations. Second, as regards metaphor identification, Yus (2009: 156) holds that the viewer is aware whether the target image *is like* or *opposed to* the source image; it should be noted, however, that there are other cognitive operations that also share the same logical form A IS B (such as echoing, hyperbole, and oxymoron; see Ruiz de Mendoza 2011: 112). Third, the relevance-theoretic view does not provide the analyst with additional principles besides relevance, if any, to analyse and constrain the *ad hoc* broadening of concepts at the conceptual upload stage. As derived from Relevance Theory, the interpretative task is accomplished only *if* the addressee's cognitive environment (that is, what he thinks he knows) is altered, and not in the way the message is conceptually motivated and constructed to prompt a change in the addressee's mind. For example: the 7UP advertisement will steer the viewer towards working out what attributes cans and lemons should have in common, *because* he knows that cans do not grow from trees. The verbal information in small caps is far less challenging since it renders usual information for soft

3. Primary auditory regions (BA 41 and BA 42) respond in similar ways to speech and music (Zatorre et al. 1992). Secondary auditory regions (BA 22) are activated by hearing and understanding words (Falk 2000) as well as by listening to scales (Sergent et al. 1992). In turn, the supramarginal gyrus (BA 40) seems involved in understanding the symbolism of language (Falk 2000) and the reading of musical scores (Sergent et al. 1992).

drinks. The rather small size of these sentences reflects its secondary role in the interpretive task.

However, a relevance-theoretic approach does not clarify how the addressee's cognitive environment can be *correctly* altered. Is it more effective to depict a soft drink hanging from a tree or to portray a lemon with the label of 7UP to prompt the connection between the fruit and the soft drink? In other words, the principle of relevance can only draw the consumer's attention toward the necessity of making a cognitive connection between two domains. Understanding how this connection is made and finding out the array of inferences triggered in this process depends on the viewer's ability to identify the correct cognitive operation at work in the advertisement.

In this regard, there have been very interesting developments of the traditional relevance-theoretic model by Carston (2002, 2010) and Carston and Wearing (2014) over the past few years. Whereas the traditional theory would argue that the processes of understanding the metaphor and the hyperbole in these examples are qualitatively identical, as they are both relevance-seeking, Carston (2010) and Carston and Wearing (2014) find a number of qualitative differences. Among the modifications proposed, perhaps the most relevant to this book is the characterisation of metaphor as a use of figurative language different from hyperbole. For Carston and Wearing (2014: 291), "whereas the literal/hyperbolic distinction is an entirely quantitative matter, the literal/metaphorical distinction is qualitative". Therefore, hyperbole can be related as a loose use of the literal, and thus it belongs to the literal-figurative continuum. In turn, metaphor requires a more refined treatment, as it entails a kind of processing that occurs at a different level from the literal. Additional criticism of the literal-figurative continuum can be found in Gibbs and Colston (2012: 27). The authors raise a number of questions about the feasibility of placing figurative and non-figurative language at the same level. They argue that there are experimental studies that have shown that the "literal" cannot be directly understood as the opposite of the "figurative", and therefore cannot be located on the same scale. Likewise, the literal-figurative continuum may be problematic to accommodate poetic instances of figurative language, which differ from both the figurative and the literal along several dimensions.

In line with these caveats, the aim of this book to treat metaphor (and by extension, metonymy) as a research topic on its own that deserves its own fine-grained account. Literal language will thus fall out of scope of this book and, by extension, from the idea of the cline of conceptual complexity that is postulated in Chapter 3. I also agree that hyperbole is something different from metaphor, although they can easily co-occur (to see how this works, the reader is referred to Ruiz de Mendoza and Galera 2014: 201ff.). I have also very tentatively introduced the role of hyperbole to maximise the effects of metonymy at the end of Chapter 5. Whereas very

preliminary, I hope it will suffice to show that hyperbole in multimodal settings involves a type of conceptual adjustment qualitatively different from metaphor and metonymy.

Another important improvement of Carston's (2010: 308) revised relevance-theoretic proposal is the establishment of two different types of metaphoric processing. The first type of processing underlying the understanding of conventional metaphors involves a rapid on-line pragmatic adjustment of a word to apprehend a loose or non-literal use of a word. This strategy refers to everyday communication, in which we are constantly assessing our expectations of relevance and finding an acceptable degree of effort to invest in the inferential task., These metaphors prompt a straightforward creation of an ad hoc concept because they are conveyed directly and explicitly in discourse. The second type of metaphors require a more cognitively demanding comparison between the literal and the figurative that requires the simultaneous activation of both scenarios. Extended metaphors behave this way, given that they require the presence of the literal scenario, together with its associated mental imagery, far beyond the point at which relevance is achieved. This kind of processing is all a matter of implicature and usually offers a dense cluster of weakly communicated concepts. This distinction sheds even further light on the different workings of metaphor in a very context-sensitive manner, and goes in line with many studies within metaphor theory. I find that this revisited relevance-based approach to metaphor has a great deal to offer to bridge the gap between both Relevance Theory and Conceptual Metaphor Theory.

Finally, there is yet another crucial shortcoming in the adaptation of Relevance Theory to study of advertising. For Sperber and Wilson (1986: 142ff.), "relevance is always relevance to an individual," meaning that interpretation is highly situated: something is relevant because there is a certain addresser who aims to be relevant to a specific addressee at a particular place and time, and under certain particular circumstances. Interestingly, Lakoff and Johnson (1980) similarly observe that there is no such thing as meaning in the absence of the subjects involved in the communicative act, thereby bringing attention to the fact that meaning is always meaning to *someone*. If this is the case, how is it possible then for an advertisement to be relevant to a composite target audience? How can advertisers create effective and relevant messages in the context of mass media communication? A tentative explanation could point out that pictures skip the linguistic barrier, thus making pictorial and multimodal advertisements much more accessible than mere verbal ones. However, pictures do not suffice by themselves to account for the whole cross-cultural understanding of global campaigns. While images can be easily recognised, the meaning ascribed to them does not necessarily have to be shared across cultures (for a discussion on the limitations of situated image schemas, see Callow and Schiffman 1999; and Pérez-Hernández 2013b, 2014).

At this point, scholars adopt different stances. For Sperber and Wilson (1986: 158), a stimulus in mass media communication is addressed to whoever is willing to entertain it. This observation does not seem very plausible, since advertising campaigns are extremely expensive and advertisers cannot take the risk of releasing an unappealing or incorrectly targeted campaign. The same kind of objection can be addressed to Yus (2009: 155), who suggests that the greater interpretative burden lies on the addressee's side, and that the author can only hope that the reader will be able to grasp the appropriate information established by the metaphorical mapping. By contrast, Forceville (1996: 86) claims that it is the addresser who carries the greater responsibility in ensuring that the addressee activates the right kind of assumptions by, precisely, establishing a correct choice of *ad hoc* pointers in the design of the multimodal message. In accord with this line of thinking, Beijk and Van Raaij (1989) are convinced that there are a series of cognitive mechanisms that advertisers can deploy in order to steer and constrain the whole array of possible inferences. According to these authors, the advertiser has to appeal for certain world knowledge constructs or *schemas*, which are aligned to what Sperber and Wilson call an individual's *cognitive environment* – in the consumers' minds. These schemas "are coherent clusters of information stored in people's memory serving as interpretive frameworks that predispose people to certain emotions and behaviour" (Beijk and Van Raaij 1989: 13–15). One possible explanation for the correct understanding of the billboard is that it exploits one of these so-called schemas: the Great Chain of Being, a cultural model which defines attributes and behaviour of humans, animals, plants, inanimate objects and natural physical things (Lakoff and Turner 1989: 170–171). By means of this model we can connect the general characteristics of plants (lemon) with the characteristics of objects (soft drink can), and vice versa. Given that two entities from different conceptual domains are put in correspondence, a metaphor must be combined with Relevance Theory in order to shed light on the issue of meaning comprehension (as has already been brilliantly argued and showed by several scholars, see Gibbs and Tendahl 2006; Ruiz de Mendoza and Pérez-Hernández 2003; Tendahl 2009; Tendahl and Gibbs 2008). The major stance of all these scholars is that the cross-domain mapping structure has great potential to maximise Relevance Theory explanation of the issue of conceptual motivation and to make predictions about meaning comprehension.

In spite of the theoretical insufficiencies discussed above, the relevance-theoretic model provides a large number of valuable insights as regards the communicative impact of the multimodal message in a context like advertising. As noticed by Forceville (1996), the theoretical difference between strongly and weakly communicated aspects of advertisements may have a counterpart in terms of cognitive effort in either constructing or interpreting a message: "the more strongly an assumption

is communicated, the more the communicator takes responsibility for having it derived by the addressee; the weaker an assumption is communicated, the more the addressee takes responsibility in deriving it" (Forceville 1996: 93). Depending on their target audience, the creative team of a brand can opt for releasing a quite straightforward message if they want to ensure that their communicative intentions are correctly understood. The alternative strategy is to convey an ambiguous figurative message that will supposedly engage consumers in a more elaborated task of interpretation with the promise of providing a highly relevant and appealing cognitive outcome.

Another insightful feature of relevance-theory is the interest on the context in which the communicative act occurs. Gibbs and Tendahl (2006: 396) suggest that the context may determine the extent of the processing time of a given utterance, be it metaphorical or not. This account holds that understanding an utterance will be slower or faster depending on the available surrounding information from which to derive implicature. This suggestion is particularly interesting because it shifts the focus from metaphor type (e.g. conventional vs. poetic) to the amount of available context to help in the relevance-seeking process. This observation nicely ties in with the relevance-theoretic bulk of published literature. For instance, Pilkington (2000: 103) points out that the success of a poetic metaphor is determined by its originality and by a surrounding context guiding its interpretation. Furthermore, there is converging empirical evidence that shows that context critically determines cognitive effort and cognitive effects, rather than just the presumption of relevance on the hearer's side (Gibbs and Tendahl 2008: 397).

In sum, as pointed out by Ruiz de Mendoza and Pérez-Hernández (2003), whereas Conceptual Metaphor Theory deals with the nature of the cognitive operation involved and the way in which it constrains the number of inferences that may be derived from a multimodal expression, the Principle of Relevance determines the extent of such an interpretive task. Of interest to this book is also to investigate the ways in which metonymy, besides metaphor, acts as an alternative route for the consumer in their relevance-seeking incursions into advertising. The fact that advertising is framed by the interaction between advertisers and consumers (who are both aware that the core genre convention is that the advertiser is trying to sell a product by means of constructing a positive image of it) greatly affects the way in which advertisements are processed. All in all, it is worth noting that some scholars (for example, Ruiz de Mendoza and Pérez-Hernández 2003; Pérez-Hernández 2011) would argue that the use of metaphors, metonymies and other cognitive operations are means by themselves of constraining the intended message and discarding deviated interpretations. Whereas the literature reviewed above has paid a great deal of attention to combine the strongest features of the relevance-theoretic and the metaphor models, little (if any) attention has been paid

to the role that metonymy may have in broadening/narrowing processes (which, in my view, is sometimes quite relatable to domain expansion and reduction as shown in Chapter 3, Section 3.2.2). Given all the areas of convergence, it would certainly be interesting to see in the near future a counterpart of Tendahl's 2009 monograph *A Hybrid Theory of Metaphor: Relevance Theory and Cognitive Linguistics* based on a relevance-theoretic account of metonymy.

2.4 The multiple space-structuring model

Conceptual Blending Theory is recently thriving in multimodal spheres as the most suitable framework to deal with creativity in advertising, since it offers a unified framework to deal with literal and figurative language in different modalities (Joy et al. 2009; Lundmark 2003; Petäjäaho 2012). Conceptual Blending Theory was developed over the eighties and nineties with a series of seminal papers (Coulson 1996; Fauconnier 1994, 1997; Fauconnier and Sweetser 1996; Fauconnier and Turner 1998; Oakley 1996) that finally led to the monograph *The Way We Think*, by Fauconnier and Turner (2002). The great potential of the multiple space-structuring model is that it does not simply account for linguistic creativity, but also for many other non-linguistic phenomena such as language behaviour and various products of human imagination.

The graphic representation of a conceptual blend hinges on the notion of *mental spaces,* which are "small conceptual packages" (Fauconnier and Turner 2002: 40) containing conceptual material that people make up in an online and dynamic process (that is, as they think or talk). Blending is thus the cognitive process which constructs a partial match between two or more *input* mental spaces, selectively projects conceptual material from those input spaces into a novel *blended* mental space and dynamically develops new conceptual material not fully determined by the input spaces. There is a fourth mental space, the *generic* space, which comprises the common material among all the input spaces that allows them to blend. Take the example "By this point, Roosevelt was far ahead of Clinton" (Fauconnier 2001: 2495ff.). The two inputs are Roosevelt's and Clinton's presidencies. They belong to different input domains given that they lived and led the USA in different decades of the 20th century. They are prone to blend given a number of shared features contained in the generic space, such as profession, country of origin, goals, etc. In the so called emergent space, Roosevelt and Clinton are brought together within the same time frame, and their starting points, mid- points, and so on are matched in a natural way, in order to structure that they are competing against each other. Blends of this sort are routinely elaborated for reasoning purposes in political analysis.

If we consider the analytical advantages of this model to account for the 7UP example, in principle we can distinguish up to four distinct input spaces: lemon tree (input 1, visual), which brings to the fore elements such as lemons, leaves, trunk, and lemon field; soft drink can (input 2, visual), that activates attributes such as bubbly, lemon-flavored and artificial; 7UP (input 3, visual and textual), which comprises all the background information related to the brand; and nature (input 4, textual) which constructs a scenario of natural and healthy products. These four input spaces constitute independent manipulable mental constructs that only match in a partial way: 7UP markets a lemon-flavored drink, but not lemon juice; lemon juice and soft drinks are both liquid, although they come from manufacturing processes; and 7UP and natural juice can be lemon-flavored, but 7UP is not as healthy as actual juice. These four mental events, which have been constructed ad hoc in the viewers' mind, share the more or less generic property of "drinkability" which connects them: we drink lemon juice, drinking (natural juice) is healthy for us, we drink the content of cans, and 7UP sells a drinkable beverage inside cans. Each of these partially connected input spaces grants a number of selected properties to the blended space. This emergent space forges a whole new independent scenario in which 7UP (a selective projection from the input space 3 "7UP") now sells 100% natural (conceptual material inherited from input spaces 1 "lemon tree" and input space 4 "natural") soft drink (retrieved from input space 2 "soft drink"). This peculiar tableau is ultimately meaningful with the incorporation of new conceptual material that stems from the blending operation, which builds a soft drink with comparable composition and benefits to an actual fruit.

See Figure 1 for a schematic overview of the blending operation (interrupted lines for shared properties between mental spaces; uninterrupted line for the mappings across mental spaces). As shown below, the conceptual blend has a great potentiality to account for virtually every creative representation. Blending analyses detect that the complex processes involved in figurative meaning construction are not completely explained by the often too restrictive source-target layout intrinsic to metaphors. By contrast, the application of Conceptual Blending Theory to the study of multimodal meaning creation favours a view in which multiple temporary spaces elaborate simulations in multidirectional mappings that create new conceptual material in a dynamic and autonomous process.

The appeal of this model for cognitive linguists relies on its aim to account for a wide range of phenomena, its explicit attention to meaning construction and processing as dynamic processes and the acknowledgement of the emergence of new conceptual material from existing ways of thinking (as acknowledged in Gibbs 2000; Grady 2005; Harder 2003). However, the all-embracing scope of Conceptual Blending Theory is not without problems, and some scholars (Camara-Pereira 2007; Gibbs 2000; Ritchie 2004) have raised a voice of concern as regards the adequate

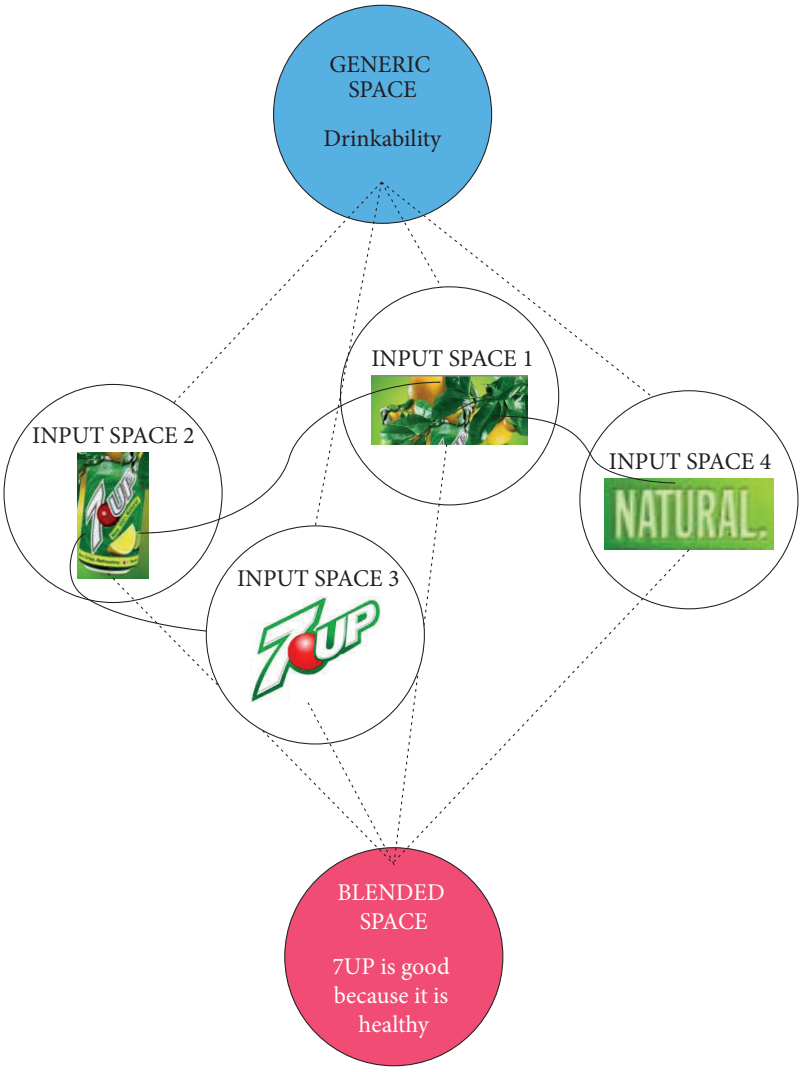

Figure 1. Conceptual blending in Example 1

explanation of specific phenomena. In order to address these criticisms, Fauconnier and Turner (2002) posited two complementary levels of constraints on blends in anticipation of this kind of criticism: the *constitutive principles* and the *optimality principles*.

Fauconnier and Turner claim (2002: 310) that the four *constitutive principles* of blends "place extremely strong constraints on any social, cognitive, or physical activity." These principles are *generic* and *blended spaces*, *cross-domain mapping*,

and *selective projections* from the input spaces to the blend, and they are aimed at defining the basic mechanism of conceptual blending as opposed to other mental activities. However, a closer consideration of these concepts reveals that they are common to many figures of thought. Regarding the first two constitutive principles, i.e. the *generic and the blended spaces*, Ritchie notices (2004: 47) that the generic space usually reflects some kind of analogous external structure (such as the property of "drinkability" in our example) rather than common properties that prompt the cross-domain mapping. Ritchie casts doubts on the necessity of the generic space by holding that "the connecting principle would be better described as a learned schema or convention for spatial representation of sequential events" (2004: 47). It is not just that the existence of an underlying common property "drinkability" supports the running of the blend; it makes the blend *possible*. Note that the blend would not have taken place if instead of "lemon" there had been a "bike" as input space, given that there is no common property that connects bikes with 7UP and natural things. The existence of a generic space is thus redundant: the blend will run if, and only if, there is enough common schematic structure among a number of input spaces. Should the input spaces lack shared analogous structure, the connection will not take place, given that there is not any generic space that can actually prompt the construction of an emergent space.

Similar reasoning applies to the necessity of the *blended space*. The use of independent circles reinforces the idea of reduplication of relevant features of the inputs in the blended space, "rather than the connection between existing elements in a new composite pattern" (Ritchie 2004: 40). The mere fact of constructing an entirely new blended space that inherits relevant features from already existent mental spaces, plus the retrieval of encyclopaedic knowledge from memory and culture, would demand an immense load of cognitive effort that is not consistent with the way we think. Our thoughts unfold in a much more simple and economic manner. Another issue that demands a more accurate explanation is the origin of the *emergent properties* in the blended space: if they are not activated via the selective projection from inputs, where do they belong? More importantly, what motivates their manifestation?

In an attempt to overcome the accusation of formulating an inefficient model, Fauconnier and Turner connected their four-space model to a network model, in the aim of representing the real way in which we think. In their words (Fauconnier and Turner 2002: 40), "in the neural interpretation of these cognitive processes, mental spaces are sets of activated assemblies, and the lines between elements correspond to coactivation of bindings of a certain kind". In spite of the fact that the neural approach could actually dilute some of the criticisms raised above, it poses new complications on the definition of the third constituent principle, *cross-domain mappings*. Both *cross-domain mappings* and *neural binding* (its neural counterpart)

are responsible for the consideration of two or more different conceptual or perceptual entities as a single entity. Their uniform and dynamic structure underlies a great range of cognitive operations, including blending but also categorisation, metaphor, paragon and analogy, among others. Even though cross-domain mapping is crucial to conceptual blending, the blend-driven analysis does not provide a detailed explanation of the conceptual trigger and directionality of the cross-domain mappings between the inputs, the characteristics of the prompted inferences or the conditions regulating the integration between inputs. For example, the blend shows the same type of connection between the components "lemon," "can," and "natural" in the lemon-can composite. However, as will be evidenced later on, our approach shows that the mapping between "lemon" and "can" is metaphoric, whereas the connection with "nature" is motivated by the metonymic pattern NATURE FOR NATURE FRIENDLY. Curiously enough, the reverse process, i.e. the application of the neural theory to refine Conceptual Blending Theory, greatly overcomes the abovementioned graphical insufficiencies of the model. Compared to the schematic representation of blend in Figure 1, the diagram of neural binding in Figure 2 dispenses with both the generic and the blended space. Note that there are only two (or more) input spaces that partially match because they share common analogous structure.

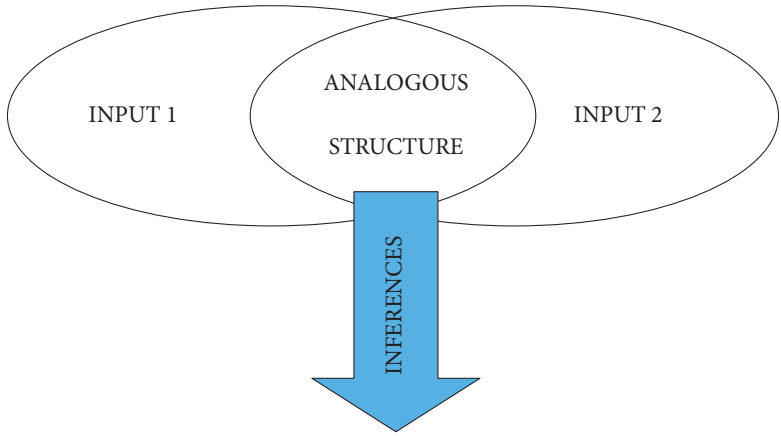

Figure 2. Schematic representation of neural binding

Feldman's *From Molecule to Metaphor: A Neural Theory of Language* (2006) argues that neuronal groups fire in synch when binding takes place because they share some of the neural circuitry (that might originate in the underlying image schema that allows the conceptual integration). This observation rejects the replication of conceptual material from the generic space in each input space in the blend, which

is highly uneconomic in cognitive terms. Neural bindings give rise to inferences that arise via mappings and mental simulation. This phenomenon is much more straightforward than the construction of a whole new blend which condenses properties of all the input domains but also develops new material.

As advanced earlier on, Fauconnier and Turner (2002: 311) complemented their view on the constraints of blends with a series of *optimality principles* that regulate the conceptual integration between mental spaces. According to the authors (Fauconnier and Turner 2002: 311) "they are not all-or-nothing constraints on networks" since sometimes they compete between each other; they are "rather, strategies for optimizing emergent structure". I turn now to the examination of these principles in their application to the advertisement under inquiry.

The first of them is the *topological principle*, by which all the elements in the blended space must participate in the same sort of relation as in their input counterparts. That is to say, the blend must preserve the structure of each of the projecting input spaces. This principle is partially met since the can preserves its original shape, and the lemon-flavored soft drink is actually made of concentrate lemon juice (plus other artificial ingredients). However, the blended space distorts the usual scenario where one can find a 7UP can (which is not in a tree but a supermarket or a restaurant).

The second principle is *pattern completion*, by which the blend is enriched with encyclopaedic information retrieved from memory that is necessary for the blend to make full sense. Although not mentioned in Conceptual Blending Theory (Fauconnier and Turner 2002: 328), the integration of additional existing patterns to the blended space facilitates the emergence of new properties in the blend that are not directly projected from any of the input spaces, but evoked from our bodily experience and knowledge of the world. In the example under study, the viewer recruits a frame in which consuming natural and organic products is not only healthy, but also communicates positively about the social and cultural status of the consumer (at least in Western countries). Eco-friendly and organic products are usually targeted to people with a higher cultural and social profile for two main reasons: (a) they are more expensive than non-organic products; and (b) their purchase is based on a middle/long term benefit (the preservation of the environment) rather than the satisfaction of a personal immediate need.

The third is the *principle of integration*, by which the blend must constitute a tightly integrated scene that can be manipulated as a unit. This principle basically grants the creation of a blended space in a representative and meaningful way. That is the case of the 7UP can- lemon blend which, by means of the clashing integration of a soft drink can within the lemon tree scenario makes it salient that the new 7UP is as natural, tasty and healthy as real fruits.

The fourth principle relates to the *promotion of vital relations*. This guiding principle, in a broad way, establishes that the blend must maximise the correspondences between mental spaces by recovering additional background information (in much the same line as *pattern completion*). Additionally, it seeks to intensify these connections in order to reinforce the conceptual scaffolding of the blended space. By virtue of this guiding pattern, relations between elements from the same input space become as close as possible in the blend. In Fauconnier and Turner (1998), this principle is labeled *metonymic tightening*. It further specifies that elements become more entrenched in the blend specifically via metonymy, thus helping to build a tighter and more defined unit easier to manipulate. As evidenced in our case study example, this principle is partially entertained. On the one hand, lemon (absent and substituted for a 7UP can) and lemon trees stand in metonymic relation to one another, in the same way a soft drink can stands in metonymic fashion to the brand that produces it. On the other hand, the representation of the 7UP can growing from trees violates this principle, since it can only happen in its figurative context. However, such a rupture can be productive for the advertiser's interests since that oddity may draw the consumer's attention to the billboard.

The fifth optimality principle is the *web principle*, by which the manipulation of a blend as a unit must maintain the same links to its corresponding input spaces without additional cognitive effort. On the grounds of this principle, the entire network is implicated in the processing of each constituent mental space. For example, this principle allows us to understand that in spite of the fact that trees do not produce soft drinks, the advertised product is feasible (in terms of meaning) insofar as it contains a beverage that could be comparable to natural juice (produced by fruits that grow in trees).

The sixth principle works exactly in the reverse way: by means of the *unpacking principle*, the viewer is able to reconstruct all the input spaces and the network of connections involved in the blend given the blending target. This is possible in this advertisement due to the interplay of the textual and the visual mode: the visual part helps the viewer to retrieve the first input space (lemon tree) from the pictorial background, and the second and third input spaces (soft drink and brand, respectively) from the picture of the can hanging from the tree. In addition to that, the textual part activates the fourth input (benefits of consuming natural goods to the human body).

The seventh and final principle, *relevance*, highlights the fact that the new emergent space must arise from a meaningful blending operation. In this case, the 7UP-lemon blend is significant since it triggers a series of positive connotations about the carbonated soft drink (such as healthy, natural and intense taste), which help advertisers to sell their product effectively.

The pertinence of the optimality principles to the many space-structuring model (and by extension, to this book) is crucial. As pointed out by Gibbs (2000: 350), they provide an opportunity to formulate specific hypotheses that can be subject to tests of falsification that could contribute to validate Conceptual Blending Theory empirically. Furthermore, if these *optimality principles* can be proven real constraints to the operationalisation of blends, they could counteract part of the criticisms leveled against the model (such as that it is a too general or too vague theoretical model to represent knowledge). However, as the reader may have inferred at this point, these principles give rise to similar concerns as the constitutive principles for the definition of the conceptual blend. With the exception of the *principle of topology*, optimality principles tend to overlap with each other or are too vaguely formulated, thus preventing the researcher from deriving specific and testable hypothesis.

For example, *pattern completion* hints at the emergence of new properties in the blended space that are retrieved either from background knowledge – although the conditions that rule such process are not specified in the theory – or from any kind of material that is compatible with the blended space.

In turn, the *principle of integration* only establishes that a blend must be perceived as a single unit. This is not surprising, since this is the logical corollary of its underlying neural operation, i.e. binding. Nonetheless, binding is also characteristic of a wide array of cognitive operations that are not specifically blends, such as metaphor and metonymy, but also paragons, counterfactuals, and analogies.

The *preservation and intensification of the vital relations* can be considered a direct consequence of the *topology principle*. Fauconnier and Turner (1998: 40) note that the selective projection serves well to compress what is diffuse by scaling it to a single vital conceptual relation. The blend thus favors the selective projection of metonymies to the blend, since metonymic patterns help to build a tighter and more easily manipulable unit (which is commensurate with the integration principle). However, the internal structure of the blend "prefers" some metonymies over others (Turner and Fauconnier 1998). This interesting consideration once again is in need of a detailed account on the criteria governing the acceptability of some metonymies over others in the blended space.

With respect to the *web principle,* it seems to be another derivation of the topology principle. If the connections among mental spaces are strong enough to be kept intact in the blended space, it is precisely because they are motivated by an external conspicuous conceptual structure. There is thus no possibility of establishing stronger connections between unrelated inputs; they must share some sort of topology.

The *unpacking principle* casts doubts on the origin of the additional information contained in the blended space (the so-called "emergent properties") that is not evoked from any of the input spaces. This is a central problem in blending theory,

namely, that it does not clarify the origin of these novel properties. Therefore, it is simply not possible to discern post- hoc what information in the blended space belongs to the input spaces and what is novel and derived autonomously (probably by the inclusion of experiential and cultural structures in the blend).

It might be argued that the relevance-theoretic model can solve some of the problems noted above. However, this is not so. The fact that the blending operation must be *relevant* to take place does not account for what properties of the input spaces are selectively projected onto the blend or how this process unfolds. In addition to the conceptual shortages found for the *principle of relevance* in Section 2.1 of this chapter, neural theory lends further support to the inoperability of this principle as a single explanation for meaning making. Lakoff (2009: 20) points out that cross-domain mapping takes place (and is thus learned) if (and only if) the situation is meaningful for the individual, thereby leading to the co-activation of the corresponding source and target group of meaningful neural nodes (or frame roles) and the triggering of inferences. If there is an activated node from the source domain with no correlate in the target domain (independently of the feasibility of the input spaces to become part of the blend), this 'impossible connection' cannot be learned because it cannot take place.

In conclusion, it seems that the *preservation of the topologic structure* of the inputs in the resultant blended space is the only valid starting point to study the nature of conceptual integration. Interestingly, the preservation of the topologic structure is akin to Lakoff's (1993: 215) *Invariance Principle*. By virtue of this principle, metaphorical mappings preserve the image-schematic structure of the source domain in such a way that is consistent to the target domain. Hence, metaphorical mappings only take place if a common analogous image- schematic structure between domains exists, and thus it is not necessary to specify its existence to guarantee the activation of the cross-domain mappings. In fact, the Invariance Principle has been demonstrated to be a consistent constraint not only for metaphorical mappings, but also for blends (Ruiz de Mendoza 1998).

As shown, the constitutive and optimality principles, which were originally meant to constrain and differentiate the nature and activity of blends from other cognitive operations, can be reduced to several basic notions that are consistent with metaphor theory: there are several input spaces which are partially mapped onto each other following the principle of invariance and that trigger an array of inferences as a result of the cross domain mapping.

There is a last concern with the excessive explanatory power of blends that is crucial for the purpose of this research monograph. Within Conceptual Blending Theory, it still remains to be explained how the blend as a conceptual *process* determines the multimodal *product* of conceptual integration. Gibbs emphasises (2000: 531) that "the processes of linguistic understanding are different from the

products we consciously think about when we read or hear verbal expressions" (let "linguistic" and "verbal" work as "multimodal" for the purposes of this research). This criticism logically also applies to metaphor and metonymy, since it also deals with differences at the dimension of the multimodal manifestation (or *product*), and not only at the conceptual level (or *process*). As will be dealt with in Chapter 3, this monograph aims to overcome this shortfall in both theoretical models by providing a finite set of interactional patterns between metaphor and metonymy that can be placed along a continuum of increasing figurativeness, thereby keeping intact the inferential capability and constrain of metonymies and metaphors.

Although it has become evident at this stage of the chapter that blending-driven analyses do not suit the analytical purposes of this work, they still have a great potential to frame dynamic meaning construction processes for a large number of phenomena. This observation points to a possible combination of Conceptual Blending Theory and Conceptual Metaphor Theory, as suggested by Grady (1997: 120–122) and by Grady, Oakley, and Coulson (1999). In their view, blending theory and metaphor theory can be seen as complementary in the sense that the former addresses novel, short-lived and often unique cases, whereas the latter focuses on conventional, regular and more stable patterns. In fact, within the multiple space-structuring model, metaphor is seen as a blend that counts on conceptual metaphorical domains as their input spaces and that then elaborates on such conceptual material to create a richer blended space (Turner and Fauconnier 1995: 187). For this reason, some blending experts (see Lundmark 2003) claim that the use of metaphor theory or blending theory depends on the type of data scrutinised, the scope of the analysis, and the nature of results sought to obtain.

2.5 The multimodal approach to conceptual metaphor

Cognitive Linguistics has witnessed an exponential growth of interest in metaphor studies since Lakoff and Johnson's (1980) revolutionary monograph *Metaphors We Live By*. This major work, which was partially advanced by Black (1955) and Ortony (1979), challenges the traditional view of metaphor as a stylistic ornament and makes a compelling argument for the centrality of metaphor to everyday thought. The proposal of this book (Lakoff and Johnson 1980: 6) is that metaphor exists at the linguistic level precisely because it reflects how thought is mainly structured in terms of metaphor. In Cognitive Linguistics, metaphor is seen as a cross-domain conceptual mapping that partially structures the understanding of one domain (the target domain) in terms of another domain (the source domain) (for a detailed account, see Gibbs 1994; Lakoff 1993; Lakoff and Johnson 1980, 1999).

Unlike previous scholars who speculated on the metaphorical nature of thought, Lakoff and Johnson provided systematic linguistic evidence of the existence of metaphors at the conceptual level. By way of illustration, consider the multiple linguistic realisations of the conceptual metaphor ARGUMENT IS WAR (Lakoff and Johnson 1980: 4): "He *attacked* every weak point in my argument," "His criticisms were right *on target,*" "We've never *won* an argument with him" (the original italics are preserved to show the linguistic manifestation of the conceptual metaphor). As can be inferred from the context, these utterances are embedded in the scenario of an intellectual argument and not a real battle. However, our encyclopaedic knowledge about battles (metaphorical source domain) is here partially retrieved and used to shape our understanding of intellectual debates (metaphorical target domain). Metaphor thus proves to be a fundamental and ubiquitous conceptual phenomenon to structure our social, intellectual and emotional everyday experiences.

Conceptual Metaphor Theory (Lakoff 1993; Lakoff and Johnson 1980, 1999) has awakened a similar amount of scholarly interest and criticism. Supporters see a great explanatory potential in the new categorisation of metaphor as a conceptual mapping between concrete domains beyond its traditional role as a mere rhetoric device (to name but a few, e.g., Dirven and Ruiz de Mendoza 2010; Gibbs 1994; Gibbs et al. 1997; Lakoff 1987; Kövecses 1990, 2002, 2005; Lakoff and Johnson 1999; Lakoff and Turner 1989; for assessment on these developments, the reader may refer to Gibbs 2011 and Ruiz de Mendoza and Pérez-Hernández 2011). In turn, detractors plead certain argumentative circularity in Conceptual Metaphor Theory inasmuch as it departs from language to infer conceptual mechanisms, which in turn motivates certain aspects of linguistic structure and behaviour (see Cienki 1998; Gibbs and Colston 1995; Haser 2005). This criticism stems from the fact that, although the theory purposely avoids the label "linguistic," metaphor research has exclusively focused on verbal manifestations of metaphor. In order to prove metaphor as a central conceptual mechanism in everyday thought, finding alternative instantiations of metaphor arises as a primary goal to build a stronger theory.

In this regard, Forceville (1996–2014) has made a case for the development of multimodal metaphor theory as a proper branch of metaphor studies. He insists on the importance of the inclusion of non-verbal corpora in metaphor analysis to prove that metaphor is not a function of language but rather of cognition, thus escaping the vicious circle that puts at stake the validity of metaphor theory as a theory of thought (Forceville 2006). In response to this call, investigation on multimodal metaphor is progressively attracting scholars' attention. According to Forceville (2009a: 24), multimodal metaphors are those "whose source and target are each represented exclusively or predominantly in different modes." There is already a substantial body of evidence based on the analysis of multimodal data that supports the pervasiveness of metaphor in multimodal contexts (see Forceville

and Uriós-Aparisi 2009 and references therein, and Hidalgo and Kralievic 2011 for varied accounts of verbopictorial metaphors in billboards and commercials; Velasco and Fuertes 2006 for olfactorial metaphors in perfume billboards; Zbikowski 2002 and Pérez-Sobrino 2014a for verbomusical metaphors in classical music; and Müller and Cienki 2009 for gestural metaphors).

In particular, advertising as a discourse genre is in a symbiotic relationship with metaphor. Metaphor suits the specificities of advertising because both consist in putting into correspondence two discrete domains: in the case of metaphor, the source and the target domain; in advertising, the product or service being advertised and the corresponding positive attributed values. For its part, advertising is a potentially productive domain of study for metaphor scholars, since the advertiser's univocal intention to convey a positive image of the product leads the consumer to make a connection between the advertised product and the positively connoted evoked domain, which precisely takes place by means of metaphor.

Consider one last time the 7UP example from the perspective of metaphor theory. Curiously enough, traditional metaphor-based analyses (that is, those exclusively focused on linguistic manifestations of metaphor) would have disregarded this billboard as a valid case study, since the verbal part does not render any metaphorical statement. Scholars would at most point out the PART FOR WHOLE metonymy between the soft drink can and the more encompassing brand domain presumably hinted at in "pick *one* up today." This kind of analysis would unfortunately miss the pun in the verbal part, which, somehow wittily, connects the new "healthier" soft drink can with the evoked lemon in the visual part of the advertisement.

A multimodal metaphor analyst, in turn, takes into consideration the additional information provided by the pictorial context in order to identify the metaphorical domains, their characterisation as metaphorical source and target, and the existent mappable features. On a subsequent level, the analyst brings other kinds of information (such as genre conventions and consumer's expectations about the product) into the analysis of the billboard. By way of illustration, a multimodal metaphor-oriented analysis points out the resemblance between a lemon and the rendered 7UP can, since the can is represented in the place where lemons are expected. The visual metaphor 7UP CAN IS A LEMON engages audiences in understanding the soft drink as having the actual taste and texture of a lemon. The effect of the mapping across two concrete domains is the highlighting of a single and "quintessential" attribute which is mapped from the source onto the target domain. It is precisely this paradigmatic centrality of the transferred feature that enables us to talk about one entity exclusively in terms of this feature. Because of the simpler nature of these metaphors, Ruiz de Mendoza and Pérez-Hernández (2011: 18) have referred to them as *one-correspondence mappings*, which work "by

highlighting one attribute or a tight-knit cluster of related attributes that are perceived to be similar across domains." Since the aim of the advertisers is to announce a new diet recipe of 7UP with less sugar and fewer preservatives, it is likely that "natural" or "healthy" is the quintessential feature put in correspondence in all the case studies. Furthermore, the relation between the core feature and the schema in which it is contained is also transferred through the generic-level mapping. The central relation of the feature "natural" of "lemon" is made to correspond through a metaphorical mapping to "7UP" (which, on the grounds of the metaphor, is released as a natural and healthy beverage).

This basic analysis provides the reader with a first real taste of the contents of this book. It is worth noting that a multimodal metaphor-based analysis, aside from taking into account non-linguistic elements that are crucial for the correct interpretation of the billboard, also inherits the strengths of a conceptual metaphor-based account. As has been pointed out, one of the main concerns of this work is finding the constraints on the process of meaning construction that may guide and limit the triggered inferential process. In this respect, and as mentioned elsewhere, one of the most appealing facets of Conceptual Metaphor Theory is the *Invariance Principle*. As advanced elsewhere, Lakoff (1993: 215) states that "metaphorical mappings preserve the cognitive topology (i.e. the image-schema structure) of the source domain, in a way consistent with the inherent structure of the target domain" (e.g. the exterior of a container is mapped onto the exterior of an object, and not the interior). Therefore, this principle is at work in establishing which domains can be actually put in correspondence and which features from the source domain can be mapped to the target domain (recall here that this was the main analytical deficiency found in both the relevance-theoretic and the multiple space-structuring model, and the reason why these two approaches would be benefited from a combination with Conceptual Metaphor Theory). This implies that, in the 7UP example, the soft drink can and the fruit may be put into correspondence because both are *containers* (in the case of the can, it contains soft drink; the lemon on its part contains the pulp used to obtain natural juice). The central meaning implication arising from this mapping is that the content of a lemon is comparable with the content of the soft drink can. The shared awareness between advertisers and consumers on the use of hyperbolic language in advertising prevents the viewers from taking advertising messages literally.

Interestingly, converging evidence of the fruitful synergy between metaphor and advertising comes from the field of marketing studies (Ang and Lim 2006; Chang and Yen 2013; Gkiouzepas and Hogg 2011; Jeong 2007; McQuarrie and Phillips 2005; Morgan and Reichert 1999; Phillips and McQuarrie 2009). The connecting thread between these studies is the idea that pictorial metaphors are quite effective tools to sell products. Compared to direct claims, metaphors (and more

specially, multimodal specimens) trigger more cognitive elaboration than literal messages (Toncar and Munch 2001). Pictorial and multimodal metaphors hold an additional advantage over verbal metaphors, inasmuch as they are more likely to trigger spontaneous inferences than verbal metaphors (McQuarrie and Phillips 2005; Morgan and Reichert 1999). They have also been shown to increase product/brand recognition and recall, consumer preferences, etc. (see McQuarrie and Mick 1999, 2003, 2009; Morgan and Reichert 1999; Kitchen 2008; Tynan et al. 2006).

It is clear, however, that marketing studies have a great limitation: they are mostly post-hoc approaches that report whether the use of figurative language in terms of multimodal metaphor works for selling a product. These studies, however, do not delve deeper into how advertisers should choose a source domain for their products, nor into the role that the selected source domain plays in assuring advertisers that their targeted consumers will infer the advertised message correctly. In the case of our example, marketing scholars would agree on the fact that the felicitous metaphorical mapping between a can and a lemon contributes to triggering consumers' positive attitudes towards the new soft drink formula. But it still remains to be seen in this field whether any other rendering of the same metaphor (e.g. a lemon-shaped 7UP can instead of the regular 7UP can hanging from the tree, or a lemon with a label of 7UP superimposed on the skin) would have triggered the same kind of response in consumers. Additionally, marketing scholars should rely on metaphor-based analyses to predict what inferences (and not only whether they are positive or spontaneous) are triggered by means of the metaphorical mapping. In this case, it is the *Invariance Principle* at work which establishes that the only possible mapping is from the content of a lemon to the content of a soft drink can, and hence it discards deviated interpretations of the billboard (such as 7UP sponsoring lemon crops or producers or 7UP now being sold on farms instead of supermarkets).

Nevertheless, analyses based exclusively on metaphor may carry critical limitations. The targeted audience for this advertisement is somehow aware that advertisers are not just selling 7UP cans, but they are promoting a new and improved version of the soft drink that is as healthy as natural goods. Therefore, the visual metaphor analysis does not fully suffice to account for the advertising message beneath the billboard. The viewer must resort to the textual part of the billboard to extract the advertiser's intended message out of the highly specific visual scenario.

I have summarised below (Table 1) the major strengths and weaknesses from each theoretical model that have been overviewed throughout this chapter.

Table 1. Summary of the major strengths and weaknesses of the four models of figurative meaning constructions reviewed in this chapter

Model	Strenghts	Weaknesses
Visual-semiotic model	– Detailed description of the multimodal structure – Detailed description of relationships between modes – Interest in the interaction between the representation and the viewer – Importance of context	– Nearly exclusive focus on the physical representation of multimodality – Limited explanatory of the individual subjective processes that govern meaning construction and communication
Relevance-theoretic model	– Identification of the agents involved in communication – Strong and weak forms of implication – Importance of context	– The principle of relevance regulates the *extent* of the interpretive task, but it disregards the way in which it is achieved (solved by Carston 2002; Carston and Wearing 2014)
Multiple space-structuring model	– Flexibility and dynamicity achieved by the notion of "multiple input spaces" – Importance of context	– No detailed explanation of the conceptual trigger and directionality of the cross- domain mappings between the inputs – Conditions regulating the integration between inputs vague or unclear, with the exception of the *principle of topology* – Unclear where the emergent structure originates
Conceptual metaphor model	– Unidirectional mappings – Difference between metaphor and metonymy – Constraint: Invariance principle – Inferential activity is constrained and limited, and thus can be anticipated to a certain extent – Importance of context	– Too restrictive source- target layout – Certain argumentative circularity (it departs from language to infer conceptual mechanisms, which in turn motivates certain aspects of linguistic structure and behaviour)

To close this section, I have argued that a multimodal metaphor-based analysis greatly overcomes the analytical insufficiencies detected for the theoretical frameworks already presented. The current bulk of the analysis of multimodal metaphor, and Forceville's on-going dedication to provide the field with a theory of its own, are invaluable departure points to fulfill the purposes of this book. However, an analysis exclusively focused on metaphor or on marketing and advertising techniques still reveals a series of explanatory deficiencies that arise from an isolated metaphor analysis. As will become apparent in the ensuing chapters, the analyst should take

into account the existence of complex patterns of conceptual interaction between metaphor and metonymy in multimodal contexts that may be useful to complement and enrich current accounts of pictorial and multimodal metaphor. Hence, this work advocates a *combined* and *dynamic* view of metaphor theory in terms of patterns of conceptual integration at the level of the multimodal manifestation and patterns of interaction between metaphor and metonymy at the conceptual level.

CHAPTER 3

An integrated approach to the study of multimodal metaphor and metonymy

Creativity isn't magic. It happens by applying ordinary tools of thought to existing materials.
(Kirby Ferguson, http://everythingisaremix.info)

3.1 Introduction

Metaphor and metonymy are of interest for this book as conceptual operations with direct relationship to the mind's ability to construe, represent and reason about the world. I adopt here the definition of cognitive operation provided in Ruiz de Mendoza (2011: 104): "a mechanism whose purpose is to derive full semantic representation out of a symbolic device (such as texts or drawings) in order to make it fully meaningful in the context in which it is to be interpreted". *Representational operations* reflect the mind's ability to construct, represent, and reflect about the world. They should not be conflated with *mental operations*, such as memory storage and retrieval, recognition, and the like, which fall out of the scope of this work. Both representational and mental operations can account for the construction of meaning, but they do not necessarily reflect each other (Gibbs 2006b: 148). This book deals with representational operations, and I do not assume they also involve mental operations, because they are not always isomorphic. This should however not hinder the analyses and discussion offered of this book, as it originates from the observation of authentic date and the careful consideration of alternative hypothesis.

Assuming a perspective based on operations such as metaphor and metonymy presents a major advantage with respect to other theoretical frameworks (such as Visual Social Semiotics, Relevance Theory, and/or Conceptual Blending Theory) as it involves the study of finite and well-defined conceptual mechanisms underlying different manifestations of thought (whether linguistic, visual, multimodal, etc.) with a constrained inferential potential that allows the analyst to predict the communicative impact that they may trigger.

While scholarship addresses the role of metaphor and metonymy in language, little has dealt with the combination of both in images, let alone in the context of

advertising. A starting point to explore the different ways in which these two figurative operations combine is by acknowledging their similarities and differences. Even though the boundaries between metaphor and metonymy are sometimes fuzzy (Barnden 2010), there is a widespread (yet tacit) agreement that metonymy is qualitatively simpler than metaphor (Rundbland and Annaz 2010). Another relevant notion is "mixed metaphor", understood in the collective volume edited by Gibbs (2016) as the combination of two or more metaphors in the same sentence. As the editor emphatically addresses (Gibbs 2016: IX), "mixed metaphors do not reflect cognitive errors or necessarily impede our understanding of what people mean to communicate" but rather they "demonstrate people's cognitive flexibility to think of abstract topics" in multiple ways. This volume brings up several issues that are of interest for the investigation of complex patterns of figurative language in different genre that can be applied for the specific case of advertising. Conceptual metaphors might be conventional, but the mixing is novel (Lonergan and Gibbs 2016: 68), which is what makes adverts noticeable and attractive. Also, this dynamic view opens up the creative possibilities of metaphor in discourse and goes beyond the (sometimes too constrained) single source-target layout of metaphor in traditional metaphor theory (Müller 2016: 51). Interestingly, the motivation to produce a mixed metaphor is arguably intentional and could respond to rhetorical and communicative purposes (Steen 2016: 117), like selling a product or promoting a service. Finally, mixed metaphors at the intersection of verbal and non-verbal modes have the added advantage of quickly capturing people's attention (Forceville 2016: 228).

In this chapter I elaborate on this interactive view on metaphor and metonymy, and formulate a number of criteria to discern different types of "mixed" metaphors (in terms of the number of metaphors involve and their type of interaction) and also by acknowledging the possibility of a metaphor to combine with one or several metonymies. A careful consideration of these principles will help to set up an axis in which different types of metaphor-metonymy combinations can be placed in increasing degree of figurativeness. In increasing order of conceptual complexity, these are: *(multiple source)-in-target metonymy, metonymic chain, metaphtonymy, metaphoric amalgam, and metaphoric chain*. Subsequently, I establish a cline of increasing figurativeness that, similarly to Dirven's account, ranges from metonymy through metaphor to ad hoc conceptual configurations (thus borrowing but also expanding the original notion of *figurative continuum* as was originally postulated in Dirven 2002; Gibbs 1984; Giora 2002, and McArthur and Littlemore 2008). This figurative continuum may be helpful to understand how metaphor-metonymy combinations cooperate to create figurative meaning.

Expanding the set of analytical tools allows a shift in the understanding of metaphor as a static cognitive operation (see Chapter 2) to metaphor as a *combined*

and *dynamic* conceptual phenomenon. It is *combined* because it accounts for the interplay of metaphor with other conceptual operations, thereby endowing the message with richer inferential activity. As will be argued at the end of this chapter, considering metaphor in interaction with other operations greatly expands the scope of this study beyond the boundaries posited by the analytical constraints of metaphor in multimodal settings mentioned in the previous chapter. Likewise, this is a *dynamic* approach because there is some retroactivity in this process. The activated conceptual complex, besides developing all the inferential material, limits at the same time the creative possibilities of the multimodal manifestation triggering such operations and cancels irrelevant or inconsistent conceptual material. When this process fails, the consumer is confronted with a *cognitive dissonance*, i.e. an episode of mental stress or discomfort experienced by a consumer when dealing with an advertisement's design that does not properly activate the conceptual operations aimed to structure the persuasive message. I will provide examples and discuss the meaning implications of conceptual complexes for advertising in Chapters 5 and 6.

In the remainder of this chapter, the reader will find in Section 3.2 an outline of the main references on conceptual interaction patterns for verbal communication. In turn, Section 3.3 offers a discussion of the implications of this framework for a comprehensive theory of multimodal communication and for related experimental work.

3.2 Patterns of conceptual interaction

Understanding the patterns of interaction between metaphor and metonymy furthers our knowledge about the strong potential of these two tropes to produce rich inferential activity. Additionally, these conceptual complexes provide an explanation for intermediate degrees of figurativeness falling between metonymy, metaphor, and more ad hoc conceptual configurations. I turn now to overview the similarities and difference between these conceptual complexes.

(Multiple-source)-in-target metonymies consist of simultaneous metonymic domain expansion processes from several subdomains to the more encompassing domain that they stand for (Section 3.2.1). Additionally, I also tackle in this sub-section *metonymic chains,* which are generally understood as the chained combination of two or more metonymies in which the expanded or reduced domain that results from an initial metonymic operation constitutes the point of departure for another metonymic shift (see Section 3.2.2). *Metaphtonymies* (Section 3.2.3) are halfway between metonymic and metaphoric complexes, since they relate to the principled interaction of a metonymy with either the metaphoric source or target domain (or both simultaneously, as is characteristic of multimodal metaphtonymies). In

turn, *metaphoric complexes* cover any kind of combination between two or more metaphors. If the combination is made on the grounds of one metaphor being incorporated into the source-domain layout of another metaphor, then we talk about *metaphoric amalgams* (see Section 3.2.4, in which we refer to two subtypes of this interaction pattern, i.e., single and double source metaphoric amalgams). In turn, if the combination is arranged in terms of a sequence of consecutive metaphorical mappings wherein the target domain of the first metaphor constitutes the source domain of the next, we make reference to *metaphoric chains* (see 3.2.5).

3.2.1 (Multiple-source)-in-target metonymy

This metonymic complex has been originally postulated by Pérez-Hernández (2013a) to account for illocutionary speech acts. In her study, Perez-Hernandez noted that the metonymic mappings involved, however, differ from the orthodox part-for-part/part-for-whole projections in traditional metonymies such as "I'll give you a hand", where there is a straightforward and unique conceptual link between *hand* and the *work* done as if with the hand. Careful consideration of her data on indirect speech acts alternatively suggested that illocutionary metonymies consisted of the linguistic activation and metonymic projection of a variable number of the attributes (i.e. multiple source) of a given indirect speech act onto the matrix domain representing the corresponding illocutionary category (i.e. target).

For example, in "If you don't mind, could you just clear up that confusion for me?", Pérez-Hernández (2013a: 136) claims that there are three pragmatic variables that simultaneously activate the *Idealised Cognitive Model of Requesting*: (1) the conditional clause "If you don't mind" activates the addressee's optionality variable, (2) the hedge "just" minimises the cost of the action, and (3) the use of the distal form of the modal "could" additionally mitigates the force of the illocutionary act. Logically, the specification and conventionalisation of the resulting constructions varies according to the number of attributes affording simultaneous metonymic access to the more encompassing domain. Therefore, the higher the number of attributes overtly instantiated, the more entrenched in the reference to the corresponding indirect speech act is, and subsequently, the easier it is to recognise the illocutionary intention of the speaker. See Figure 3 for a graphic overview.

Advertising, much in the same sense as illocutionary acts, is a multi-sided environment that calls for a more flexible notion of metonymy. The focus of contemporary advertising goes far beyond the metonymic projection from a logo to the company behind the creation of the advertisement. Instead, advertisements convey highly complex and multi-layered narratives that make use of a conglomerate of elements to create a positive representation of the promoted commodity.

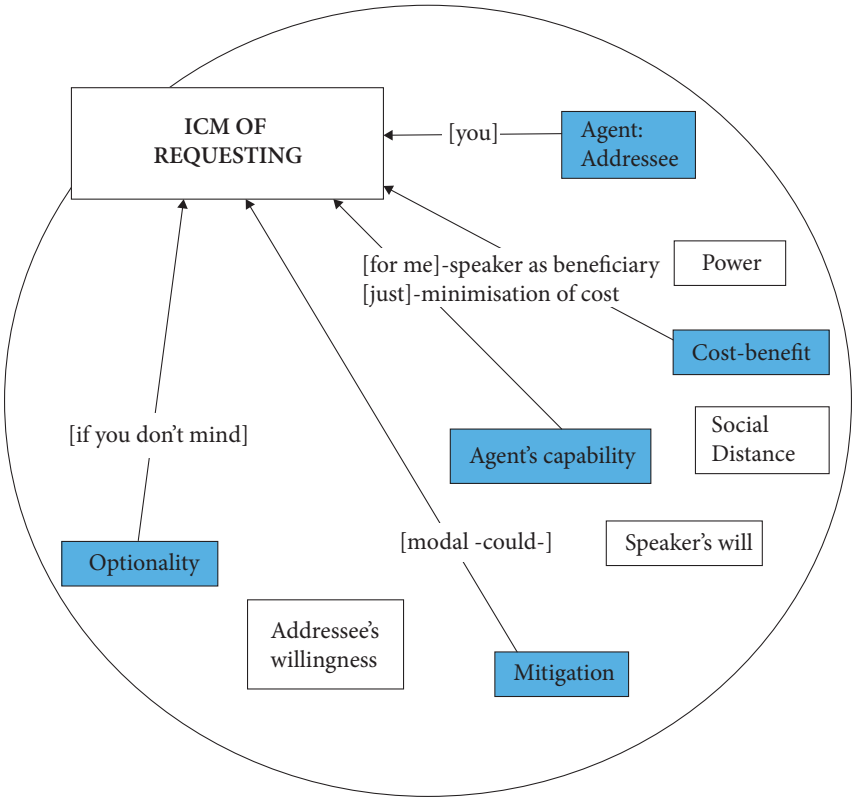

Figure 3. (Multiple-source)-in-target metonymy in the understanding of "If you don't mind, could you just clear up that confusion for me?" as a request

Combining text and pictures, these elements might relate to the construction of an advertised image of the product through multiplex metonymic mappings, by either referring to the features associated with the product, the effect triggered on the consumer by the use of the product, and/or by association with the targeted consumers and/or rival products.

The application of the notion of (multiple-source)-in-target metonymies to multimodal environments presupposes a mode shift in any of these internal mappings between several heterogeneous advertisement elements (such as the logo, the tagline, the picture of the product, the pictorial context, or even the audial logo or jingle) and the promoted product and its associated features. Therefore, the greater the amount of elements making reference to the product, the easier it is to recognise the intended advertisers' message. The eventual conventionalisation of these advertising elements in the representation of the sponsored product makes it possible for well-entrenched brands to dispense with some of them in the release

of a new campaign (e.g. the case of brand recognition in Apple exclusively by its visual logo).

3.2.2 Metonymic chains

Metonymic chains (see Barcelona 2005; Brdar-Szabó and Brdar 2011; Hilpert 2006; Ruiz de Mendoza 2000, 2002, 2007) involve the chained combination of two or more metonymies. The expanded or reduced domain that results from a first metonymic operation constitutes the point of departure for another metonymic mapping. In multimodal metonymic complexes there is an additional mode shift in the internal mapping. Ruiz de Mendoza (2007) has identified four types of metonymic complexes based on the possible combinations between metonymic expansion and reduction processes: *double metonymic expansion, double metonymic reduction, metonymic expansion plus reduction, and metonymic reduction plus expansion*. However, owing to the pervasive presence in the corpus of domain expansion operations, in this book I devote special attention to two (of the four) metonymic complexes: *double metonymic expansion* and *metonymic expansion plus reduction*. Domain expansion operations are ubiquitous in advertising since they constitute a safe and economical point of access to a broader scenario, and can thus be regarded as epiphenomenal to this type of genre. This figurative operation triggers a sort of *iceberg effect*: any desirable and sufficiently representative feature present in the advertisement contributes a straightforward and almost effortless path to the elaboration of a positive image of the promoted product in the consumer's mind.

Take the example "The strings were far below full strength and the wind were out of tune" (Ruiz de Mendoza and Galera 2014: 118). Here, the notion of "strings" has sufficient conceptual prominence to grant access to the broader and most-encompassing domain 'stringed instrument' (such as a violin). This process, which is one of metonymic expansion, in turn provides a point of access to the broader domain 'collection of stringed musical instruments' (that is, violin, viola, cello and bass). Given that the context of the utterance makes reference to the interpretation of a piece of music by musicians playing stringed instruments, there is presumably a last metonymic expansion process matching the 'collection of stringed instruments' to the 'players' playing such instruments. See Figure 4 for a schematic overview of this chained metonymic expansion.

Alternatively, domain expansion mappings can combine with domain reduction processes, i.e. a metonymic mapping which highlights a specific subdomain of the more encompassing domains for which it stands. Consider now the following sentence: "After three glasses she was feeling slightly drunk" (Ruiz de Mendoza and Galera 2014: 127). A first metonymic expansion of the type MATERIAL FOR

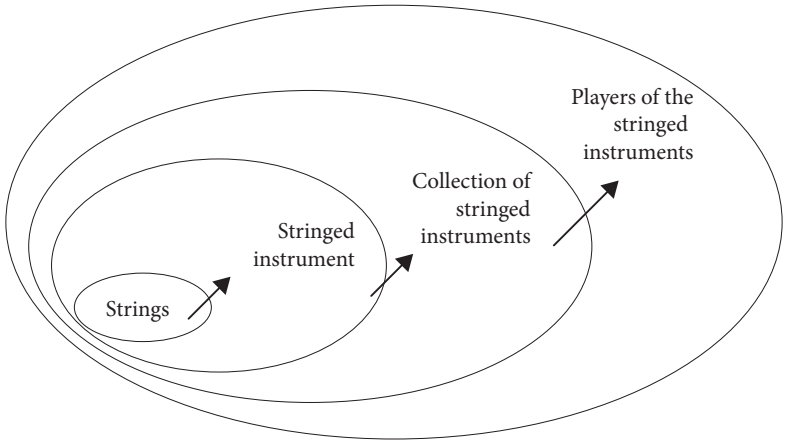

Figure 4. Chained metonymic expansion in "The strings were far below full strength"

OBJECT connects the notion of glass as a more or less transparent and hard material with the object that is made of glass and serves as a container for beverages. The second part of the sentence cues for the activation of the metonymy CONTAINER FOR CONTENT, which allows the hearer to perform a metonymic reduction process to highlight the (alcoholic) liquid contained inside an object made of glass. See Figure 5 for a schematic overview.

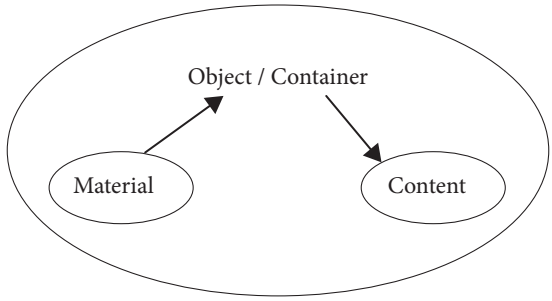

Figure 5. Metonymic expansion plus reduction in "After three glasses she was feeling slightly drunk"

As shown above, metonymic expansion mappings provide a conceptual shortcut to access broader scenarios. This highlighting effect achieves optimal balance between cognitive effort and inferential richness. In turn, as pointed out by Pérez-Hernández (2011: 380) within the context of branding, metonymic reduction processes are convenient for cases where the matrix domain is too complex or elaborated to be processed in an economical and memorable way, or where the matrix domain is

relevant enough to provide positive connotations that would be lost in the mention of the subdomain alone.

3.2.3 Metaphtonymy

This phenomenon was originally discussed by Goossens (1990), and later revised and expanded by Ruiz de Mendoza (2000) and Ruiz de Mendoza and Díez (2002). In tune with the latest developments on this conceptual complex (see Ruiz de Mendoza and Galera 2014), a metaphtonymy requires the incorporation of a metonymy into either the source or the target of a metaphor.[1] In a similar fashion as with metonymic complexes, in the following I focus specifically on metaphtonymies involving any sort of domain expansion process:[2] *metonymic expansion within the metaphorical source domain* and *metonymic expansion within the metaphorical target domain*.

Consider the sentence "He beat his breast and said, 'God, have mercy on me, a sinner' ", an example discussed in Ruiz de Mendoza and Galera (2011: 11) as *metonymic expansion within the metaphorical source domain*. According to these authors, this type of metaphtonymy is characterised by having a linguistic expression that partially represents a more complex conceptual domain. In this way, mentioning part of a scenario supplies a relevant point of access to the whole scenario, which is accessed through a metonymic expansion process. Hence, the breast-beating action affords metonymic access to a situation in which a person beats his breast in order to show regret for his actions. This expanded conceptual domain is then used as the source domain for a metaphoric mapping onto another domain that denotes the situation the speaker wants to reason about. In this case, the breast-beating situation (in which a person openly manifests sorrow by beating his breast) provides conceptual correspondences for a target scenario in which the speaker regretfully manifests his distress in order to avoid punishment or any other undesired consequences of his behaviour. See Figure 6 for a schematic representation.

A metonymic expansion process can likewise be embedded within the metaphorical target domain with the function of developing the array of metaphorical correspondences to the extent required for the interpretation to be meaningful. This

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1. This pattern is consistent with what Mittelberg and Waugh (2009) have observed in the realm of gestures. They show that gesture awareness of metonymy is sometimes key to access dimensions of conceptual metaphors that are not directly manifested in co-occurring speech.

2. The reader is referred to Ruiz de Mendoza (2000); Ruiz de Mendoza and Díez (2002) and Ruiz de Mendoza and Galera (2014) for a full description of each of these six patterns in the linguistic realm.

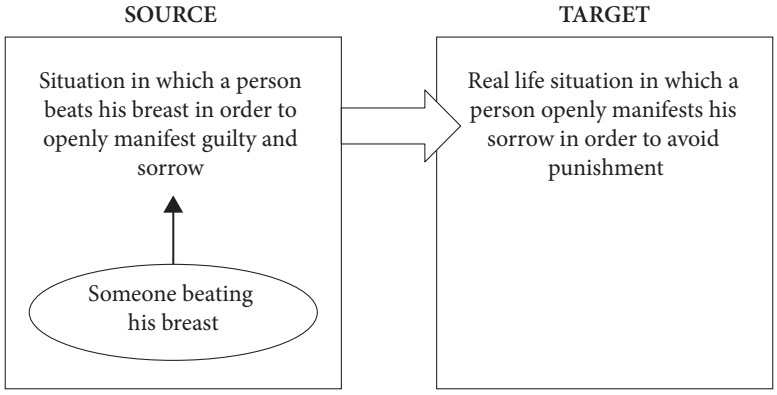

Figure 6. Metonymic expansion of the metaphoric source in "He beat his breast and said, 'God, have mercy on me, a sinner' "

is the case of "Jack Nardi should have known to zip his lip around federal agents" (Ruiz de Mendoza and Galera 2014: 111). The resemblance between the zipper of a clothing article and a person's closed lips makes it possible to establish a metaphorical correspondence between these two domains. A metonymy is subsequently required in the metaphorical target domain to develop the picture of a person with his lips kept closely together into a scenario in which a person will not disclose secret information (as a result of the inability to talk derived from having the mouth closed). The resulting pattern is one of *metonymic expansion of the metaphorical target domain*, as shown in Figure 7.

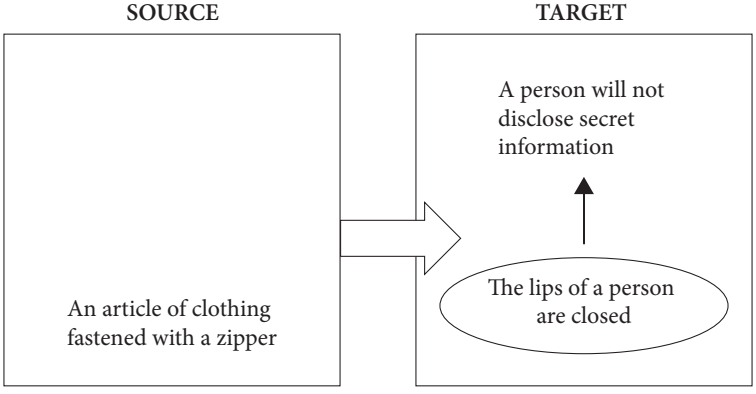

Figure 7. Metonymic expansion of the metaphoric target in "Jack Nardi should have known to zip his lip around federal agents"

The productive combination of metaphor and metonymy in this interaction pattern is aimed at seeking balance between cognitive economy and meaning effects. It is expedient to note the different role played by the metonymy in each of these two cases as well as the different amount of cognitive burden involved. When metonymic domain expansion is embedded in the metaphorical source domain, it only has the function of preparing a metaphorical source domain with sufficient conceptual material to map onto all relevant target elements, thus placing most of the inferential activity on the metaphorical mapping. In turn, domain expansion in the metaphorical target is characterised by a relative higher interpretive weight insofar as the metonymy develops the partial conceptual material provided by the metaphorical mapping into a fully-fledged scenario.

It thus comes as no surprise that metaphtonymies are central to advertising since they contribute to finding a middle ground between the interpreting effort involved in the advertisement and the range of meaning effects that the consumer obtains. In spite of that, there have been only three academic papers devoted to the interaction between metaphor and metonymy (within the view sustained by Ruiz de Mendoza and Díez 2002) within the domain of multimodality: Uriós-Aparisi, (2009), who offers an application to TV commercials; Hidalgo and Kralievic (2011), who discuss printed billboards advertising ICT products in the light of this conceptual pattern, and Pérez-Sobrino (2014a), who devotes some attention to the potentiality of this conceptual complex in classical music. However, as will be made apparent in the analysis, metaphtonymy is not only the most abundant trope in the corpus gathered for this book (30% of the identified conceptual operations, in comparison to metaphor, which takes 11%, and metonymy, with 15%; the reader is referred to Chapter 7 for a more detailed multimodal corpus analysis), but I have also detected several variants of metaphtonymy that have not yet been surveyed in linguistic contexts. These are discussed in Chapter 6, Section 6.2.2: (a) *parallel metonymic expansion in both metaphorical domains,* (b) *parallel metonymic reduction in both metaphorical domains*, (c) *metaphtonymy scenario,* and (d) *(multiple-source)-in-target metaphtonymy*).

3.2.4 Metaphoric amalgams

The notion of metaphoric amalgam can be traced back to Lakoff and Turner's (1989: 70ff.) idea of *metaphor composition* as "the simultaneous use of two or more metaphors in the same passage, or even in the same sentence". Metaphoric amalgams highlight a particular aspect of composition in which one metaphor is embedded within the source-domain structure of another metaphor (Ruiz de Mendoza and Pérez-Hernández 2011). Ruiz de Mendoza and Pérez-Hernández

further differentiate between two types of metaphorical complexes of this kind: *single-source metaphoric amalgams* (if one metaphor is integrated into another) and *double-source metaphoric amalgams* (if two different source domains are mapped onto the same target domain).

Single-source metaphoric amalgams consist in the incorporation of one metaphor into the conceptual make up of another. In this line, Reddy's (1979) notion of 'conduit metaphor' as a cognitive association between words and containers of meaning offers a clearer view of the relationship between this metaphor and other metaphors. For Reddy (1979), English speakers make use of expressions to talk about communication that contain thoughts and feelings that can be transferred among people through the conduit of words. For example, the interpretation of the phrase "She got the idea across to me" (Ruiz de Mendoza and Pérez-Hernández 2011: 17) requires the dynamic interplay of the metaphor IDEAS ARE OBJECTS with UNDERSTANDING AN IDEA IS PERCEPTUALLY EXPLORING AN OBJECT (Figure 8). Whereas the first metaphor cognitively structures an idea as an object moving along a path (highlighted in grey), the second metaphor complements this mapping by developing the way in which the observer (the speaker) interacts with the object in motion (the idea).

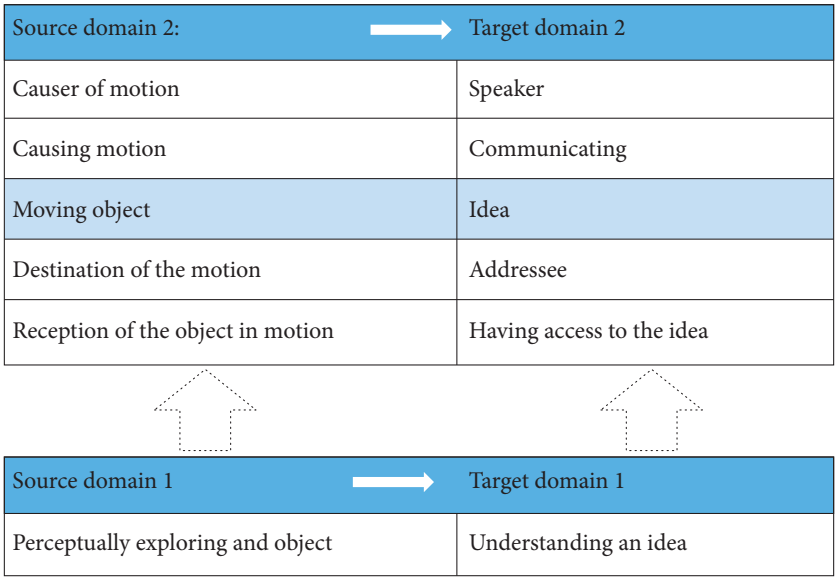

Figure 8. Single-source metaphoric amalgam in "She got the idea across to me"

In turn, *double source metaphoric amalgams* conflate the metaphorical mappings of two independent source domains into one target domain. In this interactional

pattern, the target domain requires the mapping of two complementary source domains for interpretation to take place. A case in point is the sentence "He slapped some sense into me" (Ruiz de Mendoza and Pérez-Hernández 2011: 18). The proper understanding of this example as one person causing another to acquire knowledge by slapping calls for the interaction of the metaphors AN EFFECTUAL ACTION IS CAUSED MOTION and ACQUIRING A PROPERTY IS GAINING POSSESSION OF AN OBJECT (see Figure 8 for a schematic overview). This amalgamation gives rise to an enriched metaphor in which the integration of the verbal predicate "slap" into the caused-motion construction with resultative meaning gives rise to a metaphorically constructed scenario in which the destination of the action (slapping) coincides with the receiver gaining possession of a new property (some sense). In consequence, the two mapping systems are integrated into one through a double-source metaphoric amalgam, whereby the effectee is seen both as the destination of motion and the receiver that gains possession of an object (highlighted in grey in Figure 9).

Source 1: CAUSED MOTION	**Target 1: EFFECTUAL ACTION** **Target 2: ACQUIRING A PROPERTY**	**Source 2: GAINING POSSESSION OF AN OBJECT**
	Effector ("he")	
Causer of motion	Effecting ("causing to acquire")	
Destination of the motion	Effectee ("me")	New possessor of an object
Object of caused-motion (moving object)	Effect ("inducing to have some sense")	
	Resultant state ("having some sense")	Gaining possession of an object
Manner of causing motion	Manner of effecting ("slapping")	

Figure 9. Double-source metaphoric amalgam in "He slapped some sense into me"

3.2.5 Metaphoric chains

To close this section, I will finally examine the case of *metaphoric chains*. The most intricate interactional pattern surveyed in this work refers to the combination of two (or more) metaphors in such a way that the target domain of the first constitutes the source domain of the following one. This pattern was first identified in Ruiz de Mendoza and Galera (2011) in their analysis of the cognitive mechanisms that underlie the interpretation of phrasal verbs. The reader should note at this point that metaphoric amalgams and metaphoric chains, though based on the principled

combination of metaphors, involve different types of composition: whereas the former involve integration, the latter requires the constrained succession of metaphoric mappings.

Consider the example: "Obama wrapped his tentacles around everything from health care to automobiles" (Ruiz de Mendoza and Galera 2014: 105). The analysis of this example finds its point of departure in a metaphorical source domain wherein a tentacled animal, wrapping its tentacles around an object, animal or person, maps onto Obama wrapping his arms or hands around an object. This is one of the most basic GREAT CHAIN metaphors, by which human features are understood in terms of animal characteristics. Then, a second mapping based on the metaphor GAINING POSSESSION OF AN OBJECT IS HAVING CONTROL OVER IT allows the picture of Obama holding an object with his hands to construct a scenario in which Obama has (non-physical) control over certain issues. See Figure 10 for the schematisation of this metaphoric chain.

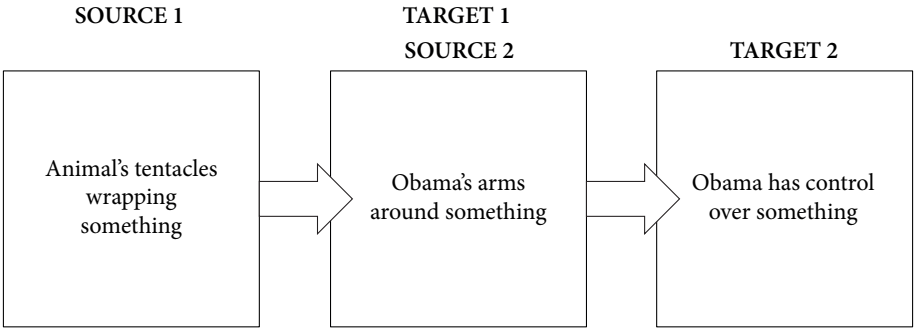

Figure 10. Metaphoric chain in "Obama wrapped his tentacles around everything from health care to automobiles"

Interestingly, the felicitous choice of "tentacles" (instead of a more general term like "arms") allows the speaker to highlight Obama's full control of a number of situations, such as the state of the health care service and the intricacies of the automobile industry, in consonance with the way octopuses clasp their prey rather tightly.

3.3 The figurative continuum

The incorporation of Ruiz de Mendoza's and colleagues patterns of interaction between metaphor and metonymy in a cline of increasing figurativeness will frame theoretically the analyses presented in Chapters 5, 6, 7, and 8. But before that, let's take a step back and address the notion of *figurative continuum* in more detail.

The concept originates in Gibbs' (1984) observation that there are some highly conventionalised metaphoric expressions (e.g. "kick the bucket" is referred to as "dying" in the dictionary) that are nowadays almost regarded as literal if compared to other figurative manifestations such as novel and poetic metaphor (e.g. "Her kiss is the sting of a bee").

What is more, a continuum with literal and figurative meanings at opposite ends also enables a number of intermediate cases of figurative language. A number of scholars have elaborated on the notion of the *figurative continuum* (Cruse 1986 as "sense spectrum", Radden 2000; Dirven 2002; Giora 2002; Katz and Ferreti 2001). Of special relevance to this book is the refinement proposed by Dirven (2002), according to whom the figurative continuum reflects the connection between different figurative word senses, ranging from different metonymic senses (linear, conjunctive, and inclusive) to metaphorical ones. For example, linear metonymies are closer to the literal sense than other metonymy types since they do not involve any shift of meaning, as when we use the name of a company or an institution to refer to the people working for it (e.g. "The CIA refused to give an official account of the situation"). Conjunctive metonymies, by contrast, give rise to paradigmatic choices in meaning. Think of the different senses of the word "cotton". Each sense of this word is the result of a metonymic extension that follows a specifiable path: 'cotton plant' > 'cotton wool' > 'cotton cloth'. The result is a paradigm of (conceptually related) meaning choices for the same form. Finally, inclusive metonymies also involve meaning shifts but they are not organised paradigmatically, which makes them closer to metaphor. A case in point is the metonymic chain 'mind' > 'brain(s)' > 'head', where each of the items is equivalent to the rest from the point of view of the denotation of its target meaning (i.e. a person's intelligence), as in "He has a good head/good brains/a brilliant mind". Any of these terms can be used metaphorically to the extent that their source and target meaning can be dissociated. For example, "He is the head" can function metonymically if by "head" we mean 'the person that does high-quality thinking', but it can be considered a metaphor if what we mean is that the person that we are talking about is the principal, for whatever reason, probably including his thinking skills, but also his charisma, leadership abilities, etc. Figure 11 schematises Dirven's proposal.

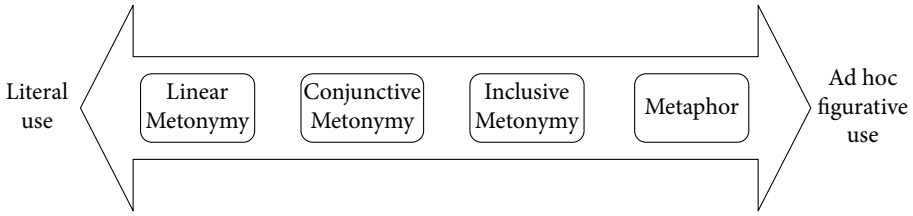

Figure 11. The figurative-literal continuum according to Dirven (2002)

As pointed out by Gibbs and Colston (2012: 26), the idea of the continuum is useful to understand the differences in the varying amounts of effort required to understand different types of figurative language. Highly conventionalised figurative expressions such as "He kicked the bucket" are comprehended much faster than novel instances of metaphor, and thus should be placed closer to the literal end. However, it is worth noting that the same authors (Gibbs and Colston 2012: 26) consider the proposal of a literal-figurative continuum to be problematic for two main reasons: first, because there is no actual way to define the extremes of the continuum (what would be the most figurative manifestation of meaning that should be placed on the far right extreme?); and second, because a single continuum is a too simplistic representation of the multiple dimensions across which the "literal" and "figurative" can take place. For example, Gibbs, Buchalter, Moise and Farrar (1993) showed that people have a varying perception of what is "literal", and that this results in different judgments of what constitutes as literal in discourse. Interestingly, they also found that some instances of figurative language were perceived as literal for the very same reason. These findings are relevant to prove that both "literal" and "figurative" are not stable, clear-cut categories in the speakers' minds. Additionally, there might be equally highly creative manifestations of meaning (such as irony and poetic metaphor) that demand different interpretation processes (e.g., unlike metaphor, irony requires the online construction of the literal scenario for the contrast to arise).

Nevertheless, this on-going debate does not affect the validity of the proposals put forward in this monograph since "literal" meaning considerations fall outside its scope. Likewise, I will only take into account metaphor and metonymy in relation to the idea of the continuum, and will leave other figurative mechanisms (such as those involved in irony, hyperbole, and strengthening, among others) out of the main scope of the book. As such, the version of the figurative continuum discussed in this book can be considered partial, as it only addresses metaphor-metonymy combinations and their inter-connections. Further research should look at other figurative operations and how are they interconnected in order to build complementary figurative continuums for the different types of irony, extreme case formulations, etc.

3.4 Expanding the figurative continuum to multimodal settings: What needs to be done

To date, the notion of the figurative continuum and its influences on multimodal figurative discourse construction and interpretation have not been theoretically or empirically addressed. Therefore, this book takes advantage of Dirven's (2002) theoretical contribution as a point of departure and puts forward a number of

developments in order to set up an inventory of multimodal simple and complex conceptual operations. However, since Ruiz de Mendoza, Pérez-Hernández, and their colleagues have not yet made any observation regarding the inherent conceptual complexity of the patterns of conceptual interaction presented in Section 3.2, there is no automatic way to integrate the study of metaphor-metonymy complexes into Dirven's version of the figurative continuum. Therefore, the first original contribution in this book is to place the metaphor-metonymy combinations found in verbal use along a cline of increasing figurative complexity.[3] Deciding on the degree of conceptual complexity of the metaphor-metonymy combinations found by Ruiz de Mendoza, Pérez-Hernández, and colleagues will contribute to build a finer-grained version of the figurative continuum that will subsequently be applied to the study of multimodal meaning construction in advertising.

In order to establish an order of increasing complexity, I have taken into account the following criteria in the order displayed below:

1. *Nature of the domain*
   For the purposes of this book, I only take into consideration *metonymic* and *metaphoric* conceptual domains. In consonance with Dirven (2002) and with additional work on the inferential load involved in metonymy (e.g. Klepousniotou and Baum 2007; Rundbland and Annaz 2010) I adhere to the widely accepted idea that domain internal mappings are qualitatively simpler than cross-domain correspondences.
2. *Type of interaction*
   In this book I will address *integration* and *chaining*. Integration consists in the assimilation of one conceptual operation into another, whereas in chaining, the target domain of one conceptual operation serves as source domain for another. In this view, chaining is qualitatively more complex than integration. Even though both types of interaction involve the principled combination of several conceptual operations, in integration there is no logical order for the mappings. This means that metonymic and metaphoric correspondences may take place in any order without hindering the final interpretation. In fact, a partial understanding of the conceptual complex based on integration would

3. I would like to emphasise that this cline of increasing figurative complexity is crucially different from the notion of *continuum* within the relevance-theoretic model. In this book, metaphor and metonymy are regarded as different operations that trigger different amounts of inferential activity. Depending on the volume of cognitive activity demanded by a given figurative operation (which is determined by the set of criteria outlined below), such operation will be regarded as more or less complex in the proposed cline. By no means should this imply that there is no clear-cut difference between metaphor and metonymy, as it is the case in the continuum view in Relevance Theory.

yield an incomplete yet still valid interpretation. By contrast, interactional patterns based on chaining involve (at least) two subsequent mappings that are realised one after another (the first being a pre-requisite for the second to take place, and so on). Hence, metonymic and metaphoric chains must be processed completely for the message to achieve its full inferential potential.

3. *Number of domains*
   When the two criteria mentioned above are not enough to differentiate between two metaphor-metonymy combinations, I take into account the number of domains involved, from less to more figuratively complex (in order to distinguish between metonymy and its complexes), and the number of separate and discrete domains (to distinguish between metaphoric complexes). In the latter case, the inclusion of metonymic developments adds to the degree of rendered complexity.

I have extracted in Table 2 the characteristics of the interactional patterns presented in Section 3.2 to elucidate their order along a cline of increasing figurativeness. Taking the criteria in the order stated above, I have first sorted the interactional patterns by the nature of the domain (domain internal being simpler than domain external); then I have moved on to the consideration of the type of integration (whereby integration is regarded as less complex than chaining); and finally I have taken into account the number of metaphoric and metonymic domains involved.

It is worth mentioning that other perspectives on conceptual complexity would hinge around the nature of the central cognitive operation (e.g. correlation metaphors are quicker to process than non-conventional resemblance metaphors or similes) and/or the combination of metaphor-metonymy with other operations (such as hyperbole, irony, etc.). Unfortunately, these alternative views fall out of the scope of this book. I do, however, briefly address the issue of primary and correlation metaphor in multimodal settings. I will also comment on alternative conceptual operations, such as multimodal hyperbole, paradox, and onomatopoeia (see this proposal in Chapter 5, Section 5.3). See Figure 12 for a schematic overview of the figurative continuum as conceived in this book. Note that I have removed the notion of "literal language" from the continuum, as I concur with Gibbs and Colston's (2012) stance that it is placed at a different level than figurative language.

Table 2. Summary of the characteristics of the patterns of interaction between metaphor and metonymy found in verbal use by Ruiz de Mendoza, Pérez-Hernández, and collaborators

Interactional pattern	Nature of the domain	Type of interaction	Number of operations	Figurative complexity
Metonymy	Domain internal	-	1 metonymy	-
Multiple source target metonymy (3.2.1)	Metonymy (with multiple metonymic subdomains)	Integration	1 metonymy	
Metonymic chain (3.2.2)	Metonymy + metonymy	Chaining	> 1 metonymy	
Metaphor	Cross	-	1 metaphor	
Metaphtonymy (3.2.3)	Metonymy + metaphor	Integration	1 metaphor + 1 metonymy	
Metaphoric amalgam (3.2.4)	Metaphor + metaphor	Integration	> 1 metaphor	
Metaphoric chain (3.2.5)	Metaphor + metaphor	Chaining	> 1 metaphor	+

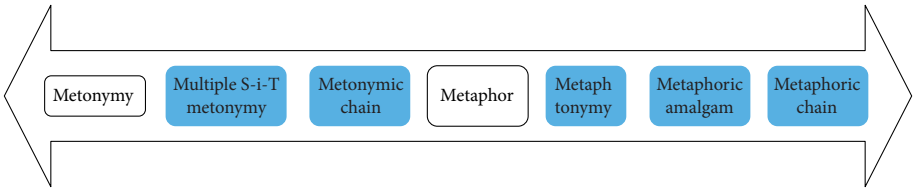

Figure 12. An expanded version of the figurative-literal continuum (in white: conceptual operations originally included in Dirven's (2002) work; in black: conceptual complexes studied by Ruiz de Mendoza and collaborators)

In order to give the reader a taste of the kind of analyses I will offer in Chapters 5 and 6, consider once again the 7UP example in the light of this proposed theoretical framework. Given that the can is represented in its full integrity, it is precisely the pictorial context that is responsible for cueing the absent metaphorical domain as LEMON (given that there are other lemons hanging from the same tree). The visual metaphor highlights the resemblance between LEMON and 7UP CAN and engages audiences in the understanding of the can as a real fruit.

However, the viewer is somehow aware that advertisers are not just selling 7UP cans. Although rendered on a lower level of salience, the text is key to unraveling the gist of the billboard message. The visual metaphorical target domain CAN (represented visually) further stands for the BEVERAGE that it contains, which in turn stands for the whole BRAND 7UP (referred to in the text) that produces the soft drink. The same metonymic reasoning holds for the case of the LEMON in the metaphorical source domain: the pictorial context helps viewers to generalise from LEMONS to FRUITS, which, alongside the pervasive green color in this advertisement (as seen in the can, lime fruits, leaves, and typeface), cues for the activation of the broader notion of NATURE.

Yet, the reader might wonder, how is 7UP being metaphorically understood in terms of nature? This is a very vague and challenging connection. Hence, the metonymic chain present in the target domain, which bridges the conceptual gap between the beverage and the brand, helps us to highlight "healthy" from the excessively broad domain NATURE. This constructed scenario serves as a viable metaphorical source domain to structure 7UP as a healthy beverage, and also as a caring and harmless brand. Indeed, structuring the content of a soft drink as natural juice further implies that the consumption of 7UP reports the same healthy benefits to our organisms as natural lemon juice does. See Figure 13 for a schematic overview of the cognitive processes involved.

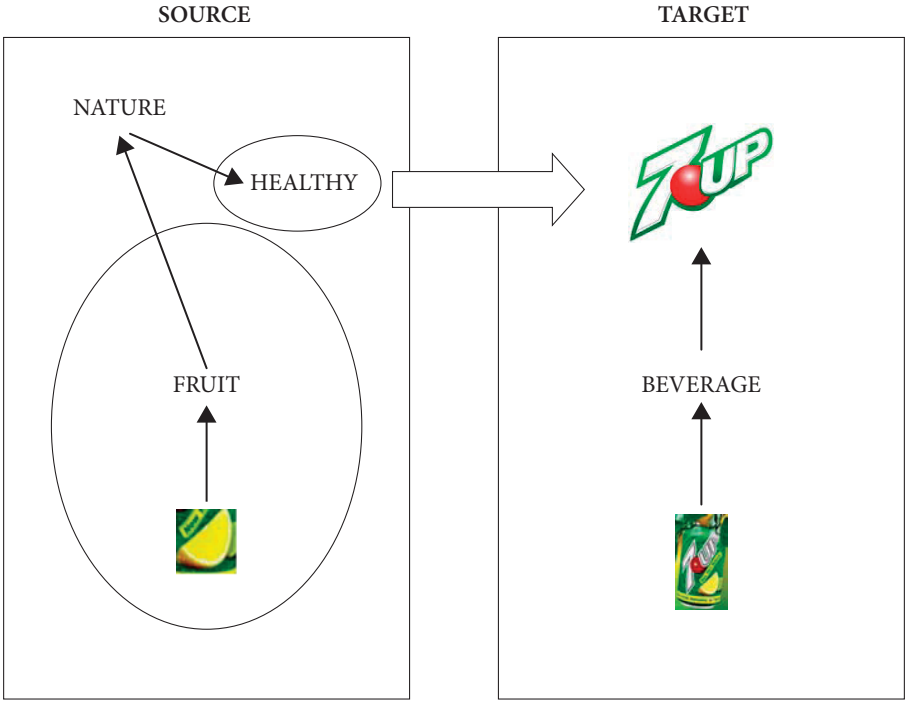

Figure 13. Graphic representation of multimodal metaphtonymy in Example 1

The application of the analytical tools from the domain of verbal metaphor and metonymy discussed in Chapter 3 to the study of advertising presents two important developments for the theorisation of multimodal meaning construction. First, the following analysis yields variants of the conceptual operations already surveyed in the linguistic domain that arise from the application of these findings to multimodal environments. For example, I have just shown that metaphtonymies can accommodate simultaneous metonymic chains in both the metaphorical source and target domain. Such a pattern of interaction is yet to be explored in verbal contexts. These new variants, alongside the already identified metaphor-metonymy combinations in verbal and non-verbal contexts, will result in the first exhaustive inventory of conceptual complexes in multimodal use. I will integrate such variants into the figurative continuum to build an even finer-grained scale of increasing figurativeness.

Second, it must be taken into account that advertising is a multimodal but also a *multilayered* medium. That means that meaning can be displayed in multiple ways, such as words, typography, colour, design, disposition of the elements, frame, etc. Metaphor and metonymy can work together at the same level (such as in the main picture in the 7UP example), but they can also operate individually at different levels (for example, in the colour chosen for the typography and in the

words accompanying the main picture of the advertisement). Whereas in verbal discourse metaphor and metonymy can only manifest through the use of words, in advertising they can operate at different levels, thus facilitating the accumulation of conceptual operations. Take once again the 7UP example. There is a metonymic complex running in the conceptualisation of the green colour at the background as the property "healthy", but also there is an independent metaphor structuring the can as a lemon, which characterises the beverage as refreshing and natural as lemons are.

This phenomenon is intrinsic to multimodal environments, since verbal discourse only counts on one mode to convey meaning. In other words, it would be worth exploring whether the concurrence of multiple individual conceptual operations has the same impact on the consumer (in terms of identification time, perceived appeal, perceived effectiveness, etc.) as complex conceptual operations based on integration or chaining (i.e., whether having a metaphor and a metonymy in the case of 7UP leads to a substantial difference in processing than a metaphtonymy). One might venture the opinion that, for the case of the joint working of individual conceptual operations, the consumer could be satisfied with the successful interpretation of some of the present operations, even though that would correspond to a partial understanding of the advertisement. By contrast, conceptual complexes would allegedly trigger richer interpretations, given that they necessarily require the processing of all the operations involved. However, these hypotheses must be put to an empirical test, and examples of how this may be achieved will be provided in Chapter 8.

CHAPTER 4

Facing methodological challenges

The only golden rule is that there is no golden rule.
(Bernard Shaw)

4.1 Introduction

In this chapter I present the methodological decisions that lie behind the analyses and findings from Chapter 5 to Chapter 8 of this book. This comes as a major necessity in the field of Cognitive Linguistics, which often relies exclusively on introspection and intuition. Indeed, as Gibbs (2007: 5) emphasises, "cognitive psychologists, and others, criticise cognitive linguistic work because it is so heavily based on individual analysts' intuitions and thus does not constitute the kind of objective, replicable data preferred by many scholars in the cognitive and natural sciences". However, it has to be acknowledged that psychologists have found a huge source of testable hypotheses precisely in introspective analyses (Gibbs 2007: 3). Cognitive-linguistic hypotheses that have been validated by scientists have been used to frame additional hypotheses, whereas misguided intuitions have been left out from valid analyses. Therefore, we can reasonably say that the community of researchers interested in the mind has greatly benefited from both intuition and empirical research. Lively feedback between introspection-based and empirically-driven analyses propels Cognitive Linguistics forward.

Unfortunately, there is to date no reliable procedure to detect and analyse multimodal metaphors and other kinds of figurative language. The reason for this methodological gap might be that conceptual mappings are not linked to particular verbal or multimodal forms. As Stefanowitsch (2006: 2) has pointed out for metaphors in verbal discourse, this fact that poses a problem for the empirical analysis of authentic data. Several scholars (see Gibbs 2007, 2011; Haser 2005; Ritchie 2003, 2004; Vervaeke and Kennedy 1996) to voice their concerns with regards to the necessity of establishing set of specific methodological principles for conducting metaphor research. Debates about Conceptual Metaphor Theory often raise these and similar questions (Steen 2007), with some scholars suggesting that these issues make this theory potentially difficult, if not impossible, to falsify (Murphy 1996; Vervaeke and Kennedy 1996). In particular, one of the most enduring objections

raised against Conceptual Metaphor Theory is the alleged circularity of the theory, i.e., that the theory cannot be tested because the conclusion is the same or equivalent to part of the premises (see Haser 2005; Kertesz and Rakosi 2009; for criticism on Haser 2005; see Ruiz de Mendoza and Pérez-Hernández 2011).

There are two ways to overcome the methodological shortcomings of multimodal metaphor research. The first one is to adapt the frameworks and methodologies that have been proven reliable for the identification of metaphor in text for the study of multimodal discourse. The most recent example is Šorm and Steen's (forthcoming) development of a method for visual metaphor identification, VISMIP, which heavily borrows insights from Steen et al.'s (2010) method for verbal metaphor identification (MIPVU). The second way of overcoming methodological shortcomings is to formulate new analytical frameworks specific for the study of non-verbal metaphor (see Forceville 1996; Forceville and Uriós-Aparisi 2009; Hidalgo and Kraljevic 2013) by basically relying on their professional expertise and intuitions. Thus, there are methods in multimodal metaphor analysis that originate from the study of linguistic metaphors, and there are other methods that are more specifically developed for the exploration of non-verbal settings.

Both approaches to the operationalisation of the study of metaphor in non-verbal contexts are still incipient, and in need of replicable protocols to validate the generalisation of their findings (Forceville 2009a: 22). My goal in this chapter is to explore a number of issues that need to be considered in conducting research on multimodal metaphor, such as (1) the establishment of a protocol for the identification and labelling of multimodal metaphor and multimodal metonymy, (2) the compilation of a representative and diverse corpus of real examples, (3) the issue of inter-rater reliability, and (4) the use of specific software to handle large amounts of non-verbal data. Although verbal and multimodal metaphor share enough similarities to justify an analysis of multimodal metaphor using some insights from the study of verbal metaphor, I concur with Forceville (2009a) that advertising (as well as other multimodal environments) have different meaning-making possibilities that require a specific set of analytical and methodological tools.

This chapter unfolds in three sections. I first introduce the *equipollence hypothesis* in Section 4.2. This is a methodological assumption that encourages the analyst to look for equivalent structures that have been proven valid for the study of one domain of enquiry (in this case, metaphor in verbal environments) in other domains (such as non-verbal settings). Adopting this a driving principle helps to endorse my approach to the identification of multimodal metaphor and metonymy with more systematicity, because it embeds this research on the existing literature on the topic. However, the ample possibilities of the visual mode to convey creative messages demand the development of new analytical tools to deal adequately with the specificities of advertising as a genre. The analyst must be ready to adapt

existing methods and also to develop new ones when necessary. I move to more specific methodological considerations in Section 4.3. I begin by describing how I compiled the corpus of 210 advertisements from advertising databases, and the steps followed to make the sampling diverse and representative. I then deal with the identification of metaphor and metonymy in the corpus. I compare and contrast Šorm and Steen's (fc.) and Forceville's (2009a) ways to approach the issue, and will formulate my own contribution by formulating a protocol for the identification and analysis of metaphor-metonymy *combinations* in multimodal use. Finally, I describe the different layers of annotation of the corpus. This manual annotation system, specifically devised for the purposes of this monograph, proved useful to establish quantitative correlations between the degree of figurative complexity and other advertising variables, such as product type, (explicit or implicit) representation of the product, coincidence of the product with the metaphorical target domain, and modes of representation (verbal, visual, and verbopictorial).

4.2 The equipollence hypothesis

As has been argued elsewhere, developing a theory of multimodal metaphor necessarily requires the construction of an appropriate methodology suited to the particular object of study. Schalley (2012), who presents a compilation of works that deal with the issue of practice vs. theory in linguistic studies, holds that "[a]n interplay of different methodologies, coupled with a sound theoretical backing for the creation of good elicitation tasks, will thus create the most comprehensive and convincing evidence" (Schalley 2012: 23). In this respect, and in absence of any widely accepted methodology in multimodal metaphor research, researchers should look for analytical tools in other domains of enquiry, but at the same time, they should be ready to develop their own mechanisms to account satisfactorily for the specificities of multimodality.

A core assumption of Conceptual Metaphor Theory is the metaphor is not a rhetoric device but rather a mechanism of thought, and therefore, it should be manifested in language but also in other modes. Indeed, part of the structure of verbal metaphor also characterizes multimodal metaphor. Just to mention an easy example, the source-domain structure of verbal metaphor is equivalent of the structure of visual metaphor, which also consists in the cross-domain mapping of features from a source to a target domain. What is more, the very fact that people use the term "multimodal metaphor" and "multimodal metonymy" to speak about cross-domain or internal-domain correspondences in images, respectively, comes from a description of metaphor in verbal language.

This has been labelled the *equipollence hypothesis* (Ruiz de Mendoza and Mairal 2008: 154), a methodological assumption according to which the analyst should explore whether linguistic processes that have been attested in one domain of linguistic enquiry may also be (at least partially) active in other domains. In addition to this, the equipollence hypotheses could also apply to the selection of the research methods to explore such processes. If verbal and non-verbal metaphor share a similar source-domain structure, and a process in terms of cross-domain correspondence, it is thus not unreasonable to think that the research methods should be similar, regardless if it is manifested in words or in images. In fact, there is already a substantial body of evidence based on the analysis of multimodal data that supports the importance of metaphor and metonymy (and their patterns of interaction) in the visual realm (Forceville 1996, 2009a, 2009b; Hidalgo and Kraljevic 2011; Pérez-Sobrino 2013a, 2016a, b; Uriós-Aparisi 2009).

However, the analyst should be aware at the same time that the specificities of multimodal settings, especially those featuring a great deal of images (as it is the case of advertising), may require a set of analytical tools specifically devised for that purpose. For example, as will be discussed later on in Section 4.3.2, the identification of multimodal manifestations related to metaphor and metonymy must be carried out in a different way than for verbal metaphor. The only available protocol for the identification of metaphors in text is MIPVU (Steen, Dorst, Herrmann, Kaal, Krennmayr, Pasma 2010), and looks at the differences between basic and contextual meaning (i.e., between how a word is described in the first entry of the dictionary and how it is used in a particular context). If they do not coincide, it is established that the word has the potential to convey a metaphor. In turn, the absence of such dictionaries for images, or for images in context, makes it impossible to adapt this method for non-verbal metaphor research. The analyst needs to develop and test the validity of new tools to advance in the research of multimodal metaphor, as well as in other figures of thought in multimodal use. Figure 14 graphically represents how this hypothesis works.

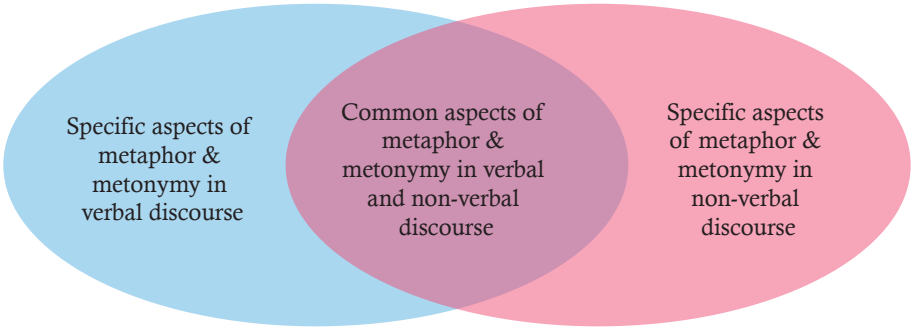

Figure 14. The equipollence hypothesis

Interestingly, the greater flexibility of multimodal settings (especially those featuring a great deal of images) to convey creative messages enhances the possibilities of combination between metaphor and metonymy in ways that have not yet been attested in verbal discourse. These novel combinations between metaphor and metonymy arisen in multimodal discourse will be discussed in more detail in Chapter 5 and 6. In this respect, the equipollence hypothesis is not a one-way methodological principal. Following the same rationale, it could be that the equipollence hypothesis may work also in a reverse way, i.e., from non-verbal to verbal communication, to offer new hypotheses and avenues of research for analysts interested in verbal discourse.

4.3 Aspects of operationalization

Operationalisation consists of clarifying of the extent of the subject of study. A detailed formulation of these aspects of operationalisation will facilitate a shared understanding with the reader with respect to what multimodal metaphor and metonymy entails for a particular research study. As has been already noted, there is to date no large-scale methodology to investigate the presence of these figurative mechanisms in advertising or to make claims about their effect on advertising comprehension. Making explicit how metaphor and metonymy are identified and characterised will help to strengthen the qualitative analyses offered in Chapter 5 and 6, and will also contribute to validate the results of the two follow-up studies offered in Chapters 7 and 8, that also hinge around this annotation protocol.

4.3.1 Selection of the data

Much of the debate on methodological issues in the Humanities has revolved around the topic of what is the most appropriate methodology for the elicitation of data in linguistic research, with special emphasis on the adequacy of introspective data (examples that the linguist creates relying on his/her own intuition) as opposed to corpus data (examples taken from compilations of utterances produced by speakers in natural contexts). In this work I adopt a corpus-based approach with data sampled from actual communicative use.

A corpus of real advertisements

I compiled a corpus of 210 printed advertisements retrieved from the major advertising databases: www.coloribus.com, www.advertolog.com, www.adsoftheworld.

com, www.vismet.org,[1] and simple searches in Google Images. The selected advertisements belong to real advertising campaigns that have been released over the past twenty years around the world. Compared to simple searches in Google, an advantage of advertising databases is that they additionally provide the analyst with all kinds of information about the advertisers and the campaign. This information may help to elucidate context-internal and context-external factors of the advertisement under scrutiny that might prove useful for identifying and characterising the metaphorical and metonymical domains. In order to minimise the analyst's weight in the retrieval of 210 advertisements from the databases mentioned above, we established the following protocol.

A diverse corpus of advertisements

In order to ensure the diversity of the corpus, I followed a mainstream classification of products in marketing to build the corpus of study. *Product type* is an influential factor in determining the effectiveness of metaphor advertising (Ang and Lim 2006; Chang and Yen 2013) and, by extension, of the rest metaphor-metonymy here studied. Chang and Yen (2013: 81) divide products into hedonic and utilitarian. This distinction relies on the type of motivation driving the purchase of the product (emotional vs. rational). Hedonic products are pleasure-oriented and the consumption driven by the desire for sensory experience, fantasy, and fun (e.g. chocolate), whereas utilitarian products are more functional and offer more down-to-earth rewards (e.g. shampoo, Chang and Yen 2013: 81).

However, it is not always possible to draw a clear line between these two categories of products. Utilitarian products can be sold as hedonic to make them more attractive to consumers (in fact, shampoo is not advertised anymore as dandruff remover, for example, but rather as a treat for the senses), whereas some hedonic products might have utilitarian uses (such as red wine and black chocolate, which is small amounts might help to reduce high blood pressure). Additionally, the distinction between these two categories might also depend on the location and professional status of the customer (e.g. a hi-fi camera might be a hedonic product for someone living in a developing country, but it would be considered utilitarian for a Dutch journalist). Finally, this distinction does not address in detail the differences between *physical goods* (i.e. a product whose purchase results in the ownership of something) and *services* (i.e. activities or benefits that are offered for sale), a core

1. I specifically consulted the section of advertising "in each of these databases". We kept the annotation provided by the authors when possible; however, we refined their coding whenever we detected alternative operations in the form of conceptual complexes. That is to say, if we considered that there was a metonymy at play with the metaphor already annotated by the Vismet team, we coded it as metaphtonymy for this book.

aspect about which significant differences in terms of conceptual complexity (as services have a qualitatively more abstract nature) can be expected.

I thus decided to rely on a different product classification that draws on Kotler and Armstrong's (1997) distinction of products on the basis of durability, tangibility and use (consumer or industrial). With this taxonomy in mind, I expected to cover the vast majority of products in the market and, in consequence, to encounter a greater range of advertising creativity possibilities for the analysis. Within the classification based on tangibility, marketing experts have traditionally subdivided products into *physical goods* and *services*. Regarding the former, Copeland (1924 [1978]: 129) additionally divided physical goods into three subsequent categories based on "consumers' buying habits" (in terms of invested time and cognitive effort in the purchasing decision) and "patronage motives" (i.e. the marketing strategy steering the promotion of a product). This classification shifts the focus from the characteristics of the product to the consumer's active role in the market, and it has an important implication on marketing decisions for both the producer and the consumers. Indeed, the understanding of the patterns ruling buying behaviour for each of these categories will shown which marketing strategy options are the most appropriate for higher returns.

Copeland's (1924) distinction involves three types of physical products:

a. *Convenience goods*: These products are generally bought with little planning and low shopping effort. They are low priced and have widespread distribution. The type of marketing that is used to sell these items is usually mass advertising and sales promotions by the producer. The most typical examples of convenience products are bread, cereal, and magazines.
b. *Shopping goods*: These items are bought less frequently and involve more planning and comparison. They are higher in price than convenience products and are distributed in fewer outlets. Examples of shopping products include appliances, furniture, and clothing.
c. *Specialty products*: These products are bought with strong brand preference and low price sensitivity. The purchase is much more brand-oriented these products are generally high priced and distribution is not widespread. Both the producer and the retailer carefully target the promotion of these products to a specific audience. In turn, buyers of these products usually spend more time trying to find the specific commodity than comparing the cost of the product with competing brands. The specialty products *par excellence* are diamonds and luxury cars.

A fourth category can be added, as described by Perreault and McCarthy (2002):

d. *Unsought goods*. This category encompass products that are not immediately necessary or are so new that consumers are not yet aware of their existence. Owing to the lack of an immediate or the specific necessity due to its novelty, consumers may defer the purchase of these goods. Hence, unsought goods require highly appealing and shocking advertising techniques to attract attention. Typical examples of products that are not immediately necessary are encyclopaedias and fire extinguishers; in turn, extremely novel products include the newest technological gadgets, such as the latest mobile phones.

Classifying services (as deeds, acts, or performances) requires addressing two central variables: the nature of the service act (tangible or intangible) and at whom or what is the activity directed. According to Bhattacharjee (2006: 83), services can be further broken down into two broad subcategories: *tangible* and *intangible* actions.

e. If the nature of the service act are *tangible actions*, we may find services directly targeting people (e.g. transportation of passengers, health care, lodging, beauty salons, physical therapy, fitness centres, restaurants, haircutting, funeral services) or their material possessions (e.g. freight transportation, repair and maintenance, warehousing/storage, janitorial services, retail distribution, laundry and dry cleaning, refuelling, landscaping/lawn care, disposal/recycling).
f. Likewise, for *intangible actions* we might find services focusing on people's minds (e.g. advertising/PR, arts and entertainment, broadcasting/cable, management consulting, education, information services, concerts, psychotherapy, religion, voice telephone) or services directed at intangible assets (e.g. accounting, banking, data processing, data transmission, insurance, legal services, programming, research, securities investment, software consulting).
g. *Charities*, *non-government organisations (NGOs)*, and *governments:* Public organisations and institutions also need to develop effective advertising campaigns and they are increasingly likely to make use of advertising agencies. Advertising in these public sectors shares similarities with regular practices insofar as it needs to be eye-catching, emotionally appealing and persuasive. I decided to set up a separate category (rather than including them among the rest of intangible service directed at people) because they are not driven by a ludicrous motivation, a fact that makes them slightly different from the rest of companies that provide intangible services.

A representative corpus of advertisements

In the spirit of minimising the impact of my first selection of advertisements and in order to guarantee the representativity of the corpus, I subsequently selected each third advertisement of those initially found per product type. By following

this criterion, I made sure I would not be able to influence the suitability of the case studies to account for the research hypotheses in this book. Since my goal was to collect at least 30 advertisements per category, I had to gather 90 advertisements and then select the third, the sixth, the ninth, and so on in order to ensure that 30 advertisements per each of the seven product categories escaped my (as author) potential selection bias. Table 3 summarises the distribution of the selected 210 advertisements per type of product (30 advertisements per category).

Table 3. Distribution of advertisements extracted per product category

				N
PHYSICAL GOODS				
a. Convenience	b. Shopping	c. Specialty	d. Unsought	
30	30	30	30	120
SERVICES				
e. Tangible		f. Intangible		
30		30		60
g. NGO, charities, governmental				
30				30
TOTAL (a+b+c+d+e+f+g)				**210**

4.3.2 Identification of multimodal manifestations related to metaphor and metonymy

At first glance, extracting metaphor and/or metonymy-related words or images is almost impossible simply because there is not a fixed and steady match between linguistic/multimodal forms and the conceptual mappings. This makes the automatic retrieval of data impossible (unlike for other corpus searches), and posits serious challenges for analysts to identify them manually.

Steen, Dorst, Herrmann, Kaal, Krennmayr, and Pasma's MIPVU (*Metaphor Identification Procedure Vrije Universiteit Amsterdam*, 2010) is, to date, the only available protocol for metaphor identification in broad-scale verbal corpora. The method comprises a set of instructions to identify metaphor-related words in verbal discourse. The protocol of the procedure demands that every word in the corpus is looked up in a dictionary in order to find out whether there is a more basic, concrete and human-oriented meaning on which the contextually instantiated meaning might be based (this usually coincides with the first entry in the dictionary). If a basic meaning can be identified for a particular lexical unit, and if the contextual and

the basic meanings are sufficiently distinct and related by some form of similarity, the unit is marked as being related to metaphor[2] (for further information on the procedure see Steen, Dorst, Herrmann, Kaal, Krennmayr, and Pasma 2010: 25ff.).

The emphasis on the juxtaposition of contextual vs. basic meaning can be carried over to multimodal settings, yet not without difficulties. To begin with, the visual dictionaries on the market present decontextualised visual elements (http://www.visualdictionaryonline.com/), thereby making it impossible to discern whether a representation of a multimodal element in certain scenario is literal or figurative. Šorm and Steen (forthcoming) have developed an adaptation of MIPVU for non-verbal settings that helps to identify metaphor on the basis of the visual incongruity (that is, the tension between contextual vs. basic meaning). In their account, the analyst must first describe the picture in words, and then decide whether the incongruity (if existent) between what is being represented and his/her description of the image can be explained in terms of a metaphor. If there is a metaphor, a subsequent step involves deciding whether it requires a novel or conventional kind of mapping. An aspect of the method that is not relevant for the present discussion is deciding whether a metaphor is used *deliberately* or not for the specific case of advertising. In my view, advertising is always intentional in involves deliberate communication because there is always someone that wants to sell something to someone else. The shared awareness of this genre specificity between advertisers and consumers makes it the notion of "deliberateness" redundant for the present discussion. The interested reader will find a full overview of this protocol in ww.vismet.org.

Forceville (2009a: 31–32) has approached the issue of the identification of multimodal metaphor somehow differently. He singles out three multimodal cues to detect metaphor-based pictures: perceptual resemblance, filling a schematic slot unexpectedly, and simultaneous cueing. This system is reminiscent of the categories established in Phillips and McQuarrie (2003), and also pervades the subsequent annotation scheme formulated for the project Vismet.[3]

According to Forceville's distinction (2009a: 31), *perceptual resemblance* refers to the similarity in colour, form, placements, etc. between an element oddly placed in a scenario and the element being substituted. For example, in an Old Spice

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2. Metaphor-related is a MIPVU technical term which subsumes cases of direct metaphor (for example simile), indirect metaphor, metaphor signals, metonymies that can be understood as personifications (for example "The essay says that …"), implicit metaphor where a pronoun stands for a metaphorically used lexical item, and unclear cases in which the analysts could not agree (Steen et al. 2010: 25ff.)

3. VisMet Baby (www.vismet.org) is an online resource of annotated images for visual metaphor in different genres (advertising, political cartoons, and artistic illustrations).

advertisement for soap,[4] a man receives a basketball that, when cut in two, turns out to be a watermelon inside. Such connection is possible because both elements share a spherical shape. *Filling a schematic slot unexpectedly* involves placing a thing in a certain context that may strongly, even inescapably, evoke a different kind of thing. That is the case of the 7UP can from the first example discussed in this book; the fact that it hangs from a tree, next to other lemons, makes the viewer think it is meant to be understood as a lemon. Finally, the *simultaneous cueing* of two elements signalled at the same time in different modes highlights the necessity to make a connection between the two of them. Forceville (2009a: 31) illustrates this type with a picture of a kiss that is accompanied by the sound of a car crash, thus conveying a dreary domestic routine. Forceville also acknowledges that these two last categories might sometimes co-occur, as two disparate things can be linked because of an unexpected filling of a slot, e.g., if the photography of the kiss is accompanied by the word "imprisonment".

Additionally, Forceville (1996: 65) discusses the role of various contextual factors that are crucial for metaphor identification in advertising, such as the advertisers' unambiguous intention of selling something to their targeted audiences. This defining feature of the genre not only helps to identify multimodal metaphorical manifestations, but also to characterise the source domain (usually represented in the image) and target domain (usually the product). All in all, it seems clear that the role of the context (whether visual or textual) is important, if not crucial, in determining the existence of images used metaphorically. For example, knowing about which company posted a particular advertisement might influence our understanding of whether there is or is not a multimodal metaphor present, and what the type interpretation expected from the target audience.

Both of the protocols discussed share two key aspects in the identification of metaphor in multimodal discourse: the role of the pictorial context, and the importance of the genre. Regarding the role of the context, it should be noted that the presence of a multimodal metaphor is usually signalled by the existence of a mismatch between the main image and the surrounding context (with the exception of simultaneous cueing, in which both elements are already signalled in a salient manner). Indeed, we might recognise a *metaphor-related* picture just because it is either oddly placed in a certain scenario, or because it is located in an environment to which it does not belong (Forceville's *filling of an unexpected slot*, 2009a: 31). Our encyclopaedic knowledge alerts us when there is a visual incongruity in an advertisement that requires some sort of conceptual adjustment (in terms of metaphorical or metonymic mappings) to be resolved. I would like thus to argue that the

4. Retrieved on 23rd November 2016: https://www.youtube.com/watch?v=OvQJlYpAWWo

(absence) of internal consistency between the represented element and the context is what makes it possible to detect figurativeness in multimodal settings, much in tune with MIPVU for verbal discourse.

Additionally, the specifics of advertising as a genre may ease the characterisation of the metaphorical domains as source and target. As advanced at the beginning of this book, it is generally acknowledged that the product tends to coincide with the metaphorical target domain onto which attributes borrowed from a desirable source domain are mapped (an exception is NGO advertising and other socially-oriented advertising practices like *shockvertising*, which will be discussed in detail in Chapters 5 and 6). The reader should note at this point that it is the *external consistency* (i.e. coincidence of the identity and intention of the advertisers and the beliefs of the consumers) what makes it possible to assign the role of source or target to the metaphorical domains identified in the previous stage.

It has to be noted that the approaches surveyed above focus exclusively on the identification of metaphor, but they do not deal with other figurative operations, such as metonymy. In this book, I present an expanded method that encompasses additional figurative operations. I have devised a method for conceptual metaphor/metonymy identification (inspired by Babarczy et al. 2010: 32 and Stefanowitsch 2006: 2), which involves the following four steps.

1. *Identification of possible target domains*
   This protocol is grounded on two initial hypotheses: (1) the product is very likely to be represented, as advertisers need to ensure that their targeted audiences will remember it; and (2) the product usually coincides with the target domain of the main figurative operation at work, because it is usually the product the recipient of positive features (rather than the donor). These positive features are usually borrowed from a well-connoted domain, the source domain, and associated to the product via metaphorical or metonymic mapping. Therefore, an alternative question to formulate this step could be: *What (sort of product or service) is being advertised?*

It should be noted that advertising conventions make multimodal metaphors behave a bit different from verbal metaphors. In advertising, the target domain is usually the element that is explicitly represented (as advertisers must ensure that audiences will remember their products). In turn, metaphors in verbal discourse usually requires the explicit mention of the source domain in the sentence (e.g. when we say "We are at a crossroads" in reference to the difficulties experienced in a romantic relationship, it is the reference to the source domain JOURNEY what is brought up *explicitly* in the verbal sentence, whereas the reference to LOVE must be retrieved from the surrounding context).

Given these genre conventions, it is safer to start examining the promoted product or service and then to confirm or reject whether it can actually act as target domain of the main figurative operation. In the example discussed in Chapter 2, what we know just by looking at the advert is that it is saying *something* about a carbonated soft drink, rather than about lemons. This appreciation qualifies the soft drink as a potential good candidate to be the target domain of the main figurative operation at work.

Before moving on to the second step, the identification of the source domain, there are two caveats that should be noted. First, note here that it is possible that the product might not always be represented entirely. For example, the shape of a bottle of Coca-Cola bottle is well known enough to grant access via metonymy to the soft drink without explicitly representing the logo or the brand name. And second, there might be advertisements that are not based on the two working premises behind this protocol, that is, advertisers that deliberately avoid the explicit representation of the product. That is the case, for example, of *taboo* products: condoms, lubricants, and laxatives, and products of the like. Advertisers are more likely to avoid the explicit representation of these products and choose in turn a scenario that positively evaluates the metaphorical source domain and hence indirectly the product target domain (see Example 11 in Chapter 6 for a more detailed discussion). In order to account for these cases, the researcher must also be ready to analyse alternative target domains if he or she feels that the first step of this protocol is not providing a feasible target domain candidate.

2. *Identification of possible source domains*
   The second step involves shifting the focus to the rest of the image and look for any visual and verbal elements that convey a positive image of the product (i.e. the element that has been identified as target domain in the previous step). In answering the question *What is being said about the product?*, This step demands checking every single element and see if they improve the consumer perception of the product in any way (with the exception of NGO advertising whose aim is to denounce an undesirable or unfair situation). In our particular soft drink example, the researcher would include lemons, freshness, and nature, among the positive features that act as source domain.

3. *Metaphoric or metonymic relationship?*
   The third step consists in describing figurative operations as cases of metaphor or metonymy. In other words, this step involves analysing the question *How does the product connect with what is being said about it?* In this step the analyst should detect what mappings are projected from source to target, and if the belong to the same conceptual entity as the target domain (internal mapping),

or connects two different entities (external mapping). For the sake of practicality, if the mapping can be phrased as A FOR B, as it is the case of adverts that highlight the properties of the product, this is annotated as metonymy; if it can be labelled as A IS (LIKE) B, as it is the case when the advert shows what the product looks like, it is annotated for metaphor. Once again, in application to the soft drink example, this allows to characterise the connection between green and nature as metonymy, and the connection between the soft drink and the lemon as metaphoric.

4. *Patterns of interaction*
   In case that more than one metaphor and/or metonymy were identified in the previous step, the analyst should look now at the patterns of interaction among them (if there are any). In doing so, the analyst needs to take a step back and establish (a) what the advertisement shows, (b) what the advertisement conveys, and (c) how these two scenarios can be related to each other. If several elements could relate to the same broader item, I annotated it as a *(multiple-source)-in target metonymy*. If an element was related to another and then to another, I annotated is as a *chain of metonymies*. For instance, as discussed at the end of Chapter 3, a chain of metonymies accounts for the connection between the visual representation of the can, the beverage as a product, and the brand. If a RELATED TO relationship supported an IS LIKE relationship, then we annotated it for *metaphtonymy*. This metaphor-metonymy combination also explains the interaction between the metaphor SOFT DRINK IS LEMON and the metonymy FRUIT (LEMON) FOR NATURE FOR HEALTHY. There are additional interactional patterns that involve the interaction of more tan one metaphor, that are covered under umbrella term *metaphor complex*. If a metaphor was supported by another metaphor, it was annotated as a *metaphoric amalgam*; if, in turn, a metaphorical domain led to another metaphorical domain, it was coded as *metaphoric chain*. I will survey each of these interactional patterns in much greater detail in Chapters 5 and 6.

Since real advertisements usually contain multiple metaphor and metonymies, two more final caveats apply to keep the identification protocol efficient and simple. First, I only took into account the figurative operations that had to do with the promotion of the product advertised, and disregarded secondary figurative configurations that did not convey directly anything related to it. Second, in case of multiple compatible explanations, I coded the one that exclusively referred to the product and, in case of doubt, the one that is more salient in the verbal and/or visual part.

4.3.3 Inter-rater reliability

Next, the researcher annotates the corpus of advertisements. It should be noted that the limitless creative possibilities of advertising make it impossible to predict in a systematic manner how metaphors are going to be manifested visually. Therefore, it comes as no surprise that the identification of visual metaphors heavily relies on introspection and may be subject to the analyst's bias.[5]

In order to reduce the analyst's partiality, I have contrasted a representative sample of my own annotations (around 30% of the adverts comprising the whole corpus) as author of this book with other two experienced researchers. The procedure spelled out in the previous section was applied on a consensus annotation, and resolved conflicting cases until we reached 100% agreement. While far from being perfect, this method ultimately incorporates the insights of the independent researchers, thus producing the most complete analyses we were able to produce. Those examples for which we reached similar analyses have been included in the corpus. In turn, we took away cases that presented some conflict and led to different conclusions, because we understood that they could be problematic in subsequent replications of this research. A sample of analyses that resulted from our discussions is presented in Chapters 5 and 6.

Given that we coded the advertisements for metaphor and metonymy together, we were not able to produce any reliability index for our annotation (in line with the work undertaken by Steen et al. 2010). However, this need not be regarded as a limitation. As I have already discussed, the nature of the research topic demands higher levels of introspection than the study of verbal metaphor. Additionally, we were not coding advertisements for metaphorically-related images (as it is the case of MIPVU-based studies), but for metaphor, metonymy, or a combination of both. Thus, the complexity of the corpus went far beyond than the sole presence or absence of metaphorically-related pictures.

The protocol presented here was tested for inter-rater reliability in a different study (Pérez-Sobrino and Littlemore 2017). In this study, rather than seeking a consensus annotation, two independent researchers annotated a subset of 42 advertisements for metaphor, metonymy and figurative complexity. According to the

5. All in all, even though MIPVU itself was created as an analytical tool to achieve reliability in the identification of metaphor-related words, it must be noted that it will never be completely free of intuition. First of all, the analyst must stick to the different entries in the dictionary, which are not always organised from embodied to more abstract meanings, but rather on an etymological or frequency basis. And although dictionaries are constructed using corpora, the precise sense definitions are also based in part on intuitions, namely the lexicographers' intuitions. The same remarks hold true for deciding on relatedness by similarity, which is also subjective to some extent.

standards of internal consistency in studies of this kind (De Vellis 2002), we found an acceptable degree of agreement for the identification of metaphor (Cronbach's Alpha 0.716, $p < .001$). It is quite remarkable that the Pragglejaz Group obtained a similar for verbal metaphors (0.7 for the news texts), in spite of the fact that there is less subjectivity at play in when metaphor is manifested in words. In turn, the degree of inter-rater agreement for the annotation of metonymy was lower (Cronbach's Alpha 0.496) and not significant ($p < .428$). Indeed, metonymy is sometimes difficult to detect as it relates two inter-connected elements that belong to the same domain, which sometimes can be interpreted as literal (Littlemore 2015: 126–127). Whereas an acceptable degree of inter-rater agreement has been reported in verbal metonymy identification (Markert and Nissim 2002), it still remains a challenge for non-verbal metonymy, and metonymy-based figurative operations (such as metonymic chains and metaphtonymy). In Pérez-Sobrino and Littlemore (2017), cases of disagreement for the identification of metonymy were resolved through discussion, much in line with the decision adopted for this book.

The issue of inter-rater reliability in the identification of multimodal metaphor and metonymy opens up a vast array of research possibilities. Future works should take inter-rater agreement as a research subject in its own right, rather than just a means to validate analyses. Indeed, one might wonder why multimodal metonymy attracts lower inter-rate reliability scores than metaphor, and whether there are significant differences between the scores provided for the different items within a single study that affects the result, or whether it is a uniform tendency to provide so much disagreement for metonymy.[6] A more serious consideration of inter-rater reliability will improve and refine the existent and future identification protocols, although the complexity of naturally occurring multimodal will make this a challenging research effort.

4.3.4 Annotation scheme

I manually annotated the corpus for five categories: (1) *product type*, subdivided into goods (convenience, shopping, specialty, unsought), services (tangible, intangible), and NGO; (2) *conceptual operation type*, divided into metonymy, (multiple source)-in-target metonymy, metonymic chain, metaphor, metaphtonymy, single metaphoric amalgam, double metaphoric amalgam, and metaphoric chain (see Section 4.3 for the protocol followed); (3) *representation of the product*, used to indicate whether a product is explicitly represented or hinted at by the logo; (4) *product as metaphorical target*, which signals whether the product actually coincides with

6. I would like to thank Bodo Winter for drawing attention to this issue.

the metaphorical target domain or not; and (5) *multimodal cues for domains*, to designate whether the metaphorical and metonymic domains are cued by means of visual or verbal elements, or a combination of both, in the advertisement.

This annotation scheme provides us with a global and comprehensive view of the key features of figurative complexity in advertising, and covers the nature and entrenchment of metaphor and metonymy in three dimensions: *conceptual*, *discursive*, and *communicative*. At the *conceptual* level, it aims to underscore the distribution of conceptual operations across the corpus (a). This is the first attempt to study the nature and presence of multimodal metaphor and metonymy in a fairly large-scale corpus, as multimodal metaphor studies have been traditionally restricted to the detailed examination of few case studies. At the *discursive* level, it seeks to investigate whether there is specific relationship between different amounts of figurative language and different choices of mode (and if so, of what nature) (b). This is a relevant enquiry justified by the fact that, to date, multimodal tropes have been characterised by the fact that they involve a mapping between two different (or partially different) modes, but no research has been undertaken to explore what modes this are, and if there is a pattern of mode choice that can be correlated with specific figurative operations. Finally, at the *communicative* level, it accounts for the marketing strategy behind the promotion of products (e) to assess its role in triggering different amounts of conceptual complexity. So far, researchers have cherry-picked different examples of advertising in order to show how metaphor and metonymy works. Usually, these advertisements have been chosen either randomly, or according to the advertised product or service (i.e. perfume, Velasco and Fuertes 2006; or ICT, Hidalgo and Kralievic 2011). However, it still remains to be seen if there is a specific type of figurative language that is intrinsic to a type of marketing strategy, precisely because there have been no comparative studies of multimodal metaphor across different types of advertising strategies.

4.4 Final remarks

Over the course of this chapter, I have raised a number of methodological decisions that the analyst must take into account when conducting multimodal metaphor and metonymy research. Here is a summary of some of the major aspects of interest in this domain:

1. *Borrow and develop*
   I have supported a number of reasons to base the research on multimodal metaphor on the already existent methods for the research on verbal metaphor, but I have also advocated for the creation of new tools to address the specificities

of non-verbal settings. It is only by being aware of the compatible strengths of different approaches that the analyst can overcome their specific weaknesses.

2. *Inter-rater reliability is important, but not everything*
   The protocol for identification developed in this book ensured a reasonable level of reliability for multimodal metaphor (0.716), but not metonymy (0.496). Whereas there is plenty of room for improvement in the area of multimodal metonymy identification, this lack of agreement should not prevent researchers from achieving a greater degree of granularity in their analyses. Individual examples should be discussed between annotators to reach a consensus annotation.
3. *A corpus should be real, diverse, and representative*
   Researchers will only be able to make general claims about the behaviour of metaphor in real discourse if the corpus collected for the study reflects the complexities that could be encountered in real life. Developing a robust and sound methodology to investigate multimodal metaphor, and other types of figurative language, is a promising field that offers countless possibilities for scientific enquiry. There is already a wealth of publications on multimodal metaphor that account for the wide range of possibilities to create meaning in non-verbal environments. But to date, this research has not been paralleled by a similar interest in making these analyses fully reproducible by other researchers. A more careful consideration of inter-rater reliability and/or the replication of the comparable analysis by a group of researchers will help to improve and refine identification and annotation protocols.

CHAPTER 5

Metonymy and metonymic complexes

Two daiquiris withdrew into a corner of a gorgeous room and one told the other a lie.
(John Berryman, *The Dream Songs: Poems*)

5.1 Introduction

This chapter explores several creative practices in advertising that can be framed and constrained by the workings of simple and complex metonymic mappings. Metonymy is a cognitive mechanism by means of which, in a specific context, one entity is used to stand for another that belongs to the same conceptual domain. Within the context of advertising, metonymy has the great advantage of shifting the focus from product to its promoted benefits in a highly economic way (in cognitive terms). That is to say, metonymy presents a way to reconcile what is familiar (product) and what is novel (unknown properties or well-known properties under a new light) in a quite straightforward way. For Sternberg and Lubart (1993: 3), this is precisely what gives shape to creativity: "it is the ability to produce work that is both novel (original, unexpected) and appropriate (adaptive concerning task constrain)".

Research into the potential of metonymy to offer creative links between the product and its promoted features is yet sparse, but the few studies that exist highlight the systematic use of metonymy in advertising, and offer promising avenues for further research. Forceville's pioneering approach to pictorial metonymy (2009b) highlighted the cognitive affordances of stand-for relationships in billboard advertising and art films. This process can involve pictures (thus rendering a monomodal pictorial metonymy, as in Forceville 2009b and Villacañas and White 2013), or multimodal if such process involves a mode-shift (Pérez-Sobrino 2014b).

In his analysis of advertising discourse, Forceville (2009: 69) demonstrates that the context is crucial to understand the metonymic relationship that is established between a target and a source domain. In turn Villacañas and White (2013) take up the notion of pictorial metonymy and identified three metonymic patterns in a number of advertisements from Purificación García: two distinct metonymy sources, metonymic blends arising from the co-occurrence of the two metonymic sources and metonymy motivating metaphor. The recurrent exploitation of these patterns over the years guaranteed certain resemblance over the years between

campaigns, thus strengthening the brand's identity. More importantly, the standardised use of the same figurative pattern (in this case, pictorial metonymy) helps their targeted audiences to undertake the figurative twist between the mundane and the creative in a highly predictable way.

Furthermore, Moya (2011) contributed to refine the understanding of metonymy as a truly conceptual mechanism by examining the discourse functions of the metonymies in children's picture books. His interpretation of the data in functional terms characterised visual metonymies as useful strategies to facilitate the understanding of the story besides attracting children's attention towards relevant aspects of the plot. Evidently, this double function of metonymy is fully valid for the case of advertising. Metonymy offers a conceptual vantage point of access to the advertising narrative, and it also steers the attention of the viewers towards relevant aspects of the promoted commodity that are crucial to succeed in the company's selling plans.

What these studies have in common is that (a) they all concur that metonymy pervades multimodal discourse (even though this fact has not been sufficiently investigated), (b) metonymy is useful to convey a narrative because it simplifies the story and highlights relevant aspects of the message, and (c) there are certain metonymic patterns that are different enough to postulate a number of "types" of non-verbal metonymy.

In this chapter I will expand these claims in three ways. First, I will look at instances of multimodal metonymy (that is, metonymies in which the internal mapping takes place across text and images). Second, I will categorise the metonymies identified in the corpus according to structural differences (such as the number of available subdomains and number of internal mappings) in order to build an inventory of simple and complex metonymies. These are the different types of metonymy surveyed in this chapter: multimodal metonymy (5.2.1), multimodal (multiple-source)-in-target metonymy (5.2.2), multimodal metonymic chains (5.2.3), and multimodal (multiple-source)-in-target metonymic chains (5.2.4). Third, I will also take into account the combination of metonymy with other figures of thought, such as hyperbole (5.3.1), paradox (5.3.2), and onomatopoeia (5.3.3). It is my hope in this chapter to contribute to create a richer theory of metonymy on its own that sets special attention to its nature, entrenchment, and specific communicative effects in advertising.

Before I move on to the analysis of multimodal metonymy and its complexes, I would like to include a note on the choice of the examples. I have selected a number of case studies on their degree of replicability (Ruiz de Mendoza 2013) as opposed to their frequency. Originally in application to the study of linguistic constructions, Ruiz de Mendoza (2013) argues that a form-meaning pair can be identified if it is fully understood by native speakers of the same language and to the extent that such speakers regard expressions based on the construction as natural to the

language in question. This claim can be extended to the identification of non-verbal figurative operations. Hence, on the grounds of *replicability*, the analyst is entitled to formulate valid hypotheses and to predict similar conceptual behaviour in other advertisements of a comparable nature relying on the features found in a limited sample of multimodal advertisements.

Consequently, replicability-based analyses (of the like of the ones provided in Chapters 5 and 6) do not aim to make any claim on whether a phenomenon is common or rare. They are qualitative rather than quantitative in nature and they only focus on providing an explanation of the intelligibility of a given experience (should it take place again). Hence, even though the examples selected for these two chapters amount to about 10% of all the advertisements of the corpus, they are representative cases of the rest of advertisements with similar characteristics (in terms of the type of figurative operations featured and the type of product they advertise).

5.2 Multimodal metonymy and its complexes

In order to exemplify multimodal metonymy and its complexes, I will present a number of case studies, each following a similar structure. First, a working definition of the trope in multimodal use will be provided. Second, the advertisement or advertisements chosen to illustrate that trope will be described. Four questions will be subsequently addressed: (a) how visual and verbal elements contribute to the identification of the pictorial metaphor and/or metonymy; (b) how metaphor and metonymy interact; (c) how such interaction contributes to draw the required set of inferences out of the advertisement while cancelling misguided interpretations; and (d) how such multimodal interaction enhances the persuasive elements present in advertising discourse.

5.2.1 Multimodal metonymy

This cognitive operation involves a domain internal mapping that affords access to one concept by calling up another concept within the same domain, in a process that involves a mode shift. As mentioned in Chapter 3; Ruiz de Mendoza (2000) distinguishes between two types of metonymy. In *source-in-target* metonymies, a subdomain stands for the matrix domain by means of a domain expansion process (e.g. "All hands on deck" where "hands" stand for the physical work done by the sailor). This type of metonymy follows Norrick's (1981: 35) observation that "any specific instantiation of a class calls forth the whole class". In his book, he gives the example of a single violin that calls forth the class of violins, and of a

musical note that calls forth the musical key system. In turn, *target-in-source* metonymies, which are built on the basis of a domain reduction process that allows the more-encompassing domain to stand for one of its subdomains (e.g. "She's taking the pill," where "pill" stands for "contraceptive pill"). Within the context of advertising, domain expansion operations are of particular relevance since they constitute a safe and economical point of access to a broader scenario. I envisage this phenomenon as an iceberg. Typically, only one-tenth of the volume of these large mountains of ice that float in the sea are actually above water (due to Archimedes' Principle). However, the shape of the underwater portion can be difficult to judge just by looking at the portion above the surface, thus lending to the idiom "tip of the iceberg" to refer to "a small, noticeable part of a problem, the total size of which is really much greater".[1] Likewise, metonymy makes use of a part to make us think of a greater entity, that might be more or less clearly defined (I will elaborate on different patterns to constrain the inferential power of metonymy later on in this chapter). Given that the ultimate aim of advertising is to sell a product, virtually any desirable feature contributes in a straightforward and almost effortless manner to the construction of a positive image of the promoted product in the consumer's mind. I will illustrate the workings of domain expansion processes in the multimodal metonymy operating in Example 2, an advertisement of Duracell batteries. The picture represents three appliances (a baby walkie-talkie, a Discman, and a radio-cassette) overlapping in such a way that they share the location for the battery compartment. The battery, Duracell, is explicitly represented, and it is accompanied by the text "Lasts for ages".

If we focus exclusively on the visual part we can conclude that it does not involve any figurative meaning: Duracell fits and makes audio appliances work, regardless the amount of energy they consume. However, the textual part alerts the viewer about a cognitive adjustment that needs to be made between the schematic depiction of these three appliances and the word "ages". The inclusion of the notion of time in this advertisement can make consumers hypothesise that the billboard is not about the potential of Duracell to make multiple house appliances operational, but about the shared knowledge that Duracell batteries are long lasting ones. A metonymic expansion process is needed to bridge the gap between each of these three appliances (cued visually) and the time lapse in which they are used (hinted textually by the word "ages"). Each audio appliance (in its three parameterizations, i.e. as a RADIO-CASSETTE, a CD PLAYER, and a BABY WALKIE TALKIE) provides a point of access to a broader scenario, i.e. the age period in which a consumer (probably born around the 60's–80's) makes use of it. Following this rationale, the

1. http://dictionary.cambridge.org/es/diccionario/ingles/tip-of-the-iceberg. Retrieved on 16th September 2016.

Example 2. Duracell: Lasts for ages

radio-cassette stands for childhood, as it was the most popular music appliance during the 80 and 90's. In turn, the CD player activates a later life stage of the consumer (presumably from the beginning of the 2000s until the arrival of the MP3 player). Finally, the baby walkie-talkie prompts the reconstruction of a later stage of life when the same consumer that used the radio-cassette and, later on, the CD player, became a parent and started to use such a communicating system to take care of his/her baby. It is also plausible to think that the baby walkie-talkie stands for the baby instead of the parent. In any event, such distinction is immaterial for this discussion if we take into account that both PARENT and BABY are core components of the PARENTHOOD scenario, in which the baby walkie-talkie features a prominent role. See Figure 15 for a schematic overview.

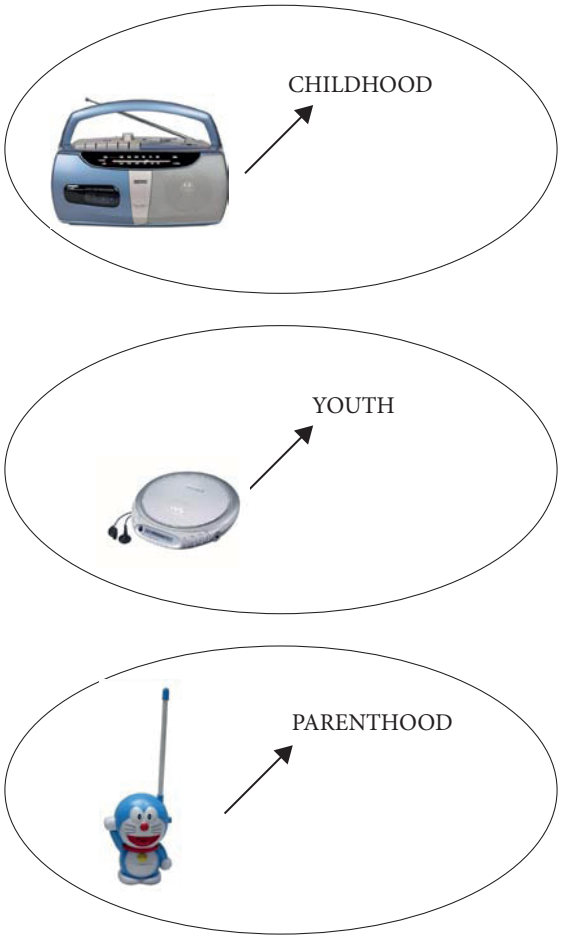


Figure 15. Multimodal metonymy APPLIANCE FOR AGE PERIOD OF THE USER, in its three parameterizations: RADIO-CASSETTE FOR CHILDHOOD, DISCMAN FOR YOUTH, and BABY WALKIE TALKIE FOR PARENTHOOD in Example 2

The fact that the batteries have been represented only once highlights their extensive durability through a generation's lifespan. As can be inferred, the core point of this advertisement is to highlight one of the attributes associated to the product rather than the product itself. The consumer would thus conclude that the role of the battery is positively structured by virtue of an EFFECT FOR CAUSE metonymy, in which "lasting for ages" (i.e. "durability") stands for the battery that supplies energy to the appliance in question.

Metonymic reduction processes are also present in advertising (yet they are not as abundant as domain expansion mappings). They are particularly productive in advertisements of harmful products, such as tobacco and liquor. Consider Example 3, an advertisement for Camel cigarettes. The picture offers a bird's-eye view of a ship sailing a frozen sea in a polar region, while leaving behind a camel-shaped trail in the ice. There is a verbal heading in the upper-left corner of the picture, "Discover more", and a caption in the lower-right corner, "Camel, since 1813".

Example 3. Camel: Discover more

As referred to above, tobacco advertising is now one of the most highly regulated forms of marketing. For obvious reasons, tobacco companies use advertising to drive brand awareness and brand preference amongst smokers rather than praising tobacco's properties (since tobacco has been definitely proven as a health-damaging product). Therefore, tobacco advertisers must resort to metonymic reduction processes that allow the represented brand to stand for the product (whose explicit depiction is illegal in advertising). In the example under consideration, the camel drawn in the ice resembles the icon of the brand Camel, thus providing prominence to Camel cigarettes (which are neither represented nor referred to) by means of a metonymic reduction process. See Figure 16 for a graphical representation of this conceptual mechanism.

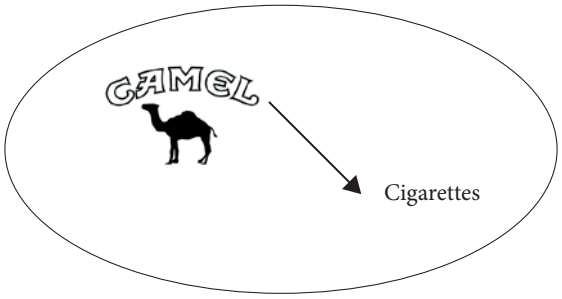


Figure 16. Multimodal metonymy BRAND FOR PRODUCT in Example 3

The interpretation could continue if we take into the analysis the existing link between the picture of the boat exploring the ice sea and the text "Discover More". One of the reviewers[2] of this manuscript pointed out that the existence of an antonymic relationship between the ice and the camel (as a metonymy of the desert). The clash between two irreconcilable scenarios could prompt the interpretation of a new adventure no one has undertaken before. In fact, one might contend that the act of smoking Camel cigarettes is structured in terms of exploring an unknown and virgin territory, thus giving the act of smoking the characterisation of a daring and adventurous act. This metaphor neither boosts nor hinders the workings of the metonymic mapping discussed above. As advanced, it is highly usual for many operations to work at different levels within the same advertisement: the metonymy bridges the gap between the brand and the advertised product, and the metaphor resolves the enigma posited by the pictorial and textual part.

5.2.2 Multimodal metonymic chain

A multimodal metonymic chain involves the interaction of several metonymies, which are exclusively or partially rendered in different modes. The expanded or reduced domain that results from a first metonymic operation constitutes the point of departure for a subsequent metonymic mapping.

For the sake of explanatory clarity, I will first discuss the case of double metonymic expansion process in the light of Example 4, an advertisement for noise-cancelling headphones. The consumer is presented with two apparently unrelated scenarios: a visual depiction of a speeding ambulance and a verbal reference to a fictive co-authored song (hinted by the word "featuring"). The title for the selected single, "Time is running out" (which is a real song by the British band

2. I would like to thank Sabine de Knop for this remark.

Muse), is particularly pertinent in this case since time is actually precious when an ambulance is called in an emergency situation.

Example 4. Polk Audio Headphones: Leave the noise outside

If we were to focus only on the visual part we would conclude that there is no figurative intention behind the representation of a running ambulance leaving exhaust fumes behind. However, it is precisely by contrasting this picture with the textual part (which refers to two different audio sources, Muse's song "Time is running out" and the siren of Saint Francis Hospital's ambulances) that enables the consumer to understand the sketched ambulance smoke as the graphic representation of sound waves. Notice that there is a relative perceptual resemblance between the sketch of the exhausting fumes and the usual shape of sound waves, which is further reinforced by the allusion to the domain of sound in the text.

Therefore, the first metonymic chain allows the viewer to connect the sound waves (visual) with Muse's song "Time is Running Out" (textual) as a particular

instance of music which, within the context of the product advertised, would ultimately stand for any kind of music we listen to with headphones. The metonymic chain SOUND WAVES FOR SONG FOR MUSIC thus resolves the first half of the riddle proposed by the billboard. See Figure 17 for a graphical overview of this metonymic chain.

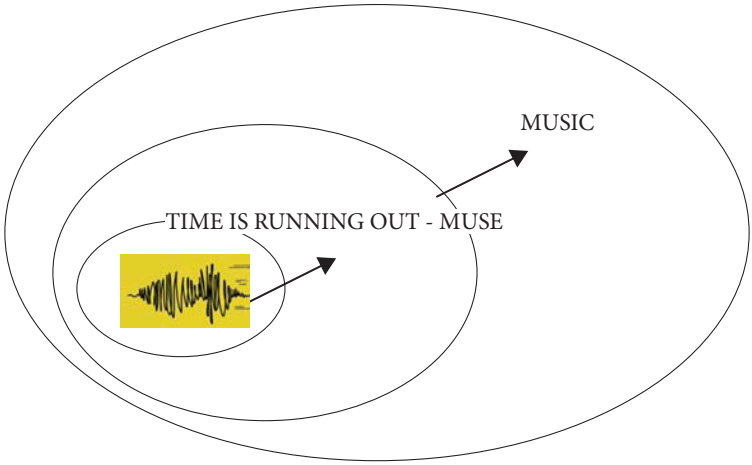


Figure 17. Multimodal metonymic chain SOUND WAVE FOR SONG FOR MUSIC in Example 4

Metonymic expansion mappings can be additionally coupled to metonymic reduction processes, i.e. a metonymic mapping which highlights a specific subdomain of the more encompassing domains for which it stands. This is the case in the conceptualisation of the ambulance (visual) as noise (textual). The black highlighting of "Saint Francis Hospital" and "noise" visually prompts this connection. Given that the viewer is already aware that the advertisement is to be interpreted in acoustic terms, a first metonymic reduction process highlights the role of sirens as the sound feature of ambulances (which in turn are also a constituent part of the broader domain of hospitals). In this context, SIREN becomes the most prominent subdomain of the more encompassing domain HOSPITAL through a chain based on metonymic reduction processes (i.e. HOSPITAL FOR AMBULANCE FOR SIREN). A last metonymic process is required to connect this characterisation with the notion of "noise" (cued verbally in the lower part of the billboard). In this case, the matching would be undertaken via a metonymic expansion process, given that noise is a broader domain capable of covering sirens and many other types of disrupting sounds. Figure 18 reproduces a schematisation of this operation.

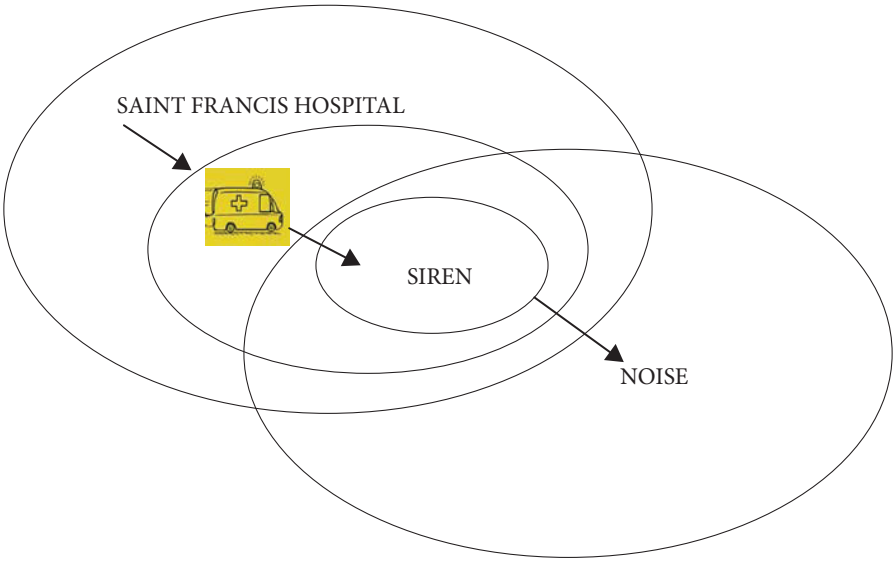


Figure 18. Multimodal metonymic chain HOSPITAL FOR AMBULANCE FOR SIREN FOR NOISE in Example 4

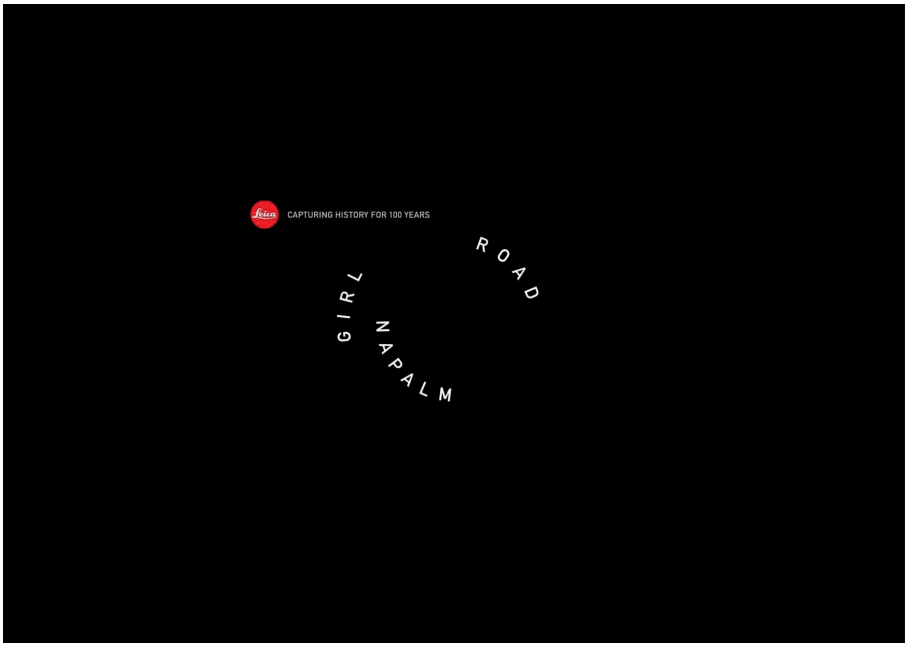
Finally, a cause-effect relationship that is similar to the one discussed in Example 2 explains the role of the product. The effect of leaving out the noise (referred to in the textual part of the advertisement) is caused by the noise-cancelling power of the advertised headphones.

5.2.3 Multimodal (multiple-source)-in-target metonymy

Of particular interest for this chapter are (multiple-source)-in-target metonymies precisely because they challenge the traditional notion of metonymy as a single domain-internal mapping, as has been emphasised in Chapter 3. In order to illustrate the structure and meaning implications of this complex type of metonymy in advertising, consider Example 5 below. This billboard will serve as a guide to characterise this trope, and will additionally shed light on the fact that conceptual complexity is not directly linked to the density of multimodal cues in an advertisement. In fact, minimalist advertisements, if wittily devised, are ideal candidates to trigger conceptual operations in multiple directions.

Example 5 displays two groups of textual elements arranged in such a way that they resemble the front plane of a camera. The first one is comprised by Leica's logo (brand name within a red circle) and the pay-off "Capturing history for 100 years".

Together they might remind the consumer of a camera's shutter button at the upper right corner of most cameras.



Example 5. Leica: Capturing history for 100 years

This hypothesis is further reinforced by the fact that the second group of words is placed in a circular fashion that imitates the objective of a camera. Both shutter button and objective are equally prominent subdomains that simultaneously provide viable access to the most encompassing domain LEICA CAMERA. Given that consumers count on more than one point of access to the advertised product, multiple source-in-target metonymies offer advertisers a much safer way to steer consumers in the interpretation of their advertisements. See Figure 19 for a schematic clarification.

Once we have explored the formal aspects of the billboard, I encourage the reader to take a closer look at the content of the words chosen for this advertisement. "Girl", "napalm", and "road" would probably mean nothing by themselves to an audience interested in cameras; but, if displayed together, these three concepts almost immediately point towards the Pulitzer prize-winning photograph taken during the Vietnam War of a nine-year-old girl running naked along a road after being severely

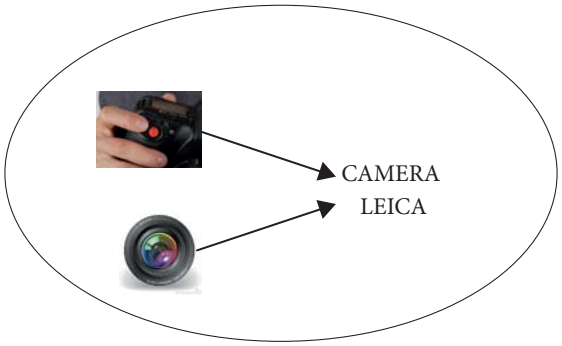


Figure 19. Multimodal (multiple-source)-in-target metonymy SHUTTER BUTTON & OBJECTIVE FOR CAMERA in Example 5

burned on her back by a South Vietnamese attack.[3] See a graphic overview of this second (multiple-source)-in-target metonymy GIRL&NAPALM&ROAD FOR HISTORIC PICTURE in Figure 20.

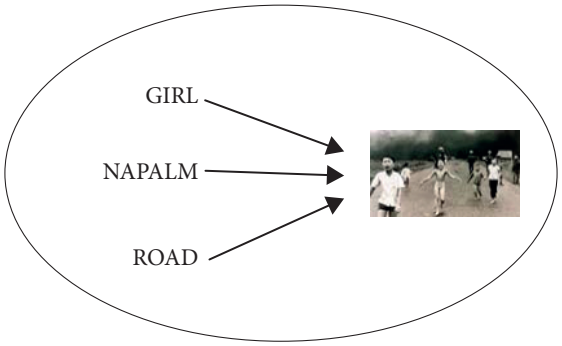


Figure 20. Multimodal (multiple-source)-in-target metonymy GIRL&NAPALM&ROAD FOR HISTORIC PICTURE in Example 5

It must be pointed out that, in order to proceed with the understanding of the second multiple source-in-target metonymy GIRL & NAPALM & ROAD FOR HISTORIC PICTURE, the viewer must be previously aware of the fact that this award-winning photography was taken with a Leica and that it was one of the most salient highlights in the history of photojournalism in the 20th century (as indicated

3. Associated Press (June 11, 1972). "Girl, 9, Survives Napalm Burns". New York Times. Retrieved 17th November 2014. "Nine-year-old Phan Thi Kim-Phuc is recuperating in a Saigon children's hospital, the unintended victim of a misdirected napalm attack. http://query.nytimes.com/gst/abstract.html?res=9C07E5DC153AE73ABC4952DFB0668389669EDE

in the first group of words). If this is the case, then the viewer will not only infer that the advertisement is about a camera, i.e. about the iconic aspects schematised in Figure 18, but will expand his/her interpretation by undertaking the semantic connection as proposed in Figure 19 and subsequently matching the two groups of words. Additionally, it could be argued that the picture may readily stand for the broader domain VIETNAM WAR, thereby adding a subsequent metonymic expansion process to the sketch in Figure 19.[4] Once again, this suggestion does not hinder the interpretation provided above. The billboard under scrutiny is addressed to an audience interested in photography, and therefore, reaching the inference that the advertisement is about a (historic) picture because Leica is a reliable brand with a long record of successful photographs is the core assumption to make in this advertisement. Reaching a subsequent assumption related to the role of this picture in denouncing the continuous human right violations during the Vietnam War depends on the professional and social engagement of the viewer.

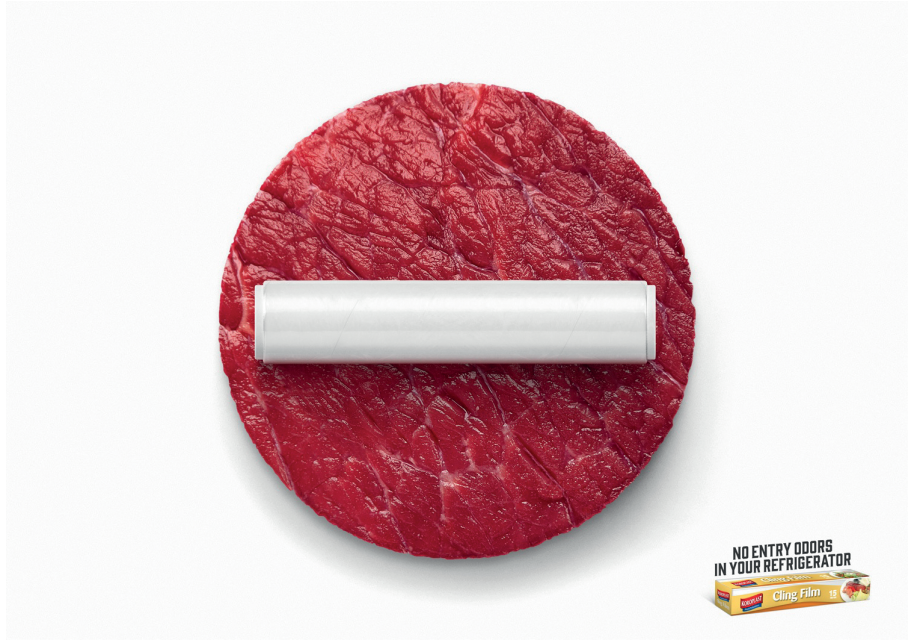
Another important aspect of this billboard is the choice of colours: white letters over a black background. Black or darkness as a metaphorical source domain relates to our inability to discern properly what lies ahead of us. Winter (2014) argues that the correlation between darkness and danger is deeply rooted in experience, as well as the negative emotions we feel in dark settings. Indeed, humans are more vulnerable in dark cities. For instance, Pease (1999) found that more street lighting decreases the incidence of criminal acts. This also applies to natural environments, where it is at night that most predators hunt (Packer, Swanson, Ikanda, Kushnir 2011). Darkness makes us more likely to lose control of our bodies, and more likely to stumble, trip, or hurt ourselves (Forceville and Renckens 2013: 163). By contrast, light metaphors carry more positive implications, given that in our everyday experience light allows us to see what it is ahead and thus to gain further knowledge and control over the situation around us. Therefore, the white words making up

4. Within Conceptual Blending Theory, this is a case of conceptual integration where the metonymies provide the input spaces. In fact, Pérez-Sobrino (2014b) has already argued for the productivity of combining networks of conceptual integration with metonymic mappings (yet within the domain of classical music). The final picture in the viewer's mind is one of someone taking the award-winning picture with a Leica camera, with the implication that only a camera like Leica can make the prospective buyer a true professional. This implication is obtained pragmatically through a premise-conclusion pattern. Ruiz de Mendoza and Galera (2014) show that this process actually involves a double-metonymic shift, i.e., PREMISE: Leica professional cameras can be used to (likely) take potentially award-winning pictures > ADVERTISEMENT: The viewer is invited to buy and use a Leica professional camera > CONCLUSION: The viewer can likely take a potentially award-winning pictures. The advertisement affords access to the premise (source-in-target metonymy), part of which is then to be highlighted (target-in-source metonymy) to derive the conclusion.

the objective of the camera would highlight the potentiality of Leica to capture and recover events from darkness (or Western ignorance) and make them public to create public awareness around Vietnam War.

5.2.4 Multimodal (multiple-source)-in-target metonymic chain

(Multiple-source)-in-target metonymies can couple with additional expansion or reduction metonymic processes, thereby giving rise to a composite of the conceptual operation mentioned above with metonymic chains. For the sake of illustration I have chosen an example of multiple source-in-target metonymy in combination with a metonymic expansion process (yet it could equally be connected to a domain reduction mapping). Take Example 6, a rather minimalistic advertisement for cling film.



Example 6. Cling film

The round, red piece of raw meat plus the white roll of cling film prompt an iconic relationship with the traffic sign that forbids cars to drive onto a specific street or road. Thus, the traffic sign is accessed by means of two complementary subdomains (MEAT & CLING FILM), whose colours and disposition in the advertisement (round and red, and white and straight, respectively) activate simultaneously the

domain TRAFFIC SIGN (more specifically, "do not enter"). In principle, this traffic sign has an iconic basis as it schematically represents a white line blocking the access. Originally, such a blockage was used to metonymically stand for the legal restriction for some vehicles to enter a place. However, this sign can be found nowadays in many other contexts: for example, at the entrance of a warehouse, it might stand for the prohibition for regular pedestrians to enter the building. Hidalgo and Kralievic (2011: 166) have offered an interesting analysis of the conceptual motivation behind traffic signs, arguing that they stand in metonymic relation for the event they represent when put in a place. See Figure 21 below for a combination of the (multiple source)-in-target metonymy that connects the meat and the cling film with the traffic sign, with a subsequent domain expansion mapping that links the traffic sign with the instruction to not enter into a place.

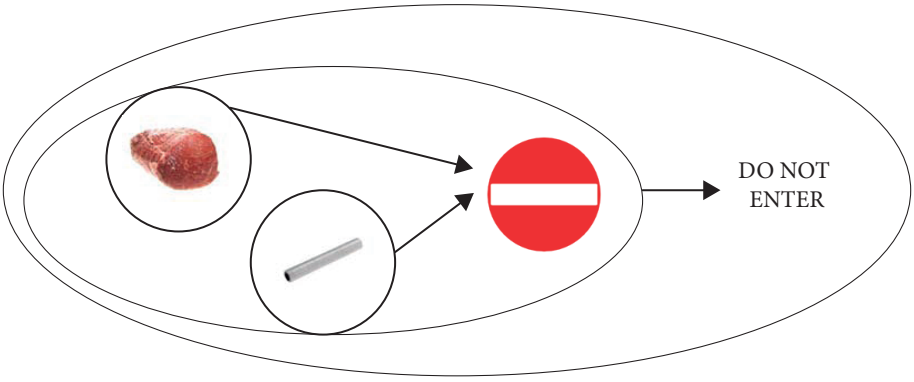


Figure 21. Multimodal (multiple-source)-in-target metonymic chain (red and round) MEAT & (white and straight) CLING FILM FOR TRAFFIC SIGN FOR DO NOT ENTER in Example 6

The integration of the cling film in the "do not enter" sign is particularly effective to advertise the main property of the promoted product (developed in the second metonymic projection). It is by wrapping food with the promoted film that odours will not stick in the fridge. The corollary is that the surveyed (multiple-source)-in-target metonymic chain also triggers the metaphorical reasoning necessary to structure all the elements of the traffic event of "not accessing a place" in terms of food preservation. By way of illustration, I would venture that food odours are characterised as pedestrians or cars, the product restricts the propagation of odours in a similar way to how the traffic sign restricts the free circulation of pedestrians and vehicles, and the inner part of the refrigerator is represented as a place of prohibited access, like a private property.

5.3 Other operations in combination with multimodal metonymy

In closing this chapter, I would like to acknowledge the existence of alternative conceptual tropes that productively combine with metaphor and metonymy. This subsection briefly accounts for multimodal manifestations of hyperbole, paradox and onomatopoeia, and offers some discussion on the meaning effects derived from its interaction with metaphor and metonymy. As advanced at the beginning of this chapter, conceptual complexity can be measured in terms of the combination between conceptual operations of a similar kind (for instance, metaphor and metonymy, as conceived in this book) but also of a different nature, as it is the case of the following conceptual tropes. With this brief overview I hope to open a new path of enquiry into the intricacies of conceptual complexity, its ingredients, and alternative protocols to quantify it.

5.3.1 Hyperbole

According to Ruiz de Mendoza and Galera (2014: 45), a hyperbole is an exaggerated statement derived from the creation of a counterfactual scenario that maximises a scalar value to an abnormal degree. Hyperbole is meant to surprise hearers, thus stirring them to react in largely predictable ways. Hyperbolic statements are therefore not to be taken literally. For example, in the phrase "It took me a hundred years" (Ruiz de Mendoza and Galera 2014: 45) the speaker aims to draw the hearer's attention to a situation in which he or she has had some difficulty in performing a given task. The hearer, in turn, should mitigate the utterance in order to access the real meaning beneath the exaggerated utterance. This operation takes the form of A IS +B, where +B consists of a counterfactual scenario that maps onto the real life situation to produce a surprising and shocking effect (see Ruiz de Mendoza 2013). Fyock's (2011) work directly applies this notion of hyperbole to the specific context of advertising, and argues that the role of hyperbole in visual images in advertising is the visual exaggeration or understatement of a product's benefits or losses respectively (Fyock 2011: 5). The discussion below will take this notion of visual hyperbole as its point of departure, and will show how it can be paired with other figurative operations, such as metonymy. Example 7 advertises a new version of Oreo containing double milk cream filling between the two chocolate wafers.

Example 7. Oreo: Double milk

In this billboard, advertisers convey the increase in the amount of milk cream filling by directly portraying a glass of milk between the two wafers. Obviously, the glass of milk stands for the main ingredient, milk, which is at the basis of the cream filling. However, it is clear to the viewer that a glass of milk contains more than two layers of milk cream (as indicated in the text "new double milk"), and thus this visual overstatement needs to be mitigated by the viewer to the extent required for the text to be true. See Figure 22 for a schematic clarification.

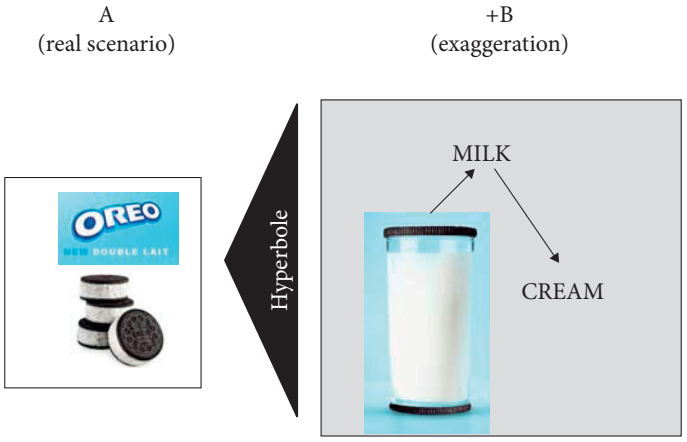


Figure 22. Visual hyperbole in interaction with a metonymic chain in Example 7 (in grey: hyperbolic statement in the advertisement; in white: actual product)

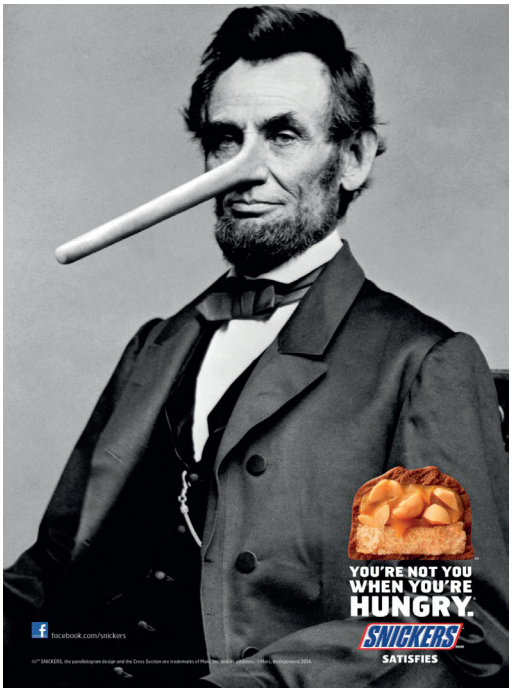
As pointed out above, the enhancement of the metonymy GLASS FOR MILK FOR MILK CREAM through hyperbole is aimed at drawing the audience's attention to the new feature of Oreo biscuits. Indeed, the visual part of this billboard has a higher communicative impact than the textual element. The predictable reaction on the consumer's part would first be one of surprise and then the mitigation of the visual hyperbole (following the textual cue). The reader is referred to Fyock (2011) for further considerations on visual hyperbole as a persuasive device in advertising.

5.3.2 Paradox

Paradox sheds light on the way contrasting works. For example, in the phrase "I must be cruel to be kind" (Ruiz de Mendoza 2011: 114), a person's cruel behaviour is seen from a different perspective. The juxtaposition of two contrasting realities results in an impacting utterance that sticks in the hearer's mind. This form of figurative thought can be formulated as A IS ≠B, where B is the opposite of A. The reader should bear in mind that, even though paradox involves an A IS B operation, it is a very distinct mechanism from metaphor. The conflation of two opposite events in paradox (and by extension, oxymora) is demanded by the (apparently) irreconcilable nature of the expression (Ruiz de Mendoza 2011: 115), whereas conflation in correlational metaphors has an experiential basis.

Given the potential for creativity in advertising, it is not surprising to find a number of "impossible" visual depictions in the corpus. For instance, the text of Example 8 reads: "You are not you when you are hungry. Snickers satisfies". This verbal statement presents a paradox in itself, given that one cannot stop being

oneself at any moment of one's life. However, in this context, the statement could be interpreted in terms of the way our mood fluctuates when we experience hunger. The visual part of the billboard illustrates this paradox by representing Abraham Lincoln with an oddly elongated nose.



Example 8. You are not you when you are hungry. Snickers satisfies

Some background knowledge of Abraham Lincoln is necessary to know in order to interpret this advertisement. As the 16th president of the United States, he led the United States through its Civil War and the moral, constitutional and political crises in the post-war period with honesty and skill. He additionally preserved the Union, abolished slavery, strengthened the federal government, and modernised the economy. Abraham Lincoln can thus be considered a prototypical historical example of political trustworthiness and good command, and thus functions as a feasible conceptual access point to the broader domain HONESTY. By contrast, the elongated nose is the most defining feature of the fictional character Pinocchio in Collodi's children's novel *The Adventures of Pinocchio* (1883). Pinocchio has become an icon in modern culture on account of his short nose becoming longer when he tells lies. The elongated nose is thus metonymic for Pinocchio, which in turn stands for FALSEHOOD. The juxtaposition of these opposing realities,

HONESTY and FALSEHOOD, creates an impossible situation that mirrors the paradox introduced via the text: "You are not you when you are hungry". The reader may find a graphic representation of the interaction between paradox and the series of metonymies discussed above in Figure 23.

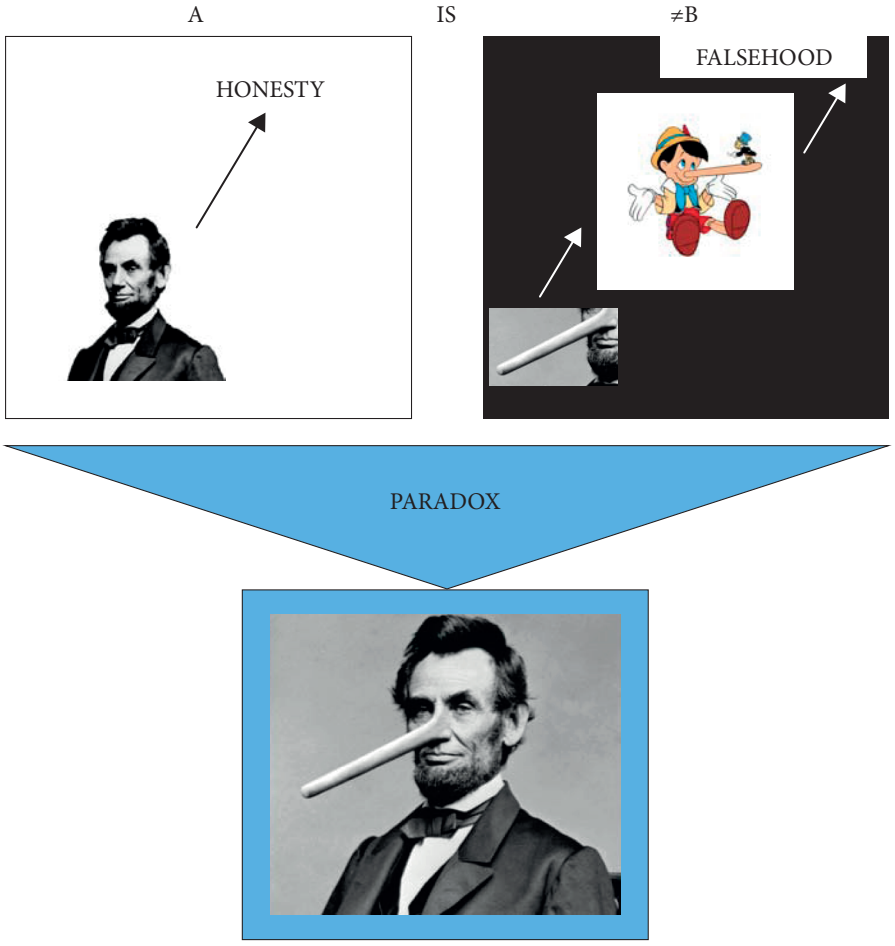


Figure 23. Visual paradox in interaction with metonymies in Example 8 (in white: real scenario; in black: contrasting scenario; in grey: paradoxical statement in the advertisement)

The role of the advertised product, Snickers, would be that of "satisfying" one's hunger. By virtue of a CAUSE FOR EFFECT metonymy, the consumer would thus infer that by eating Snickers one would not be hungry anymore, thus leading to a happy resolution of the portrayed paradox by recovering his/her own real personality.

5.3.3 Onomatopoeia

The corpus search of images revealed that onomatopoeia could also be creatively exploited to convey the desirable attributes ascribed to the promoted product. Onomatopoeia refers to the formation of words whose sound is imitative of the sound of the noise or action designated, such as in "buzz" and "bang". The integration of sounds within words gives pride of place to onomatopoeia as a truly multimodal device. The creative exploitation of this tool in printed advertising offers a great opportunity for advertisers to introduce the audial mode (in principle, not present in static advertising formats), thereby enhancing the impact and memorability of their billboards. Consider Example 8, which takes advantage of the ending letters of the brand *Bosch* to add the onomatopoeia "Schhhh". Convention dictates that this onomatopoeia is a request for silence. This feature is highly desirable for vacuum cleaners, given that they are rather noisy home appliances. The text reinforces this interpretation: "The quietest vacuum cleaner: Bosch Relaxx Pro Silence".

Example 9. Boschhhh. The quietest vacuum cleaner: Bosch Relaxx Pro Silence

"Boschhhh" merges the brand name "Bosch" (verbal input), the corporative red typeface over a white background (visual input), and the notion of silence (which is a – lack of – audial input based on our auditory experience) into a single multimodal unit. The incorporation of the onomatopoeia "schhhh" in the compound

"Boschhhh" licenses an economic metonymic connection of the advertised product with the sound produced in order to request silence from someone via metonymy. This ultimately results in quietness via a CAUSE FOR EFFECT metonymy, which is a desirable characteristic for a home appliance.

Given that the recognition of the advertised product is quite straightforward (as it is both represented in the lower right corner and referred to by the brand and the text; see the discussion for brands in Example 2) by means of a metonymic reduction process BOSCH FOR BOSCH VACUUM CLEANER, the issue remains as to what is being said about the product. I argue that the compound "Boschhhh" integrates an extra feature of Bosch vacuum cleaners: silence. Given that onomatopoeias are words that imitate a sound embedded within a larger event, "schhhh" is broadened by means of metonymic expansion until a relevant target is produced, in this case, (the request for) silence. The picture of the vacuum cleaner on the lower right corner triggers and constrains an echoing operation that matches the domain of silence (accessed through the onomatopoeia "schhhh") with lack of noise produced by the advertised vacuum cleaner. The reader might note at this point that this echoing operation is not a direct one, since the lack of silence is a result caused by the product in action. In other words, silence is a result that provides access to an even wider domain, that is, the vacuum cleaner.[5]

Figure 24 below schematises how the composite "Boschhhh" (Bosch + Shhh) characterises, through a metonymic chain, the attributes associated to the advertised product.

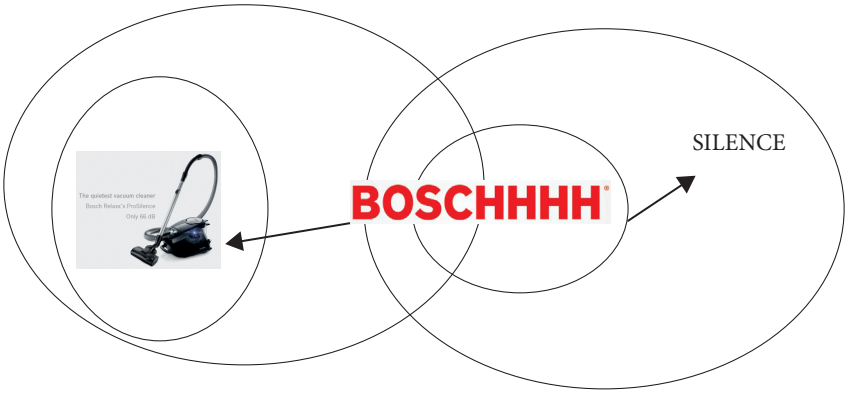


Figure 24. Onomatopoeia plus multimodal metonymy BOSCHHHH FOR SILENT VACUUM CLEANERS in Example 9

5. Since the name of the brand is given a prominent place in the billboard, I further hold that the vacuum cleaner might additionally serve as a gate of access to a wider inventory of Bosch household appliances that are equally quiet.

5.4 Interim conclusions

Before moving on to the study of multimodal metaphor in combination with other operations, I would like to draw the reader's attention to three interim conclusions arising from this chapter.

First, my exploration of multimodal metonymy complies with the cognitive commitment and looks for non-verbal validation of conceptual metonymy (which has been traditionally restricted to the study of linguistic examples, and more recently, to pictorial examples), which consequently results in the strengthening of metonymy theory. The insights offered in this chapter on verbopictorial metonymy are to be complemented with those offered in Pérez-Sobrino (2014b) on verboaudial metonymy to obtain a richer insight on non-verbal metonymy and its characteristics. My application of non-verbal metonymy to the study of advertising narratives has revealed that multimodality may exploit cross-domain mappings (as captured in Forceville's definition, 2009a: 34) or mappings *within* a domain, as is the case of *(multiple-source)-in-target metonymies*, i.e. or metonymies where several subdomains (rendered in various modes) simultaneously grant access to the most encompassing domain. This observation is relevant to refine existing accounts on multimodal metonymy as a meaning-making strategy. Second, this chapter has introduced a novel complex based on metonymy, *(multiple-source)-in-target metonymic chains,* that complements the existing inventory of conceptual complexes identified by Ruiz de Mendoza, Pérez-Hernández and their collaborators on the basis of linguistic data. Third, this chapter has offered a preliminary account of hyperbole and paradox in multimodal use, and of their patterns of interaction with other complexes. I hope that this brief incursion into alternative paths of conceptual complexity will open a promising path for future research. In the future, it would be worth looking at multimodal equivalents of these figures (in isolation or in combination with metaphor and metonymy) in greater depth and detail.

This chapter has shed light on a wide variety of metonymic patterns that can be found in the advertisements, alongside a number of possible explanations as to why this might happen. Although many experts working in the field of advertising may be aware of metaphor, it is unlikely that they will have in-depth knowledge of metonymy. This is important as metonymy is likely to be a useful variable in determining the success, or otherwise, of an advertising campaign. The explanations of the different metonymic patterns, which have been illustrated with advertisements throughout, should therefore be of use to both linguists and advertisers.

CHAPTER 6

Metaphor and metaphoric complexes

I want to change my punctuation.
I long for exclamation marks, but I'm drowning with ellipses.
(Isaac Marion, *Warm Bodies*)

6.1 Introduction

As has been already argued, there is a productive synergy between metaphor and advertising. Their shared basis – exploring the connection between two discrete domains in metaphor (source and target) and the product and the advertising narrative in advertising – offers an opportunity to both disciplines to pursue interdisciplinary inquiries. All in all, metaphor is so embedded in advertisements that it is hardly possible to make a clear-cut distinction between the conceptual structure of advertisement motivated by the inclusion of a metaphor at the stage of advertisement creation, and the discursive and communicative effects that such metaphor prompts on the consumer's side. In this spirit, and following the line of the previous chapter, I will first offer a definition of the conceptual operation, followed by a description of the advertisement or advertisements chosen to exemplify it. I will then provide a qualitative analysis of the advertisement(s) under scrutiny following four research questions: (a) how visual and verbal elements contribute to the identification of the pictorial metaphor and/or metonymy; (b) how metaphor and metonymy interact; (c) how such interaction contributes to drawing the required set of inferences out of the advertisement while cancelling misguided interpretations; and (d) how such multimodal interaction enhances the persuasive elements present in advertising discourse.

Chapter 6 continues with the qualitative analysis of the figurative continuum initiated in Chapter 5 and accounts for multimodal metaphor (6.2.1) and four metaphorical complexes based on metaphor (and their variants). I follow Ruiz de Mendoza and Galera (2014: 96) in my understanding of metaphoric complexes as any kind of combination between metaphor and other cognitive operations, such as metonymy and/or other metaphors. As advanced in Chapter 3, conceptual complexes can be distinguished according to the type of interaction, i.e., integration or chaining. Among the metaphorical complexes based on integration, I discuss

multimodal *metaphtonymy* (6.2.2), a complex based on the incorporation of a metonymy in the metaphorical source and/or target domain; multimodal single metaphoric amalgam (6.2.3) and multimodal multiple-source/target metaphoric amalgam (6.2.4), both metaphorical complexes wherein one or more metaphors are incorporated into the source-target layout of another metaphor. The only chaining-based metaphorical complex that I will illustrate is *metaphorical chain* (6.2.5), a conceptual pattern arising from a metaphorical target domain of one metaphor that serves as source domain for another.

6.2 Multimodal metaphor and its complexes

6.2.1 Multimodal metaphor

First, a basic explanation of multimodal metaphor is necessary to ground the explanation of the conceptual complexes built upon it. Multimodal metaphor is exemplified in Example 10, an advertisement for Lego, a popular line of construction toys consisting of colourful interlocking plastic bricks. Lego blocks can be assembled and connected in many ways to construct different objects; for instance, this case study shows a plane made of red Lego bricks over a plain sky-blue background. The Lego plane yields a shadow of a real plane.

Example 10. LEGO

The incongruent connection between the plane and its shadow calls for a metaphorical reading in which the toy plane is understood as a real plane (hinted at by the shadow). As pointed out by Forceville (2009a: 31), perceptual resemblance can only function as a trigger of metaphorical reading in the case of monomodal metaphors, that is, only a visual representation can perceptually resemble another visual representation (resemblance is here understood in terms of the representation, not of the intrinsic nature of the things represented). The similarity is cued in this case by the position of the two incongruent elements (the Lego plane is in the upper half of the billboard and therefore in the right position to project a shadow), and the coherent proportions in size and shape. See Figure 25 for a schematic overview of the LEGO PLANE[1] IS A REAL PLANE metaphor.

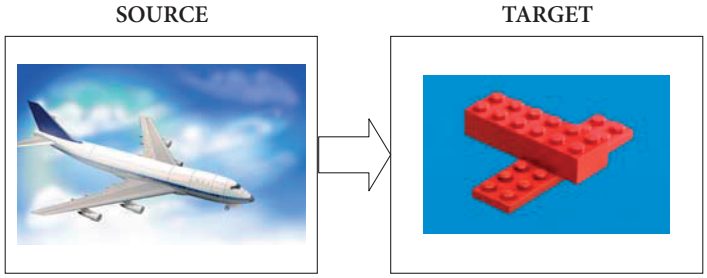


Figure 25. Multimodal metaphor LEGO PLANE IS REAL PLANE in Example 10

In terms of Conceptual Metaphor Theory, this would be a kind of *resemblance* metaphor (as opposed to *correlational* metaphor, Grady 1999). Resemblance metaphors are built on very basic mappings exploiting mere attribute comparison. In fact, the absence of alternative elements makes the analogy between the fake and the real aircraft all the more straightforward. In this case, further inferences derived from the metaphor LEGO PLANE IS REAL PLANE would point towards the idea that a child would be able to create a world made of bricks as rich and complex as the real world we live in. In fact, most Lego advertisements hinge on the potential of Lego to foster children's imaginations. This process is accomplished through mental simulation, which is one of the cognitive processes that has received the most attention in recent years as part of correlation metaphor thinking (see Casasanto 2009; Gallese and Lakoff 2005; Gibbs 2006a).

1. It is evident that there is no such thing as a "Lego plane", but a simulation of a plane made by putting together Lego pieces in such a way that they look like a plane in terms of their topological properties. Hence, "Lego plane" is just a convenient way of referring to the assembly of Lego pieces bearing basic topological resemblance to a real plane.

Multimodal analysts have found in advertising a wealth of examples to investigate resemblance metaphor, precisely because they readily prompt comparison between two entities on the grounds of perceptual similarity. This has perhaps prevented scholars from focusing on alternative types of metaphor structuring multimodal discourse, such as correlational metaphors (Grady 1999). These metaphors are based on the conflation of events in human experience such as LOVE IS A JOURNEY ("Our relationship has hit a dead-end street") or TIME IS MONEY ("It's not worth my while"). With few exceptions (such as Forceville 2011a; Forceville and Jeulink 2011; Ortiz 2011; and Pérez-Sobrino 2014a,b), not much work has look into the possibilities of representing abstract entities and advertisements and other types of multimodal discourse, and this is not completely illogical. At first glance, correlational metaphors would seemingly be more difficult to represent in multimodal settings given that they invoke experiences, and/or not well defined objects. How can a designer represent the concept of *love* or *time* in a advertisement, if not by recurring to (metonymically) related objects, like a ring or a clock, respectively? However, correlational metaphors count on a strikingly broad range of possibilities of representation through graphics and typography. A careful examination of these and other graphic resources to exploit correlational metaphors can be found in Sections 6.2.2.d, 6.2.3, and 6.2.4.

There is another interesting phenomenon related to multimodal metaphor at work in advertising: the notion of *metaphor scenario*. Some multimodal analysts (Forceville 2009a: 11; Koller 2009: 48) have already noticed that the A IS B formula (which became popular in Conceptual Metaphor Theory possibly because of the exclusive focus on decontextualised verbal metaphors) could be insufficient to address the dynamic nature of metaphor, at its different levels of abstraction as well as cause-effect relations. In fact, we usually resort to fully-fledged events and on-going actions to make sense of a metaphor. Musolff (2006: 28) defines a metaphor scenario as "a set of assumptions made by competent members of a discourse community about 'typical' aspects of a source-situation, for example, its participants and their roles, the 'dramatic' storylines and outcomes, and conventional evaluations of whether they count as successful or unsuccessful, normal or abnormal, permissible or illegitimate".

Hence, a metaphor scenario presents an opportunity to better account for metaphors based on highly situational advertisements. Whereas I have examined quite minimalistic advertisements thus far, there is a reverse trend in advertising that embeds the persuasive message in concrete and detailed representations. An illustrative case is to be found in Example 11, an advertisement for a personal lubricant. There are two distinct layers of meaning in this advertisement: the visual part depicts a rather unconventional scenario in which a Hell's Angels Motorcycle Club member is oddly depicted in a sophisticated room in friendly conversation

with members of an unknown elitist society. As regards the textual part, advertisers have chosen to refer to the product in a caption in the lower right corner: "Durex lubes. Get in anywhere".

Example 11. DUREX lubes. Get in anywhere

Since there is no further information in the pictorial part to disentangle the visual incongruence, the consumer must refer to the textual part in order to unravel the visual riddle. Rather strikingly, the advertisement is not about social inclusion or understanding between social clubs, but about the properties of lubricants. The consumer's encyclopaedic knowledge about the dynamics of societies (cued visually) triggers a series of metaphors that establish correspondences between the dynamics of social communities and the dynamics of the sexual act (cued by the text) that will eventually shed light on the properties of the advertised product. For instance, the consumer can readily draw a connection between the two different social clubs and the two individuals engaged in a sexual relationship. But the depicted source domain conveys an even wider message: social groups are in fact very exclusive and barely accepting of strangers as members, and if they do, it is at great expense to the newcomer. This shared knowledge about the idiosyncrasy of high society would correspondingly structure the difficulties of enjoying smooth intercourse. Additionally, the happy outcome depicted in the billboard would correspond to the

benefits of the product. Without explicitly mentioning or depicting the properties and context of use of personal lubricants (probably due to the social convention of avoiding sex-related topics in public discourse), the consumer is nonetheless able to grasp the properties of the product. See Figure 26 for a graphic overview.

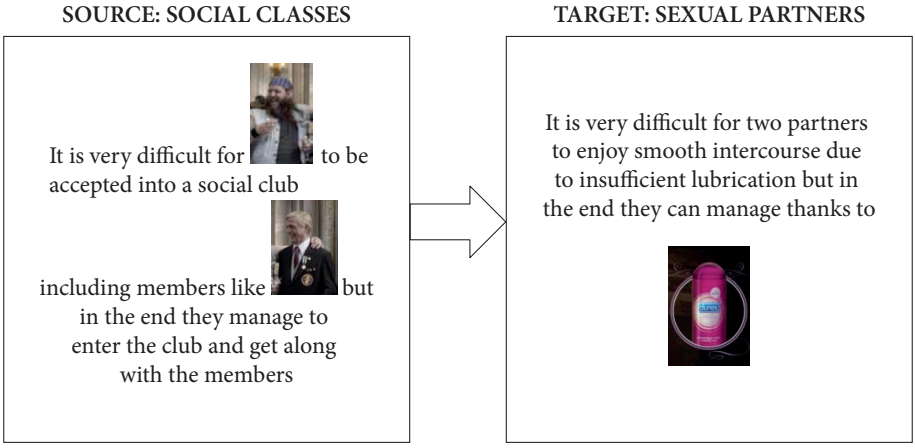


Figure 26. Multimodal metaphor SCENARIO A (SEXUAL PARTNERS) IS SCENARIO B (SOCIAL CLASSES) in Example 11

Pun left aside, this example is highly illustrative of the workings of multimodal metaphor in three respects. First, because it shows that multimodal density, i.e. the amount of multimodal cues, is not necessarily tied to conceptual complexity. Both Examples 10 and 11, which have been discussed in this section, rely on a single metaphorical mapping even though the former is characterised by a rather minimalistic display of visual elements and the latter abounds in visual elements. Second, the complexity of the situation depicted in Example 11 makes it almost impossible to capture the source domain in just one noun. The construction of an adequate source domain required to fully structure the target domain requires the description of a certain situation and the recovery of specific background knowledge (identity of participants, cause-effect relationships, etc.). Advertisements of the same kind as Example 11 constitute mini narratives (Forceville 2009a: 11) rather than the comparison of the promoted product with a positively connoted domain. Third, this advertisement reveals the technique exploited in the promotion of taboo products. Given that social convention dictates that sex-related issues should be avoided (except when the advertisement is deliberately meant to stir the audience's feelings as in *shockvertising*, see Section 4.2.b), advertisers relegate the product to a secondary place in which it is not the centre of the advertising narrative but a cue to resolving the otherwise puzzling message in the advertisement. Advertisers

just need to ensure that audiences will be able to identify a connection between the depicted and the invoked scenario. In turn, consumers will rely on their previous knowledge of the situation represented in order to derive all the attributes ascribed to the product.

6.2.2 Multimodal metaphtonymy

A multimodal metaphtonymy consists in the principled integration of a metonymy in either the source or target domain of a metaphor (Ruiz de Mendoza 2000, 2002), in a process that involves a mode shift. As will be revealed by the quantitative analysis offered in Chapter 7, metaphtonymy is the most frequent pattern of conceptual interaction in advertising. This is so because of the especially situational character of advertising. The metonymy in the source of verbal metaphors has the role of providing an economic point of access to a more complex scenario that will map onto a target situation. Of course, in multimodal advertisements we can encounter more than one metonymic process occurring at the same time since the confluence of modes, and especially the visual component, allows for a greater degree of communicative complexity. For the sake of explanation, and in order to avoid repetition, I will be focusing only on novel variants of multimodal metaphtonymy that have not yet been found in verbal contexts: (a) *parallel metonymic expansion in both metaphorical domains,* (b) *parallel metonymic reduction in both metaphorical domains*, (c) *metaphtonymy scenarios, and* (d) *multiple source-in-target metaphtonymy*.

(a) *Parallel metonymic expansion in both metaphorical domains*

The reader may have noted that Example 1 (discussed at length in Chapter 2 from different analytical perspectives) constitutes, in fact, a case of a multimodal metaphor that accommodates metonymic expansion projections in both the metaphorical source and target domains. For the sake of clarity and for the reader's convenience, I will illustrate below an alternative example built on similar conceptual grounds.

Take Example 12. This billboard advertises an anti-wrinkle facial night cream featuring double the amount of co-enzyme Q10, an anti-ageing agent that supports the energy metabolism of the skin to fight the generation of wrinkles. The billboard displays a very minimalistic visual scenario: an elevated view of an open cream jar over a dark blue background. The top layer of the cream shows two straight parallel marks that are presumably the trace left by two fingers after taking some cream. The advertised product appears in a lower level of salience in the lower right corner of the billboard.

Example 12. Nivea Visage Anti-Wrinkle Q10 Plus Night Cream

It might be argued that the explicit representation of the product informs the viewer of the fact that the advertisement is about an anti-ageing cream. However, the relative lower salience of the product in the scene forces the viewer to find an additional cue to infer that night is the appropriate time of application. Indeed, the non-verbal context proves helpful to trigger this inference: the two straight parallel marks on the top of the round-shaped jar closely resemble a pause button in many music and video players. This button allows users temporarily to halt the actions of the video or song being played. Thus, that this button can stand for the broader domain of machines. The stand-for relationship between the button and the machine is then put in correspondence with the cream and its targeted user. By means of this analogy, the anti-wrinkle cream "pauses" the aging process of a human being in the same way buttons pause a machine (this is, of course, a hyperbolic attribute given that creams containing Q10 do not pause all bodily processes, but rather they delay the creation of wrinkles).

Hence, this simple scenario provides two vantage points (the cream and the pause button) for the activation of the metaphor HUMANS ARE MACHINES. This metaphor allows us to conceive of detailed blueprints for desired changes and leads the consumer to create unrealistic expectations of control, such as the idea that the advertised product can actually prevent a person from getting old (instead of merely minimizing the physical effect of ageing). See Figure 27 for a

schematic representation of the metaphtonymy with parallel metonymic expansion in both domains: A CREAM (FOR A PERSON) IS A PAUSE BUTTON (FOR A MACHINE).

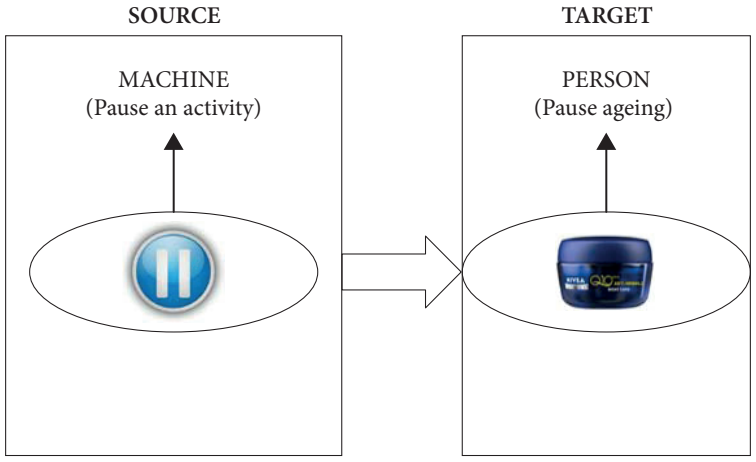


Figure 27. Multimodal metaphtonymy A CREAM (FOR A PERSON) IS A PAUSE BUTTON (FOR A MACHINE) in Example 12

Similarly, the resemblance between the picture of the open white cream jar over a dark blue background and a full moon in the night sky serves as a cognitive shortcut to access the wider domain NIGHT (via domain expansion). A subsequent metonymic reduction process then highlights the feature "night care" or "night use" as a central property of certain creams, which specifies the application time and its regenerative ingredients. This is a case of (multiple-source)-in-target metonymic chain, similar to those surveyed in Chapter 5, Section 5.2.4.

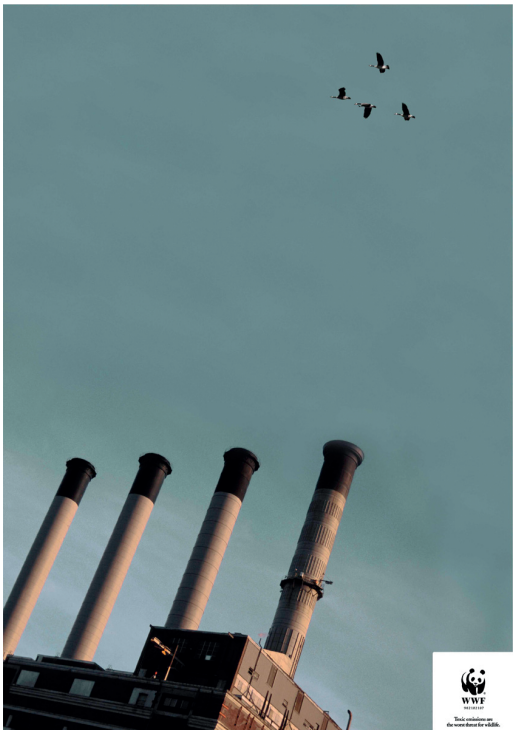
This is, however, not the only inferential route available to interpret this advert. All in all, the consumer can still rely on the information provided by the depicted product in the bottom right corner. What differs from one interpretive path to the other is the amount of figurative language used and the use of images, both elements that are more likely to trigger an emotional response in the viewer. However, this choice ultimately depends on the cognitive effort that the consumer is willing to make.

(b) *Parallel metonymic reduction in both metaphorical domains*

I now turn to address the reverse metaphor-metonymy combination: *simultaneous metonymic reduction in both metaphorical domains*. This interactional pattern involves the highlighting of a specific aspect of both source and target metaphorical domains. Even though the presence of this interactional pattern was quite scarce in

the corpus, it has the effect of evoking a persuasive message that cannot be conveyed explicitly due to prohibition (as was the case of tobacco advertising, see Chapter 5, Example 3) or, as in the case of Example 14 below, because explicit representation could be unintelligible due to the abstraction and/or complexity of the topic.

Example 13 is part of *World Wildlife Fund for Nature's* (WWF) campaigns to fight against air pollution, global warming, and the disappearance of endangered species. WWF is an international non-governmental organisation promoting research and action to preserve the environment. The advertisement under consideration illustrates four factory chimneys and four birds flying in the sky above. The scene is captured from an angle that forces the viewer to make a perception-based mental connection between the chimneys and war cannons aiming at the flying birds. Such an interpretation is reinforced by the text underneath the well-known logo, which reads: "Toxic emissions are the worst threat for wildlife".



Example 13. WWF: Toxic emissions are the worst threat for wildlife

The viewer must make a connection between two realities in order to resolve the incongruence. On the one hand, the consumer should identify the 'factory' frame (visually cued), whose activity produces many toxic gases (mentioned in the text)

that are expelled through their chimneys into the atmosphere. On the other hand, the 'war' frame is brought up by the resemblance between chimneys and cannons (cued by the angle from which the picture is taken) and by the word "threat". The metaphor CHIMNEYS ARE CANNONS would straightforwardly account for the cued similarity of these two domains: indeed, the angle from which this picture is taken makes the viewer think of a weapon targeting a victim.

However, a closer look at the textual part would alert the viewer that further cognitive activity is in order. First, it is not plausible for chimneys to be used to kill birds; and second, the text refers to "toxic emissions" as the real menace for wildlife. Toxic emissions or contaminant gasses are a subdomain of the more encompassing domain CHIMNEY or FACTORY, insofar as it is one of the effects caused by their manufacturing activity. A similar reading holds for the metaphorical source domain. Cannons are not responsible *per se* for killing a victim; the real threat is the impact of a bullet on the target. 'Bullet' is one constituent entity belonging to the more encompassing domain of 'weaponry'. Only after metonymic reduction processes single out the pertinent specific features in both the source and target domains of the metaphor, can the viewer relate toxic emissions and the mortal threat of gunshot wounds, and thus infer that air pollution will eventually cause the asphyxiation and eventual disappearance of wild birds. The reader may find in Figure 28 a schematic illustration of this process.

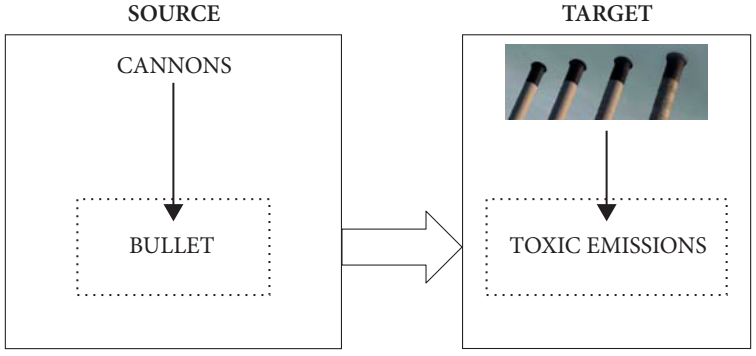


Figure 28. Multimodal metaphtonymy (CHIMNEYS FOR) TOXIC EMISSIONS ARE (CANNONS FOR) BULLETS in Example 13

This example belongs to an advertising strategy known as *shockvertising* (a portmanteau word combining "shock" and "advertising"). This persuasive strategy gives rise to unusual combinations of elements in unexpected scenarios in order to attract audiences to a certain brand or to bring awareness to a certain public service issue,

health issue, or cause.[2] *Shockvertising* has been proven effective in capturing consumers' attention (see Dens and De Pelsmacker 2010; Parry, Jones, Stern, Robinson 2013; Stadler 2010; Ting and de Run 2012), thereby complying with the increasing need for advertising companies to explore alternative means of conveying their messages across a broad spectrum of target audiences.

(c) *Metaphtonymy scenario*

Metaphtonymies can be embedded within larger and more complex meaning units, thus developing what I will call here a *metaphtonymy scenario*. In order to illustrate this interactional pattern, have a close look at Example 14. This advertisement is part of series of advertisements of the yearly M&M's "Candydate" election, a marketing strategy in which consumers vote on their favourite candy colour (blue, yellow, orange, red, or green) for a chance to win a prize. As the reader may see, the imagery and text are reminiscent of traditional political campaigns.[3]

The visual riddle put forward by this advertisement, a candy with human appearance, could initially be resolved by means of the visual metaphor M&Ms ARE PEOPLE. However, personification is insufficient to account for all the expected meaning implications hinted at in this advertisement, inasmuch as it does not add information on the implications of the personified M&M being *green*. The reader should note at this point that the subdomain GREEN provides a straightforward gate of access to the more-encompassing domain NATURE owing to the pervasive presence of chlorophyll in natural environments. Subsequently, advertisers steer the interpretation of the billboard toward the actions of people concerned about the protection and preservation of forests through visual cues (such as depicting the candy chained to a tree). Taking into account that the metonymic chain is elaborating on the domain of PEOPLE, a metonymic reduction process would then single out a central feature of NATURE that is applicable to describing people, i.e. ECOLOGIST ACTIVIST (see Figure 29).

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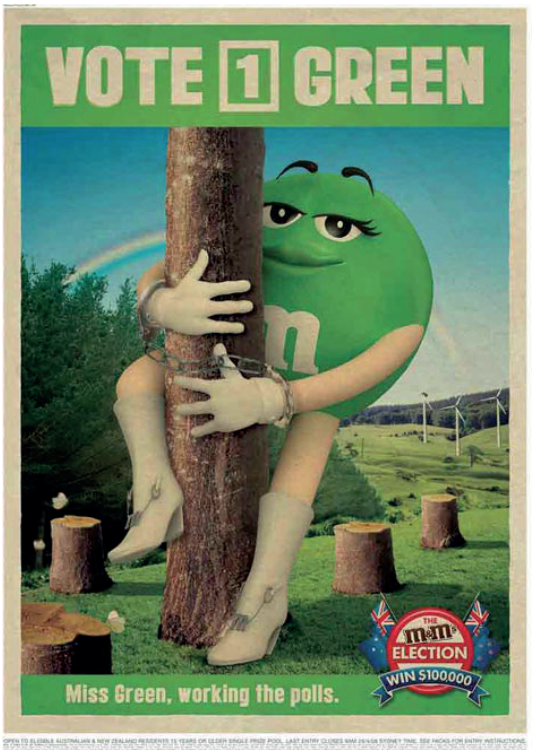
2. Common topics in *shockvertising* are, according to Waller (2004), urging drivers to use their seatbelts, promoting STD prevention, bringing awareness of racism and other injustices, or discouraging smoking among teens.

3. I would like to draw the attention of the reader to the existence of an additional substitution operation: the M&M political candidate is replaced by the M&M thus becoming the "candydate". Blending theorists would also argue that this is a case of conceptual integration, where an M&M is endowed with human attributes that are explicitly depicted (hands, legs, eyes, etc.). In fact, without the integration of human features into the M&M image, the metaphor whereby a piece of candy is seen as a political candidate would be pictorially impossible. Pérez-Sobrino (2014a, b) has already explored the feasibility of combining both conceptual integration networks with metaphoric and metonymic mappings within the realm of music. Finally, note that the compound neologism "candydate" is a formal blend that parallels the pictorial blend.



Example 14. M&M: Vote for Green

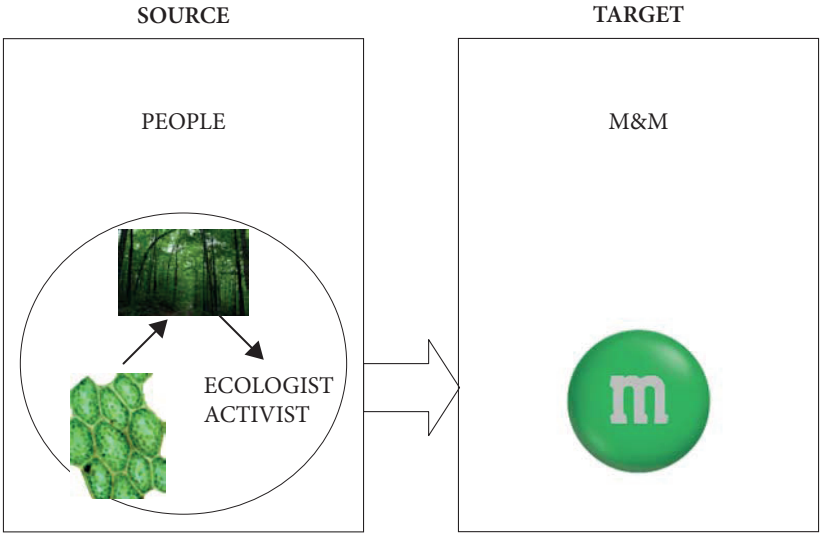


Figure 29. Multimodal metaphtonymy M&M IS (GREEN FOR NATURE FOR) AN ECOLOGIST ACTIVIST in Example 14

Of course, there would be other subdomains of NATURE amenable of highlighting that could define people's nature-friendly attitudes, such as vegetarians, vegans, and naturists. However, one must bear in mind that the words "vote" and the representation of the candy chained to a tree (a recurrent action to avoid or delay the cutting of forests) would further reinforce the prominent role of the subdomain ECOLOGIST ACTIVIST, thus discarding other misguided hypotheses of people being involved with nature.

Furthermore, preserving the natural environment has positive effects on our health, general wellbeing, and human sustainability. Consequently, environmentally concerned people are often well regarded in our society. In this connection, there are additional visual cues that point towards this positive depiction of the product: the rainbow in the background, the butterflies, the smile of the candy, etc.

In 2008, M&M marketers developed a whole strategy to popularise the consumption of their candies by structuring the campaign as a political poll. The connection is all the more pertinent, since there are political parties that prioritise the preservation of the environment over other types of social issues. Consumers voted for their favourite candy as if they were voting for their preferred political candidates. The campaign released advertisements for each candy type that were closely reminiscent of political billboards (See Figure 30 for a summary of the five "Candydates") and profile descriptions of each "Candydate" so that viewers could know more about their personalities, goals, and aims (See Figure 31a, b, c, d, e for a summary). The marketing campaign, much in the same line as political polls, made extensive use of the media (in the form of TV commercials,[4] blogs, and all sort of viral news on the Internet),[5] and even had an online voting system so that consumers could take an active role in the selection of their favourite candy (see Figure 31).

4. Retrieved 20th November 2014: http://www.baalink.org/reggie-case-study/mms%C2%AE-brand-vote-your-favorite-character

5. Retrieved 20th November 2014: http://es.slideshare.net/omgph/mms-vote-win-8835531, http://irishell.blogspot.nl/2011/06/m-candydates-vote-win-campaign.html

Figure 30. Summary of the billboards promoting the five competing "Candydates"

Figure 31a. M&M's voting interface: Vote green

Figure 31b. M&M's voting interface: Vote red

Figure 31c. M&M's voting interface: Vote blue

Figure 31d. M&M's voting interface: Vote yellow

Figure 31e. M&M's voting interface: Vote orange

As can be inferred from the figures displayed above, the depiction of the "Green Candydate" constitutes one of the promotion lines within a wider marketing strategy portraying five candies racing against one another for a prize. The organisation of the internal configuration of the source domain scenario POLITICAL POLL on the basis of political characters, their associated features, and the logic behind political campaigns is consequently mapped *as a whole* onto the advertising campaign, giving rise to the different attributes of the promoted candy. I concur with Musolff (2006: 23ff.) when he asserts that the "basic mappings between the source and target domains, each of them characterised further by specific scenarios [….] provide focal points for conceptualizing the target topic". Therefore, the metaphorical mapping is extended beyond the mere depiction of the "candydate" through metaphtonymy (as discussed in Figure 28 for GREEN M&M IS AN ECOLOGIST ACTIVIST; note here that a similar interactional pattern would characterise the personality of the rest of "candydates") in order to accommodate other mininarratives such as political charts, voting systems, political speeches, and political victory. Accordingly, the target domain M&M COMPETITION counts on its own "candydates", but also on every defining system that characterises a political poll: voting charts, an online voting system, public 'interviewing' of the "candydates" in the media, and a victory in terms of a monetary prize for the voter and a public acknowledgement before the international community of the winning colour in the country. More importantly, as can be seen from the material displayed above, the introduction and description of the "candydates" carries evaluative and attitudinal biases that are related to particular political dispositions and preferences that tilt the balance in favour of one "candydate" over another. See Figure 32 for a

graphic clarification of the metaphtonymy scenario AN M&M COMPETITION IS A POLITICAL POLL.

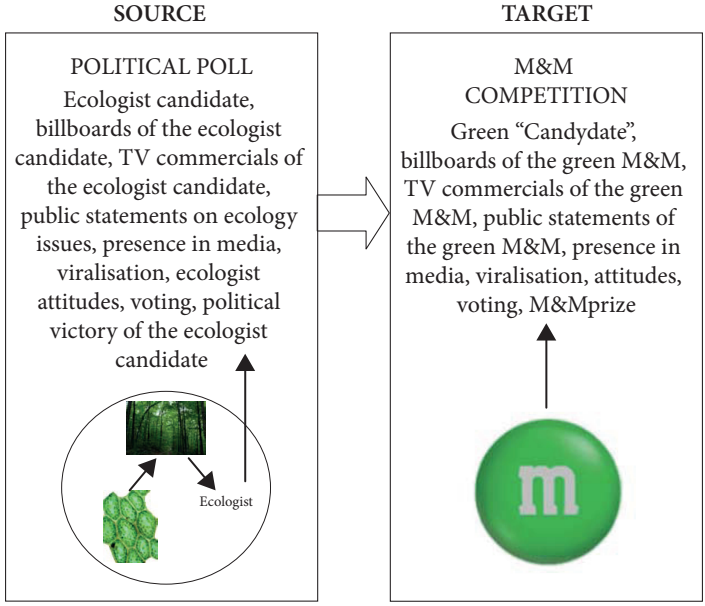


Figure 32. Multimodal metaphtonymy scenario M&M COMPETITION IS POLITICAL POLL in Example 14

(d) *(Multiple-source)-in-target metaphtonymy*

Before moving on to the characterisation of the next metaphorical complex, metaphorical amalgams, I will briefly refer to another variant of metaphtonymy that had a significant presence in the corpus. *(Multiple-source)-in-target metaphtonymy*, as the name indicates, is based upon the integration of several metonymic subdomains that provide simultaneous access to the same matrix domain, which subsequently acts as a metaphorical source or target domain. This conceptual mechanism involves at least two modes when found in advertising. In the ensuing case study, Example 15, I discuss the effects of a (multiple-source)-in-target metonymy within a metaphorical source. The example under scrutiny advertises a Brazilian radio station aimed at denouncing illegal road bumps. What is interesting in this advertisement is that the pictorial part of the advertisement does not portray a speed bump (nor a car) on a road. By contrast, the viewer is shown a sequence of three pictures of the Beatles and a fourth picture of the Sex Pistols' front man Johnny Rotten placed slightly above the other pictures.

Example 15. Mato Grosso radio station

As is usual in most advertisements, the information provided by the textual part in the lower right corner informs us on the nature of the target domain. Since the promoted radio station is aimed at denouncing illegal road bumps, we can infer that the advertisement is precisely structuring these alterations in the road height in terms of a dangerous or hazardous traffic obstacle rather than as a traffic-calming device. In fact, even though speed bumps are effective to keep vehicle speed down, their use is sometimes controversial as they can cause noise, possible vehicle damage, or hazards for motorcyclists and bicyclists if not clearly visible.

The information provided by the pictorial part provides us with a twofold source domain. On the one hand, the difference in the alignment of the pictures metaphorically corresponds, via perceptual similarity, with height differences on the road. The higher picture thus cues the interpretation of the advertisement in terms of an illegal road bump that must be denounced in the promoted radio station. More interesting is the second part of the source domain: the content of the pictures. First of all, the represented pictures are metonymic for the band (source-in-target), which is metonymic for its music (target-in-source), which is in turn metonymic for its essential characteristics in terms of melody, rhythm, etc. The viewer is thus presented with two multimodal target-in-source metonymic chains: JOHNNY ROTTEN FOR SEX PISTOLS FOR PUNK, and LENNON, McCARTNEY, STARR & HARRISON FOR BEATLES FOR POP-ROCK. The difference in the level of representation for the Beatles and the Sex Pistols (lower and higher, correspondingly) matches with

the pitch height that characterises their respective music: whereas Beatles preferred smooth, rhythmic and highly memorable rock melodies, the Sex Pistols are characterised by a more contrastive and aggressive punk style. Therefore, the vertical deflection to slow motor-vehicle traffic (here visually cued by the misalignment of the third picture) is here metaphorically structured in terms of pitch height (visually cued by two rival musical bands displayed at different heights). As the reader may have noticed, this apparent metaphtonymy counts on more than one route of access. In the metaphorical source domain, the position of the picture of the Beatles and of Johnny Rotten, plus the knowledge the viewer has of their characteristic music styles (as low or high-pitched,[6] and calm or aggressive, respectively), allows for a characterisation of the metaphorical source domain in terms of the binomial high and low pitch. Subsequently, these antagonist elements are metaphorically mapped onto a road, thus giving rise to the idea of physical height difference, or speed bump. See Figure 33 for a schematisation.

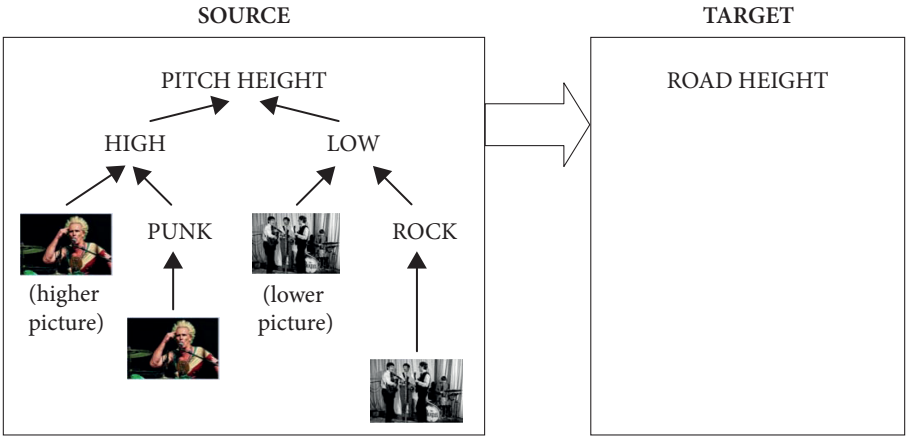


Figure 33. Multimodal (multiple-source)-in-target metaphtonymy ROAD HEIGHT IS (HIGH&LOW for) PITCH HEIGHT in Example 15

The allusion of "illegality" is probably made salient by the idiosyncrasy of the Sex Pistols as the first punk band: they deliberately shocked people with their violent behaviour, swearing, and lack of respect for the British royal family. It strongly

6. Interestingly, there is an additional underlying metaphor: MUSICAL PITCH IS PHYSICAL HEIGHT. People think of pitch intensity in terms of "high" and "low" based on the experiential correlation between quantity and height, which is metaphorical. This metaphor is so deeply ingrained in our conceptual systems that real height (as with a bump) can be interpreted in terms of metaphorical height (actually intensity). For a detailed account of this metaphor, see Pérez-Sobrino (2014a).

contrasts with the unproblematic and charming attitude of the Beatles towards their fans. It could be additionally argued that the effect the music has on the listener is in turn mapped onto the feeling the driver experiences when hitting an illegal bump. In this reading, the road is metaphorically understood as a Beatles song (metonymic of the picture of The Beatles as a band), insofar as it allows for a smooth, rhythmic and easy progression of melodies and lyrics. The sudden alteration of road height is in turn seen on the basis of the correspondence with Sex Pistol's punk songs (metonymically accessed on the basis of Johnny Rotten's picture) whose impacting and aggressive style is accordingly mapped onto the physical pain and shock that the car passengers may experience.

The reader should appreciate at this point three interesting observations arising from this case study. First, it relies on the audial (pitch height) to structure the visual (road height). This conceptual path is all the more unconventional, given that acoustics are much less accessible than any shape we could recognise visually[7] (see Pérez-Sobrino 2014a,b). However, the encyclopaedic knowledge the viewer has of the 20th century musical movements may be more prominent that their awareness of the existence and nature of illegal speed bumps, thereby rendering the choice of source domain a relevant one. I would also like to consider the reverse case: the conventionalised graphic representation of sound in terms of waves coincides with the curved shape of road bumps, thus making the music (through its visual representation in the form of waves) a perfect candidate to structure road bumps. In fact, the contrasting style of the Sex Pistols would give rise to higher peaks in the shape of a wave representation, making it a more suitable visual match for the road bump than the Beatles.

Second, it gives pride of place to primary metaphors in the visual realm. The advertisement not only describes what a speed bump looks like, but also – and more importantly – how it feels by drawing an experiential conflation between listening to music and hitting a poorly designed speed bump. This is the first multimodal correlation metaphor analysed in this book; I will offer additional examples in the analysis of single-source and multiple metaphoric amalgams (Sections 6.2.3 and 6.2.4).

Third, the conceptual pattern discussed above presents a fruitful blend between metaphtonymy, multiple source-in-target metonymies, and metonymic chains. The cooperation of these three conceptual complexes evidences the high productivity of multimodal networks of meaning construction, while pointing to the need not to

7. Visual perception is the source of much more metaphorical activity than auditory perception. This is an issue that has been investigated by several scholars (including Ibarretxe 2008). The reason behind this form of cognitive behaviour is that we give more importance to visual than to auditory perception in order to gather information about the world.

characterise such complexes as compartmentalised categories. In turn, the potential of these interactional patterns to overlap proves the continuum view more adequate to account for the fuzzy boundaries between each of the complex combinations discussed above.

6.2.3 Multimodal single-source metaphoric amalgam

After a thorough examination of the different interactional possibilities between metaphor and metonymy, I now turn to describe metaphor-metaphor combinations. Amalgamation as a conceptual operation must not be confused with cross-domain correspondence: it simply refers to the conceptual enrichment stemming from the incorporation of one metaphor into another, contrary to the partial matching between source and target domains in metaphorical mappings.[8]

The simplest case is multimodal single-source metaphoric amalgams. This interactional pattern consists in the incorporation of a multimodal metaphor within the source-target structure of another metaphor, thereby giving rise to a richer version of the latter. For the sake of clarity, I will distinguish between "donor metaphors", as metaphors that provide conceptual structure, and "receptor metaphors", as metaphors that inherit material from donor metaphors through an amalgamation process, thereby developing in complexity.

I will begin this section with the discussion of a pure example of multimodal single source metaphoric amalgam (that is, without the interaction of other additional metaphor or metonymy complexes). The advertisement below (Example 16) shows the picture of a solar eclipse that reminds the viewer of a ring, thereby paving the way to the choice of "Eclipse" for the promoted collection of jewellery.

The use of the notion of light to structure other conceptual domains (in this case, jewellery, as hinted by the resemblance between the ring of light irradiating beyond the obscured part during a sun eclipse and the circular shape of a ring) is deeply rooted in our everyday experience. Light tends to conflate with situations in which we have control, because we can see what is ahead, we have a better knowledge of our surroundings, can better control what we and others do, and in consequence, are better prepared to avoid dangers. In Lakoff and Johnson (1980: 58) it is argued that the systematic correlates between our emotions (like happiness) and our sensory-motor experiences (like experiencing daylight) form the basis of metaphorical concepts that allow us to conceptualise our emotions in more sharply

8. To that end, I have followed different graphic conventions: white thick arrows keep referring to metaphorical mappings, whereas the use of interrupted lines point towards an amalgamation process.

Example 16. Urzúa jewellery

defined terms and also to relate them to other concepts having to do with general well-being. This is why the notion of LIGHT is suitable to map onto positively qualified events, such as happiness ("a radiant smile"), knowledge ("a brilliant remark") control or power ("white collar job"), and ultimately, goodness ("we are seeing the light at the end of the tunnel").

The identification of the manufacturer in the upper right corner of the advertisement renders the connection between the eclipse and the ring a straightforward one. Our encyclopaedic knowledge of solar eclipses guarantees a number of correspondences that can be drawn to cognitively characterise the ring as a shiny and rare accessory. Note that the few rays of light that shine on the moon shadow during a solar eclipse irradiate with such strength that they cannot be looked at without protective glasses. Besides all the positive attributes ascribed to any light metaphor, the solar eclipse additionally brings in the notions of higher intensity and scarcity. The selection of the eclipse to conceptually structure and name the product highlights the valuable and sophisticated nature of the piece of jewellery that is being advertised. It may also convey the idea that the quality of the jewellery stands out in such a way that it overshadows (i.e. it "eclipses") its competitors (that is, it renders them negligible, and thus, virtually invisible to the eyes of the prospective consumer).

I thus argue that, in order to account for all the meaning potential of light metaphors in this advertisement, the initial metaphor A RING IS AN ECLIPSE OF THE SUN (receptor metaphor) must be enriched with the conceptual structure provided by GOOD IS LIGHT (donor metaphor). The characterisation in terms of receptor and donor metaphors ties up with the criterion established in Chapter 4 (p. 88), which has been formulated to distinguish source from target domains: "the

product tends to coincide with the metaphorical target domain onto which attributes borrowed from a desirable source domain are mapped".[9] The single-source metaphoric amalgamation of the two metaphors involved in this advertisement produces an enriched version of the receptor metaphor that could be labelled A (GOOD) RING IS AN ECLIPSE (OF THE SUN). As the reader may observe, the enriched version allows the ring to inherit the positive attributes that go beyond the scope of those borrowed from the domain of solar eclipses.

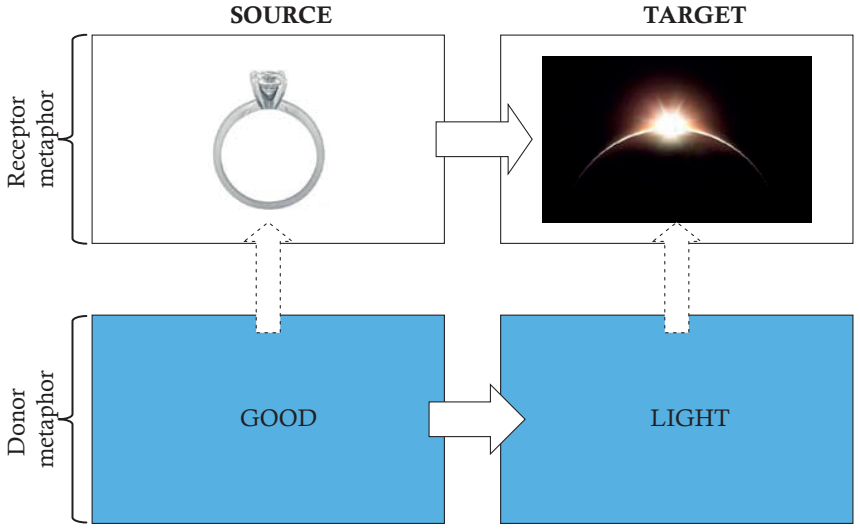
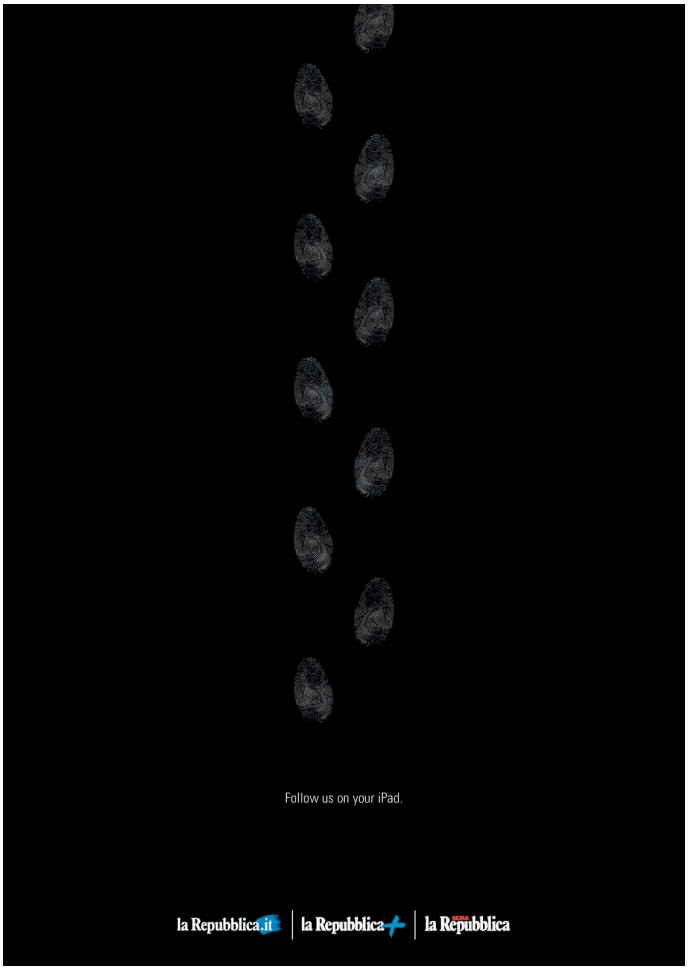


Figure 34. Multimodal single source metaphoric amalgam A (GOOD) RING IS AN ECLIPSE (OF THE SUN) in Example 16

Let me now consider an advertisement that combines several conceptual complexes elaborating on the persuasive message in different but complementary ways. In Example 17, the Italian newspaper *La Republicca* encourages its readers to read the news online on their tablets. As will be shown below, the economic use of graphic elements in this example by no means lessens the conceptual burden of the persuasive message. On the contrary, the minimalistic design of the advertisement puts the brunt of the processing burden on the consumers, who are to engage in a deeper interpretive task in order to derive all the meaning implications.

9. This will be the criterion followed to typify receptor metaphors involved in complex cases of metaphoric-metaphor interaction in the remainder of the chapter.



Example 17. La Republicca online: Follow us on your iPad

The first assumption that the viewer might draw is that the meaning of the fingerprints is to be deciphered in terms of the textual part "Follow us in your iPad". In fact, the way the fingerprints are displayed closely resembles a series of footsteps on the ground. That would lend plausibility to the hypothesis that the black background is meant to be an iPad, given that it is by swiping and tapping that we uncover new content in the screen. This interpretation involves the interaction of two metaphors. First, the metaphor NEWS IS A LOCATION (originating in IDEAS ARE LOCATIONS) allows us to structure the news items shown in the screen in terms of milestones in a landscape. This association is particularly fortunate for the case of electronic tablets, where online content actually coincides with specific spots on the screen.

The reader should be aware that NEWS IS A LOCATION, in isolation, only accounts for the understanding of the pieces of news in terms of physical spots in a paper sheet or screen, but does not provide correspondences for the way we access, interact, and ultimately understand contents displayed on a tablet. Therefore, the second metaphor READING AN IPAD IS EXPLORING A LANDSCAPE (built on the premises of UNDERSTANDING AN IDEA IS PERCEPTUALLY EXPLORING AN OBJECT) incorporates NEWS IS A LOCATION in order to provide conceptual structure to the way we interact with the milestones in the landscape, i.e. how we read the news on our iPads.

Note here that there is a mediated route of access to the metaphor READING AN IPAD IS EXPLORING A LANDSCAPE. The fingerprints provide a conceptual shortcut to the act of swiping/tapping (as traces of both the source, path, and end-point of the action of swiping); in turn, swiping stands for reading on tablets, since this is the way to acquire new information once we have read the contents displayed on the screen. A similar metonymic chain is at work to develop the metaphorical source domain. Given that swiping is usually random and multidirectional, the fact that the fingerprints are aligned suggests that they are meant to be understood in terms of another entity, such as footsteps left on the ground. This interpretation is further reinforced by the inclusion of the sentence "Follow us", which refers to the imaginary traveller/reader of the newspaper. In this case, fingerprints do not just stand for the action of swiping, but could also refer metonymically to the reader/traveller who walks along a path someone has created before. Footsteps straightforwardly stand for the action of walking, which gives access to the action of exploring a certain area. Figure 35 provides a schematic representation of the incorporation of the metaphtonymy with simultaneous metonymic chains in both the metaphoric source and target domains (FINGERPRINTS FOR SWIPING FOR) READING FROM AN IPAD IS (FOOTSTEPS FOR WALKING FOR) EXPLORING A LANDSCAPE within the structure of the metaphor NEWS IS A LOCATION. The amalgamation is necessary to structure the causer of motion (accessed through footsteps) as the reader (accessed through the fingerprints), the cause of motion as swiping (accessed through the fingerprints), the object of caused motion as the news (textual), the landscape as the iPad (cued textually and also visually through the fingerprints), and ultimately the perceptual exploration of an object as reading news on an iPad (prompted by both textual and visual elements).

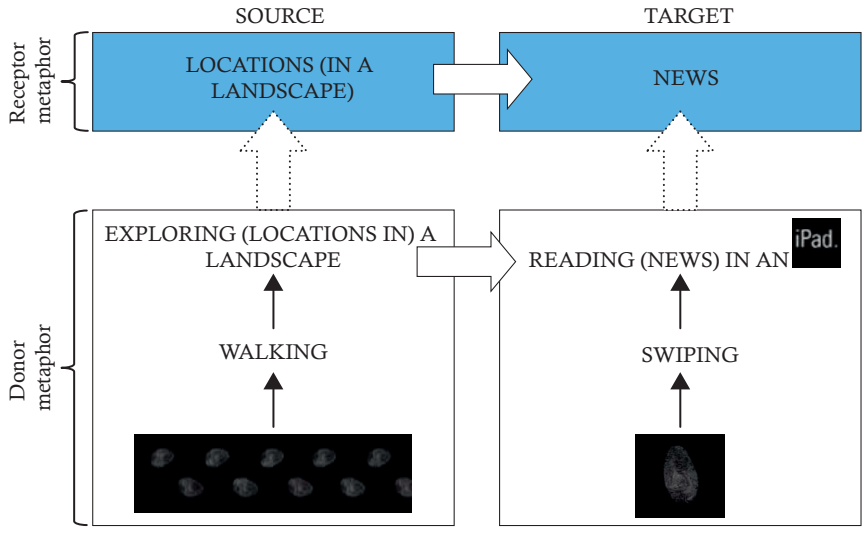
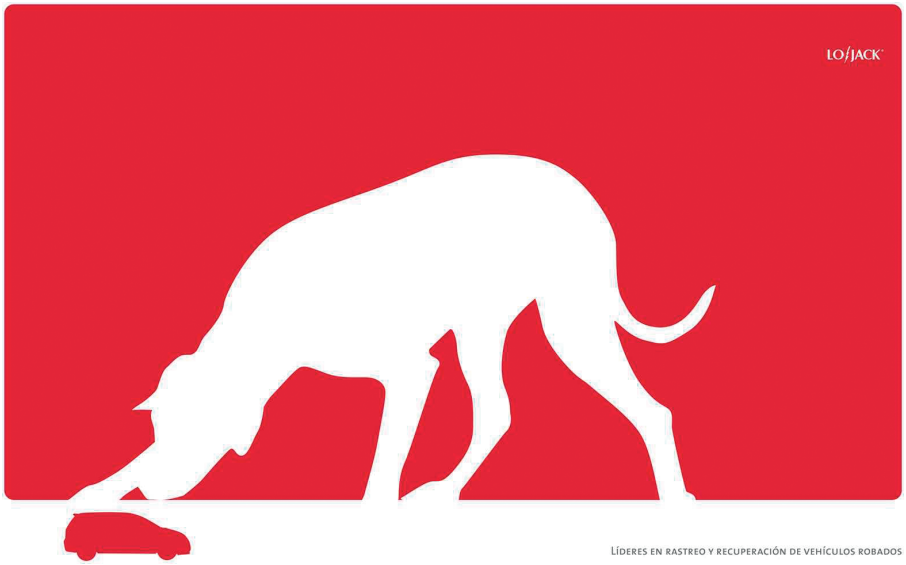


Figure 35. Multimodal single-source metaphoric amalgam (including a metaphtonymy with simultaneous metonymic chains) (FINGERPRINTS FOR SWIPING FOR) READING NEWS IN AN IPAD IS (FOOTSTEPS FOR WALKING FOR) EXPLORING LOCATIONS IN A LANDSCAPE in Example 17

6.2.4 Multimodal multiple-source/target metaphoric amalgam

This interactional pattern originates from and develops the notion of double-source metaphoric amalgams in the study of verbal examples (Ruiz de Mendoza and Pérez-Hernández 2011). Originally, they refer to the mapping of two different source domains onto the same target domain, thereby accounting for all the meaning implications required by the structure of the "shared" target domain. The first novelty that arises in the application of this metaphoric complex to advertising is that, instead of having two independent source domains simultaneously mapped onto a single target domain, two different metaphors (with its source and target) can be assembled into one single metaphorical complex. Similar to the case of single-source metaphoric amalgams, the source-target layout of a metaphor is incorporated into another, thereby conceptually enriching it.

For the sake of the reader's convenience, I will first illustrate the notion of double source metaphoric amalgams (relying on the notions of "donor" and "receptor" metaphors) in Example 18, an advertisement of a tracking and recovering service for stolen cars. The main picture shows a big police hound smelling a small car. The picture is captioned by the text: "Leaders in stolen cars' track and recovery services".



Example 18. LoJack. Leaders in stolen cars track and recovery services

The main metaphor operating in this advertisement is A CAR TRACKING COMPANY IS A HOUND,[10] a specification of the more general metaphor PEOPLE ARE ANIMALS. This metaphor prompts the connection between a central behavioural feature of hounds (cued visually) and the company (referred to through the textual information in the upper and lower right corners). The cross-domain correspondence thus maps these dogs' refined sense of smell and their successful prey-hunting skills to a company specialising in the search for information to track and find stolen cars.[11]

However, note that the visual part of the advertisement provides us with additional information that complements the textual part. The disproportionate size of

10. Even though it is not represented explicitly in the billboard, it makes sense to think that the figure of the dog is meant to imply a police hound, given that LoJack is a company that tracks stolen cars.

11. Certainly the advert is focusing on the good service provided by the company, which is as good at tracking stolen cars as a hound at tracking preys (metaphor), but it also allows for a metonymic mapping that allows this characterisation for the whole company. I would like to thank Sarah Turner for bringing up a complementary analysis in which the single hound represents the entire company in much the same way as a single representative can metonymically stand for the whole as in "Blair and Bush went to war in Iraq despite South Africa's WMD assurances, book states" (https://www.theguardian.com/world/2015/nov/30/blair-and-bush-went-to-war-in-iraq-despite-south-africas-wmd-assurances, retrieved on 29th December 2016).

the hound with respect to the car leads us to think that the animal can easily smell and track its prey, and will probably be faster and stronger in the case of an eventual chase. Additionally, a big hound stands out over other dogs, and is therefore more likely to be spotted by everyone in need of tracking services. The primary metaphor IMPORTANT IS BIG highlights the difference in size of the hound over its prey, thereby positively qualifying the advertised service. When incorporated into the previous metaphor A CAR TRACKING COMPANY IS A POLICE HOUND, the way the giant hound has dominance over its prey is brought forward to characterise the company as a notable and efficient car tracking and recovery service. Additionally, the graphic choice of displaying the hound over the car (instead of being situated in the lower right corner of the billboard, right after the car) activates the second primary metaphor: CONTROL IS UP. Such a choice highlights the notion of control and power that the police hound has over its prey. The incorporation of this second metaphor is crucial to discard undesired interpretations such as the implication that the company is always a few steps behind car burglars, and primes the vantage point that company is effective at recovering stolen cars. See Figure 36 for a graphic overview of the structure of the double source metaphoric amalgam AN IMPORTANT & POWERFUL CAR TRACKING COMPANY IS A BIG POLICE HOUND LOOMING OVER ITS PREY.

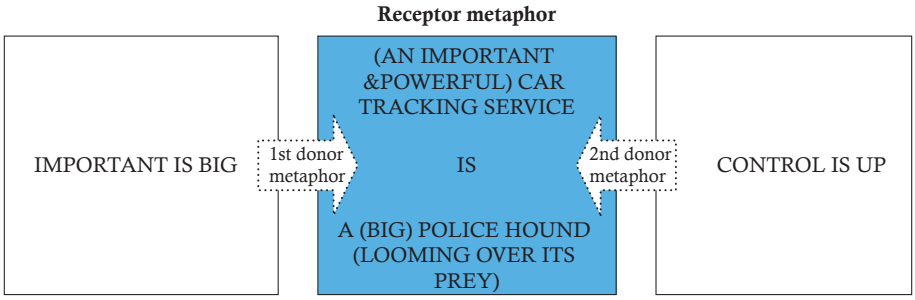
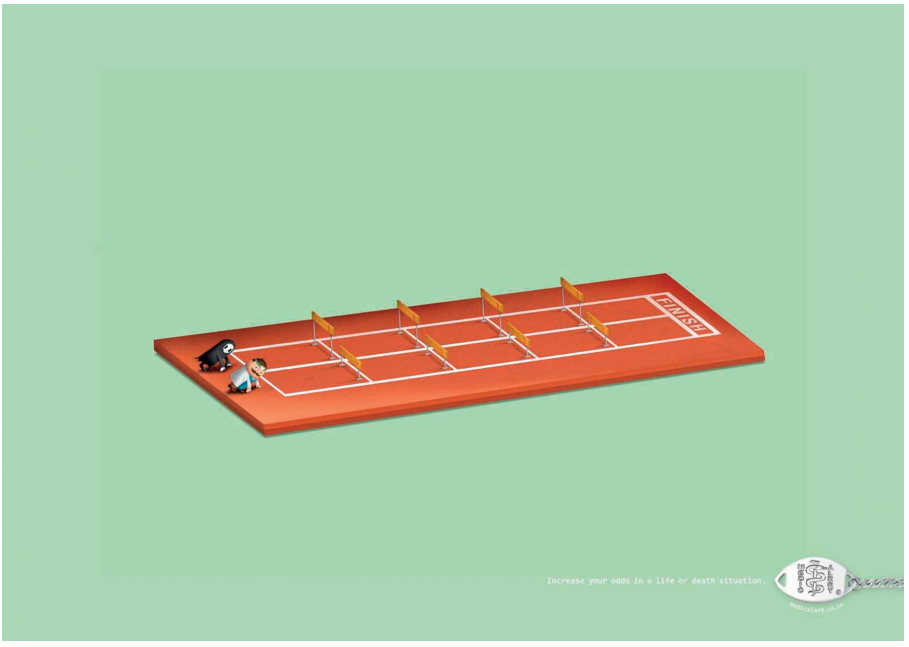


Figure 36. Multimodal double-source metaphoric amalgam IMPORTANT CAR TRACKING COMPANY IS A BIG POLICE HOUND LOOMING OVER ITS PREY in Example 18

Analysis of the multimodal data indicated that amalgamation is not restricted to two donor metaphors mapping onto the same receptor metaphor. I have found examples involving up to three donor metaphors, as it is the case of *multiple source-metaphoric amalgams* (following the logic of the labelling provided in Ruiz de Mendoza and Pérez-Hernández 2011). Consider Example 19. Medic Alert is a South African health insurance company that manages comprehensive personal health information in order to connect and share critical medical information

between patients, providers and first responders. In the billboard under consideration, a doctor and the Grim Reaper are about to engage in a hurdles competition. The hurdles are lower in the doctor's lane, thereby implying that the doctor will most likely win the race. In the text we read: "Increase your odds in a life or death situation".



Example 19. Medic Alert: Increase your odds in a life or death situation

Swiftness is one of the crucial competitive advantages of any health insurance company, and thus it is no coincidence that Medic Alert marketers have chosen a race to structure the representation of the services that they offer. The metaphor TREATING A DISEASE IS A RACE (visually cued by the two athletics lanes and hurdles) help us to see dealing with a disease in terms of a path with a particular focus on the end-point. The scenario depicted by the visual part is, however, much richer than what this metaphor can account for. There are (1) two competitors that are not regular athletes, (2) obstacles of different heights that must be overcome by the competitors in the least amount of time, and (3) a prize consisting in saving a patient's life in a life or death situation. Let us discuss each of these meaning implications in more detail.

First, the depiction of a doctor and the Grim Reaper respectively grant access, through a metonymic expansion process, to the more general metaphor A LIFE

OR DEATH SITUATION IS A ONE-ON-ONE PHYSICAL COMPETITION. The Grim Reaper and the doctor, the opposing participants in the hurdles race, would stand for the death and life of the patient, respectively.

Second, the fact that advertisers chose a hurdle race activates two complementary metaphors: PROGRESS IS FORWARD MOTION and OBSTACLES TO ACTION ARE OBSTACLES TO MOTION. Whereas the former highlights the necessity to react in a short time span in critical situations, the latter places emphasis on the difficulties that may obstruct the smooth development of the race, or in this case, the successful treatment of the patient's disease (in a multimodal application of the metaphor). Nevertheless, lower hurdles on the doctor's side tip the balance in favour of life winning over death as the outcome of the medical treatment. As indicated by the text "Increase your odds in a life or death situation", the lower hurdles are the result of the services paid by the advertised company, such as putting the patient into contact with an appropriate doctor and providing the hospital with the patient's medical records in a short period of time.

Third, the lower the hurdles, the more likely for the doctor to reach the finish line first and thus win the race. Much in the same way, saving a patient's life is usually a matter of taking action in a short period of time; a late decision would unfortunately result in the death of the patient (and hence, the victory of the Grim Reaper). As an insurance company, the sooner this company provides critical medical information about patients to providers and first responders (here visually structured by the lowering of the hurdles' height), the greater the chance for the patient to be treated effectively. Therefore, the experiential conflation between the victory and the minimum time spent in the race gives rise to the metaphor TIME IS A VALUABLE RESOURCE (originating in TIME IS MONEY), in the sense that a good use of time (i.e. maximizing the relationship between time spent and positive development of the patient's disease) is precious in this context.

In sum, the integration of the three donor metaphors mentioned above (A LIFE OR DEATH SITUATION IS A ONE-ON-ONE PHYSICAL COMPETITION, PROGRESS IS FORWARD MOTION / OBSTACLES TO ACTION ARE OBSTACLES TO MOTION and TIME IS A VALUABLE RESOURCE) into the receptor metaphor TREATING A DISEASE IS A RACE results in an enriched version of the latter metaphor in which the contestants (life and death) compete in a hurdles race in which the smooth or hindered development respectively correspond to a situation in which the patient uses or does not use the services offered by Medic Alert, and in which the key to winning is in based on swiftness in both cases. See Figure 37 for this triple-source metaphoric amalgam.

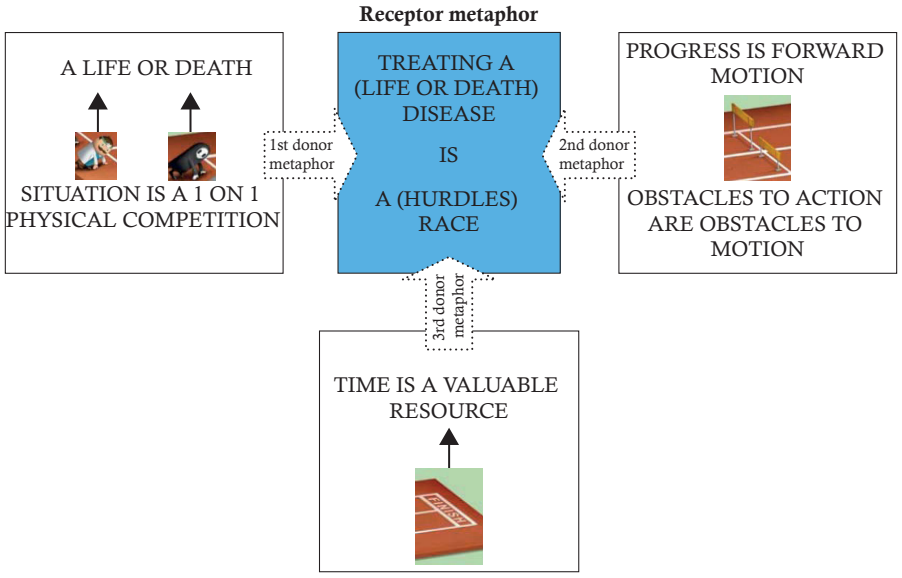
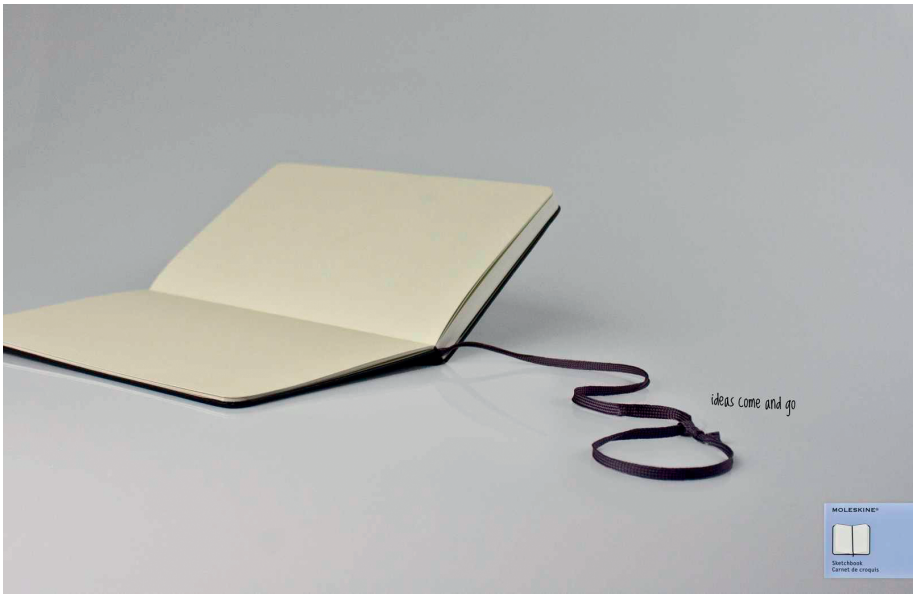


Figure 37. Multimodal triple-source metaphoric amalgam in TREATING A (LIFE OR DEATH) DISEASE IS A (HURDLES) RACE in Example 19

Recall here that the inclusion of a third donor metaphor develops the original notion of double-source metaphoric amalgam by taking into account the possibility of having more than two metaphors mapping simultaneously onto the same receptor metaphor. However, triple-source metaphoric amalgams are not the only novelty found in the application of conceptual patterns of interaction from verbal to non-verbal contexts.

One might wonder, in the light of the dynamic and flexible metaphor-metonymy combinations surveyed earlier, whether it would be possible to employ the reverse process, i.e. having one donor metaphor being economically mapped onto various receptor metaphors at the same time. Indeed, I have retrieved one example from the corpus (Example 20) where one donor metaphor is economically incorporated into two receptor metaphors. *Double-target metaphoric amalgams* are exclusive to multimodal environments (at least so far), and still remain to be observed in monomodal verbal use.

Example 20 shows a blank open notebook connected to a ribbon bookmark in the shape of a lasso to capture or catch animals. The interpretation of the notebook as a product in which we can write important things we want to remember necessitates the interaction of two metaphors: IDEAS ARE OBJECTS, which helps us to provide physical structure to the abstract nature of mental events, and A BOOK IS A CONTAINER, which conveys the way in which the product interacts



Example 20. Moleskine: Ideas come and go

with the idea we write down. Once an idea is written down, it can be consulted at any time thereby becoming harder to forget. Yet, it is clear that the advertisement does not conceptualise ideas as static objects that can be easily transferred from our thoughts to the book in question. The visual depiction of the lasso, alongside the verbal reference "ideas come and go" prompts the understanding of ideas as wild animals that are sometimes reluctant to be caught or enclosed. IDEAS ARE (MOVING) OBJECTS cognitively characterises events in which the human mind cannot control the storage and development of thought, as reflected in expressions such as "it escaped my grasp", or "it went over my head".

The lasso provides a point of access to develop a broader scenario in which a wild animal is captured. This metonymic expansion develops a source domain to the extent required to structure someone monitoring the capability of motion of the captured animal. This situation is in turn conceptually connected to our dominance over a certain unstable state of affairs. Once the gap between the depicted lasso and the metaphor CONTROL OVER ACTION IS CONTROL OVER MOTION has been bridged, the initial donor metaphor is ready to be incorporated into this receptor metaphor. As a result, the advertised product is seen as specially designed to contain ideas we need to remember. Therefore, the subsumption of IDEAS ARE MOVING OBJECTS into CONTROL OVER ACTION IS CONTROL OVER MOTION triggers an enriched version of the receptor metaphor in terms

of (NOT) FORGETTING IS (NOT) LOSING that properly accounts for the idea of writing and bookmarking notes so that they cannot be forgotten (or, in terms of the advertisement, "gone"). See Figure 38 for a schematisation.

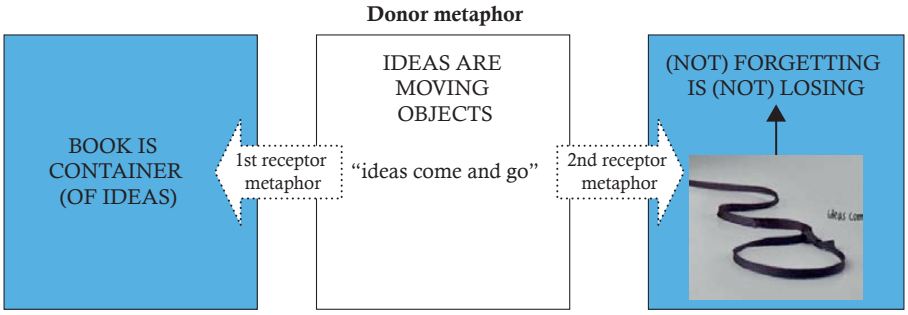


Figure 38. Multimodal double-target metaphoric amalgam derived from IDEAS ARE MOVING OBJECTS in Example 20

The simultaneous mapping of a donor metaphor onto more than one receptor metaphor enables the economic, yet productive, use of the elements displayed in this advertisement. This interactional pattern has, however, not yet been addressed in the verbal realm. I hope that this discussion will shed new light on the potentiality of metaphor and metonymy to interact in new ways, thus accounting for a new range of highly creative meaning-making processes.

6.2.5 Multimodal metaphoric chain

I will now address the most complex interactional pattern discussed in this book, multimodal metaphoric chains. In metaphoric chains, the target domain of a given metaphor acts as source domain for a subsequent metaphorical mapping. As argued in Chapter 3, metaphorical chains are qualitatively more complex than amalgams. Conceptual complexity is envisioned as a result of two factors: the number of domains involved and the nature of the mappings. In principle, both metaphoric amalgams and chains can have multiple metaphorical domains (as shown above, amalgams may involve up to four metaphors in interaction). However, there is a difference in terms of the characteristics of the cross-domain mapping present in each interactional pattern. In amalgams, there is no logical order to the cross-domain mappings: they may take place in any order without hindering the final interpretation. In fact, even a partial understanding of the amalgam would yield an incomplete yet still valid interpretation. By contrast, metaphoric chains involve (at least) two cross-domain mappings that are realised one after another (the first

being a pre-requisite for the second to take place, and so on). Unlike amalgams, a metaphoric chain must be processed completely for the message to make full sense. Nevertheless, these observations are purely theoretical, and should be tested empirically in order to determine whether metaphorical chains actually take longer to process than amalgams.

I will illustrate the characteristics of metaphoric chains with the analysis of Example 21. This billboard advertises Boddingtons Brewery, a regional brewery in Manchester (UK). Boddingtons bitter beer is best known for containing a widget, a device placed in a bottle or a can to manage the characteristics of the beer's foam, thereby giving it a creamy draught-style head. The advertisement under consideration (which belongs to a series of similar billboards) shows a pint of Boddington's with quiff-shaped beer foam. A comb and the text "Boddingtons, the cream of Manchester", accompany the pint.

Example 21. Boddingtons: The cream of Manchester

This billboard poses a conceptual challenge in which the viewer must figure out the relationship between the advertised product (Boddingtons beer), the depicted quiff, and the mention of the product being the cream of Manchester. If we assume that the beer occupies the place of the final metaphorical target domain (onto which all the implications derived from the previous metaphorical mappings are mapped), it is still necessary to determine the role played by the quiff and the cream in this equation (as the first and/or second metaphorical source domains in the chain).

Let us begin with the analysis of the quiff, which is the most salient part in this advertisement (the cream does not stand out as much in this case given that it is reminiscent of the beer foam). The quiff is probably the most defining trait of classic rock and roll musicians of the 50's and 60's, such as Elvis Presley.[12] The quiff would thus grant an advantageous cognitive access to Elvis (or similar celebrities). The metonymy QUIFF FOR ELVIS provides the viewer with a suitable metaphorical source domain to further structure Boddingtons as a product with a distinct, vintage, and authentic flavour that characterises high-quality beers.

In turn, the textual part draws attention to the cream of the milk, a dairy product that is composed of the higher-butterfat layer skimmed from the top of milk and that is the base of pastry-making. In fact, the standardised French expression "la crème de la crème" ("the cream of the crop") refers to the very best people or things in a group.

Once we infer that the cream stands for the best part of the milk, and that the quiff refers to the most salient feature of a great singer like Elvis, the series of analogies is ready to be triggered: the cream is to the milk as the quiff is to Elvis, which is then cognitively exploited to parallel the relationship between the foam and the advertised beer. As a result, the metaphtonymy (QUIFF FOR) ELVIS IS (CREAM FOR) MILK, when mapped onto the advertised product, allows the viewer to infer that the foam is the most delicious part of a high quality beer, which is why the product stands out in the market over its competitors. See Figure 39 for a schematisation of the metaphoric chain BODDINGTONS IS ELVIS IS CREAM.

The reader might wonder why the metaphoric chain unfolds in this order. An alternative possibility would be that Elvis is the first source domain that provides the cream with the implication of being the best part of the milk. Although plausible, I would argue that our knowledge of Elvis is more entrenched Western societies than

12. Depending on the viewer's background and interests, other celebrities may gain prominence through the allusion to the quiff, for example the actor James Dean. In this case, the analysis still applies with a slight change from the musical domain to the film domain. Both Elvis and James Dean are arguably distinguishable exponents in their own fields of the classic, authentic, and high-quality cultural products that defined the second half of the 20th century.

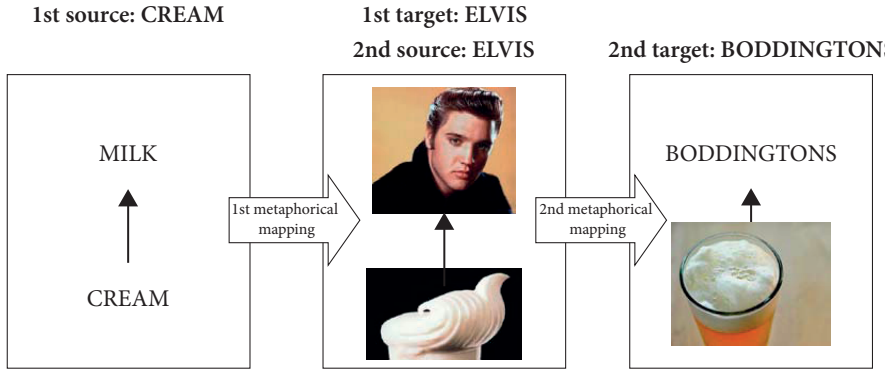


Figure 39. Multimodal metaphtonymic chain (FOAM FOR) BODDINGTONS IS (QUIFF FOR) ELVIS QUIFF IS (CREAM FOR) MILK in Example 21

in Eastern ones,[13] whereas the idea of the cream as the sweetest part of the milk is present in both cultural backgrounds. The greater shared knowledge thus qualifies the cream as a suitable domain to reason about a more culturally dependent domain, Elvis, as a high-quality lyricist (rather than the other way round).

6.3 Conclusions

Chapters 5 and 6 have shed new light on the conceptual complexity underlying printed advertising. In this book, conceptual complexity is based on the combination of conceptual operations of a similar kind (for the purposes of this work, metaphor and metonymy), although I have sketched alternative possibilities to measure conceptual complexity involving the interaction with alternative conceptual operations (such as hyperbole, paradox, and onomatopoeia in multimodal use). The application of the theoretical insights introduced in Chapter 3 to the analysis of non-verbal contexts via the equipollence hypothesis has proved useful in three respects.

First, it refines Dirven's (2002) account of the figurative continuum. I have included five patterns of conceptual interaction between metaphor and metonymy: metonymic chain, (multiple-source)-in-target metonymy, metaphtonymy, metaphoric amalgams, and metaphoric chains. These have been found in verbal domains

13. In fact, as part of the experiment reported in Chapter 8, Chinese participants reported greater difficulty in interpreting the stand-for relationship related to the quiff in this specific advertisement than English and Spanish participants. By contrast, participants did not find any significant problems when working out the role of the cream as the best part of the milk.

and have been applied to multimodal communication. As shown in the analysis, they give rise to varying degrees of conceptual complexity (in terms of number of mappings and domains involved) that fill the gaps between metonymy, metaphor, and the most ad hoc creative manifestations of meaning. Consequently, they enrich previous accounts of the figurative continuum by filling in the gaps between metaphor and metonymy. Likewise, the multimodal application of the figurative continuum lends further support to its conceptual nature.

Second, this study enhances the scope of current language-based accounts of metaphor and metonymy within Cognitive Linguistics. The application of analytical tools validated for the study of verbal discourse to multimodal contexts has proven synergic, since several novel complexes have arisen in the study of multimodal contexts, such as (multiple-source)-in-target metonymic chains, (multiple-source)-in-target metaphtonymies, metaphtonymy scenarios, parallel metonymic expansion of the metaphoric source and target domains (in metaphtonymies, (multiple-source)-in-target metaphtonymies, and single-source metaphoric amalgams), multiple source / target metaphoric amalgams, and metaphtonymic chains. These alternative patterns complement the existing inventory of conceptual complexes identified by Ruiz de Mendoza, Pérez Hernández, and their collaborators on the basis of linguistic data.

Third, it has shown that multimodality not only occurs in the mapping across domains or subdomains (whether metaphoric or metonymic), but also *within* conceptual domains. The most illustrative pattern is (multiple-source)-in-target metonymies, i.e. a metonymic complex where several subdomains (rendered in various modes) coexist and grant access to the most encompassing domain at the same time. This observation might be relevant to refine the existing definitions of multimodal metaphor and metonymy and to advance our understanding of multimodal meaning making processes.

Chapters 5 and 6 have provided the first fine-grained account of multimodal conceptual complexes. In the next chapter I argue for the suitability of a reverse engineering process to advance our knowledge of multimodal meaning construction practices. In other words, if advertising has revealed a number of novel variants of metaphor and metonymy, I now shift the perspective of analysis to explore what metaphor and metonymy can tell us about advertising in particular and multimodal contexts in general.

CHAPTER 7

Figurative complexes in advertising (I)

A corpus-based account

Not everything that can be counted counts,
and not everything that counts can be counted.
(Albert Einstein)

7.1 Introduction

In Chapters 5 and 6 I provided a fine-grained qualitative analysis of metaphor-metonymy combinations in advertising based on real examples to illustrate ten metaphor-metonymy combinations (and their variants) with authentic data. The aim of this chapter is to use these qualitative findings to learn more about figurative language in real advertising and marketing practices. This "reverse engineering" process will shed light on the possibility of bridging the gaps between the conceptual level of analysis in advertising and the discursive and communicative dimension of this genre. Bearing this in mind, the present chapter reports the results of a corpus-based survey of multimodal metonymy, multimodal metaphor, and the multiple combinations arising from their interaction that are the subject of this book.

The goal of this chapter is thus to investigate the effect of advertising variables (such as the use of words and images, or the type of product advertised) on the potentiality of figurative operations to produce more or less complex persuasive messages. In order to carry out this corpus-based investigation, I formulate below four more specific research questions, accompanied by their respective hypotheses, which seek to describe the composition of the corpus in terms of the distribution of conceptual operations, representation of the product, and use of modal cues.

1. *How widespread is the use of multimodal metaphor and metonymy in advertising?*

   Hypothesis: Metaphtonymy plays an important role in the corpus precisely because such an interactional pattern merges the highlighting power of metonymy (useful to connect products with brands) with the cross-domain correspondences of metaphor (a effective way of borrowing values from a well-connoted domain and ascribing them to the advertised product).

2. *Being advertising a multimodal medium, (2.1) is the message more likely to be conveyed in images, words, or a combination of both? And, if an overall trend is identified, (2.2) are different types of figurative operations more likely to be represented in images, words and/or a combination of both?*

   Hypothesis: I predict that source domains, which usually coincide with the advertising message, are more likely to be visual (or verbopictorial) due to the higher evocative power of images. In turn, I predict that target domains (which usually coincide with the product) are more likely to be conveyed in words or in a combination of words with images, as this is the safest way for advertisers to get their message across their targeted audiences. Besides this general pattern, I also expect specific interactions between modes and each of the five figurative operations under scrutiny, but I cannot anticipate the form these will take.

3. *Is the type of the product advertised likely to determine the figurative operation at work in the advertisement?*

   Hypothesis: According to role of the advertised product in determining the degree of conceptual complexity in the advertisement:
   - There will be a higher incidence of metaphtonymies in convenience and shopping goods. Metonymies will be crucial to establish the connection between the product and the brand name, while metaphors will develop the positive image associated to the brand.
   - There will be a higher incidence of metonymy and its associated complexes in the promotion of specialty goods. Given that these products have no acceptable substitutes in the mind of the consumer (which is due to unrivalled design exclusivity), there will be elements cueing wider scenarios of luxury and sophistication in these advertisements.
   - Unsought products, which are new or not well known by audiences, usually require a shocking but also narratively rich advertising strategy. A higher degree of conceptual complexity in terms of metaphor and its associated complexes can therefore be expected, owing to the greater inferential potential derived from the higher number of cross-domain mappings.
   - There will be a more important role for metonymy in advertising *tangible services*. This is due to the necessity of bridging the gap between the brand and the objects related to and/or offered by the promoted service. For *intangible services* I expect a higher incidence of metaphors since they allow for the conflation of two co-occurring events or activities in our everyday experience (i.e. the service and its well-connoted associated event).

– I have previously argued in favour of the suitability of metaphtonymy for the construction of NGO messages (Pérez-Sobrino 2016). Following the same premise, I expect a higher incidence of metaphtonymies in this type of advertising.

4. *Is the use of images or words related to the marketing strategy at work to promote the product?*

   Hypothesis: The (potentially) easy depiction of physical goods might be likely to lead to a higher present of images in advertisements of convenience, shopping, specialty, and unsought goods. In turn, the abstract nature of certain services and NGO actions might not be possible to be conveyed in images, and therefore advertisers might be more likely to rely on the use of words.

Figure 40 below shows the expected interactions between the three variables of enquiry: figurative operations, mode, and type of product.

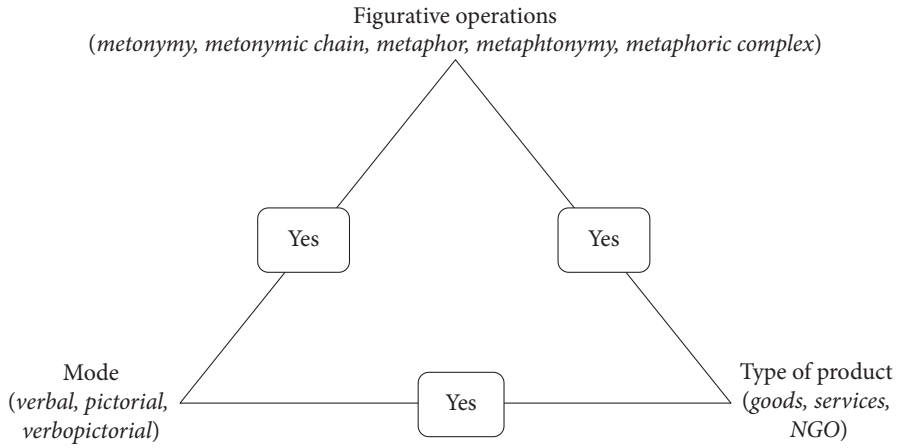


Figure 40. Expected interactions between figurative operations, mode, and type of product

The results of this investigation are reported in the following sections. In Section 7.2 I address the composition of the corpus by showing the distribution of simple and complex figurative operations. In Section 7.3 I explore whether there is a stable relationship between multimodal figurative operations and the type of mode (verbal, visual, or verbopictorial) through which they manifest their source and target domains. I then turn to address the possibility of a marketing strategy to trigger different amounts of conceptual complexity in terms of conceptual operations in Section 7.4. In the next section, 7.5 I investigate whether (and if so, how) the use of images and words in an advert varies depending of the type of product advertised.

For the sake of clarity, I will recover the working hypotheses specified above over the course of this chapter to shed light on how this corpus-based study corroborates or conflicts with the assumptions put forward above. Finally, I conclude this chapter by summarising the main results of the study in Section 7.6. In line with standards for reproducible research in data science (Gentleman & Lang 2007; Mesirov 2010; Peng 2011), the coded data is made available and can be retrieved online from the public repository GitHub.[1] Since the adverts collected for this study are subject to copyright, they could not be made available alongside their codings. Only those for which permission to reproduce was obtained from the copyright holders have been included in Chapter 5 and 6.

7.2 Figurative operations

The first of the research questions driving this study deals with the frequency and distribution of multimodal metaphors and alternative conceptual operations in the corpus. I hypothesised that multimodal metaphtonymy is a relevant conceptual complex in the corpus (even more than multimodal metaphor on its own) because it combines the economy of metonymy as a conceptual shortcut to access the interpretation of a given advertisement with the attribution of desirable features to the product through cross-domain metaphorical correspondences. For the sake of clarity, I am conflating the ten interactional patterns (and their variants) analysed in Chapter 5 and 6 in five categories: metonymy, chain of metonymies, metaphor, metaphtonymy, and metaphorical complex. Metonymy comprises isolated metonymies and multiple-source-in-target metonymies, as they both consist of one domain internal mapping. Likewise, any multiple-source in target metonymy involved in metonymic chains and metaphtonymies will be subsumed under the count of the main figurative operations. Metaphor incorporates the count of metaphoric scenarios. Finally, the umbrella term metaphorical complex consists of metaphorical amalgams (single and double) and metaphoric chains. This reduced set of metaphor-metonymy combinations will also be the focus of Chapter 8.

Table 4 shows a total count of the figurative operations in the corpus (315). In consonance with my predictions, metaphtonymy indeed holds the highest frequency of appearance (39%). It is followed by metonymic chain, a metonymic-based complex (24%). This may be due to the fact that a great deal of the advertisements from the corpus render rather minimalistic scenarios that must be developed in several successive steps for their full inferential potential to be realised. The second

1. https://github.com/paulapsobrino/book_multimodalmetaphor.git

striking result is that the role of metonymy in advertising is almost as important as that of metaphor, thus supporting my decision to explore other figurative operations besides metaphor. 41% of all the items analysed relate to metonymy or to any of its related complexes (red in the pie chart), whereas 59% relate to metaphor or to any of its related complexes (blue in the pie chart). Additionally, there are more instances of metonymy in isolation (17%) than metaphor (11%).

Table 4. Distribution of conceptual operations in number of tokens and percentage

	Conceptual operation	**N**	**%**
Metonymy and its complexes	Metonymy	53	17
N = 125	Metonymic chain	72	24
% = 41%			
Metaphor and its complexes	Metaphor	34	11
N = 180	Metaphtonymy	119	39
% 59	Metaphorical complex	27	9
TOTAL		**305**	**100**

Figure 41 displays a graphic representation of these frequencies.

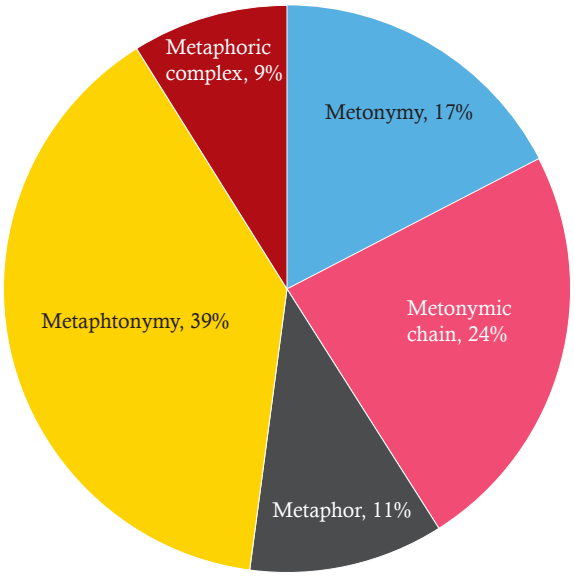


Figure 41. Graphic overview of the distribution of conceptual operations in the corpus

7.3 Choice of mode

As noted in Chapter 2, a multimodal metaphor is defined in the literature as one "whose source and target domain are cued exclusively or predominantly in more than one mode" (Forceville 2009a: 34). However, it is not known whether there are recurrent patterns of combination between these two modes (for example, a multimodal metaphor usually involves a multimodal mapping between a visual source and a verbal target domain, as in the 7UP example, where the image of a lemon is connected to the name of a soft drink) or if they can combine in a non restricted way. Hence, my second research question investigated whether metaphor and metonymy were more likely to be rendered in images, words, or a combination of both. I estimated at the beginning of this chapter that source domains were more likely to be rendered visually due to the higher evocative power of pictures. In turn, I expected target domains to be mostly either verbopictorial or exclusively verbal (particularly in the case of taboo products), precisely because advertisers need to be unambiguous about what they are selling.

Before dealing with the five different types of figurative operations, I first looked into the overall tendency for source and target domains (irrespective of the figurative operation they belong to) in order to see if there was any visible pattern of representation of the overall advertising message in words and/or images. As predicted, there were reliable differences in the way metaphoric and metonymic domains were represented (Fisher exact test:[2] $\chi_2(9) = 35.69$, $p < 0.001$). A total of 64% of the source domains ($N = 195$) were coded in the visual part of the adverts, thus matching my initial hypothesis. Interestingly, source domains of all five figurative operations were also found images in combination with words in a relative high proportion (27%, $N = 82$). Words in isolation played a rather tangential role in the representation of source domains (only 7%, $N = 23$).[3] With respect to the representation of target domains, the visual mode (36%) shared prominence with the hybrid verbopictorial mode (34%) when it comes to rendering target domains, and metaphoric and metonymic target domains were exclusively conveyed verbally in 27% of the cases.[4] Indeed, these initial results confirm my initial working hypothesis that the visual mode is an excellent candidate to construe a source domain (i.e.

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2. In much the same line as Pearson's Chi Square, Fisher's Exact test is a way to test the association between two categorical variables when you have small cell sizes (expected values less than 5).

3. The remaining 2% belonged to cases in which the source was not explicitly represented in the advert, and thus was not coded.

4. The remaining 3% belonged to cases in which the source was not explicitly represented in the advert, and thus was not coded.

the advertising message) due to its higher evocative power, but they also contradict my prediction that the verbopictorial and the verbal mode would play an important role in in the representation of target domains (i.e. the product advertised). As can be seen in Figure 42, the vast majority of the figurative message in advertising is conveyed through images (64% of source domains, 36% of target domains) or images with words (27% of source domains, 34% target domains). Verbal source domains were very scarce (8%), and words were more likely to make reference to the target domain/product advertised (27%).

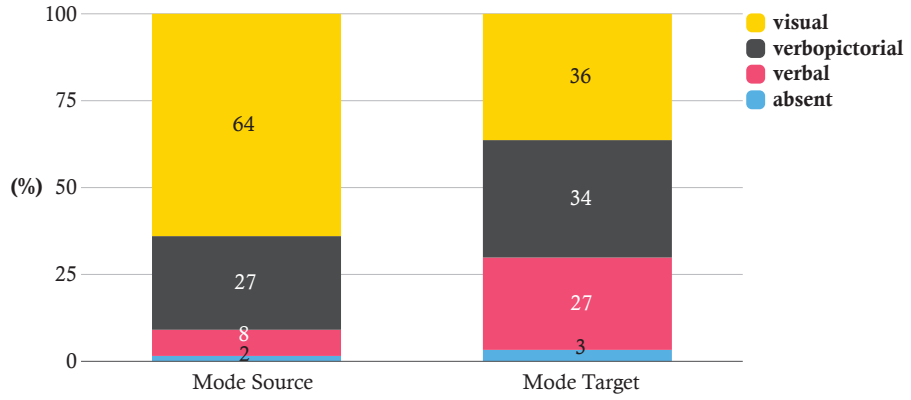


Figure 42. Distribution of modal cues for source and target domains

Very broadly, these results indicate that there is a *general* tendency for source domains to be represented visual, and target domains to be conveyed in images and in words. The picture becomes a bit more complex when we take into account the distribution of modes across the different types of figurative operation. The difference in the proportions was *reliably* significant for both source and target domains, as revealed by a Fisher exact test (in the case of the source domain: $\chi_2(12) = 28.39$, $p < 0.001$; for target domain: $\chi_2(12) = 36.78$, $p < 0.001$). *Reliability* here implies that the differences between the groups (i.e. the distribution of modes in source and target domain in each of the five figurative operations) are not due to chance alone, but instead are indicative of more stable patterns of occurrence. Figure 43 shows the average distribution in images, words, and the combination of both, to convey the source domain (SD) and the target domain (TD) of each of the five figurative operations studied.

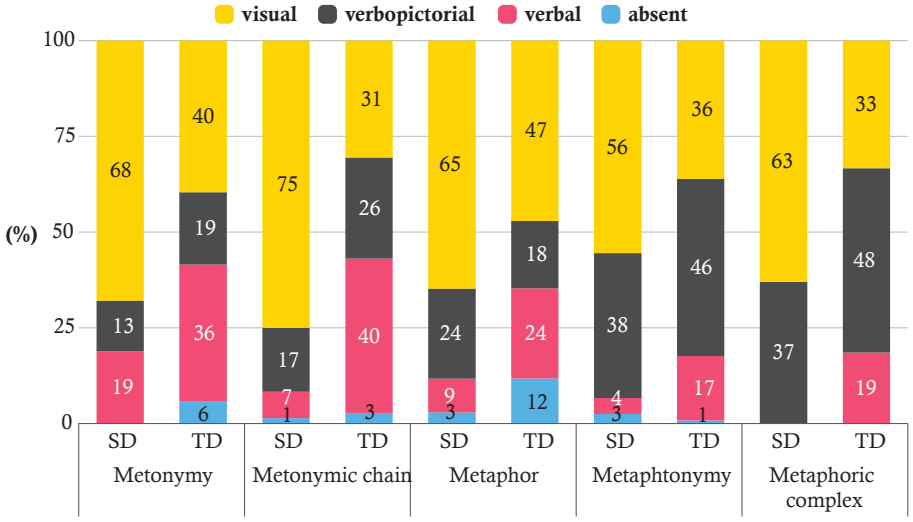


Figure 43. Mode of representation according to the type of figurative operation

In order to understand to what extent each of these operations contributed to the results reported in Figure 42, I explored the *adjusted residuals* (that is, observed count – expected count / standard deviation of the expected count). These residuals are shown in Figure 44, and they show the extent to which the frequencies for each figurative source and target domains are overrepresented or underrepresented in the corpus. A general rule of thumb for interpreting the meaning of standardised residual means is that −2 means that the cell's observed frequency is less than the expected frequency, and thus it indicates and underrepresented data point; in turn, greater than 2 values indicate that the observed frequency is greater than the expected frequency, or in other words, an overrepresented data point (the threshold for significance is marked with a dashed line in Figure 44). Adjusted residuals revealed that the higher incidence of images might be explained due to the visible tendency for the source domain of metaphotonymies to be represented in images and words (verbopictorially, 3.4) and metonymic chains just in images (2.2). By contrast, the initial hypothesis that target domains were more likely found in words was contradicted partially due to the overrepresentation of metaphtonymic target domains in the verbopictorial mode (3.7) with respect to the verbal mode, which was observed in less cases than the expected (−3.1). Recall here that metaphtonymies made up for the 37% of figurative operations identified in the corpus, and thus it might explain the general tendency or the use of modes in the corpus.

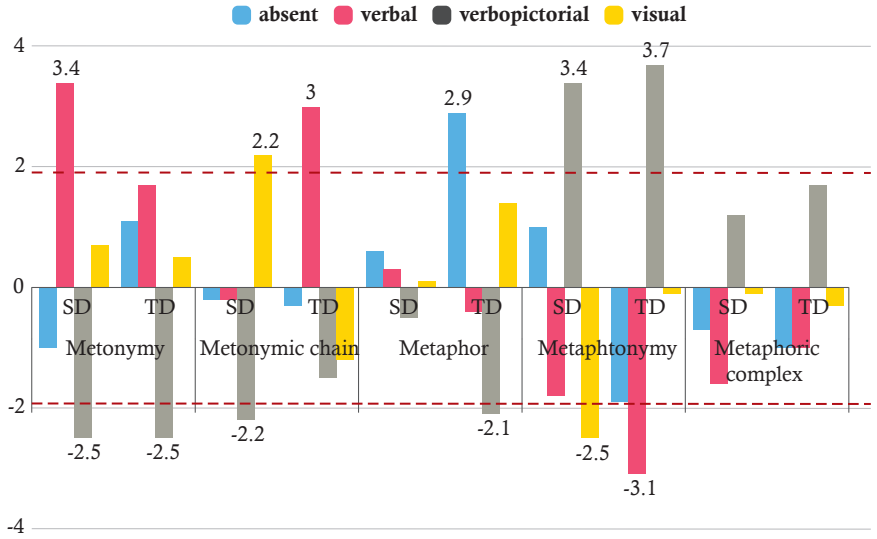


Figure 44. Graphic representation of the standardised residuals for the mode of representation for metaphoric and metonymic source and target domains

An additional question that deserves attention is whether reliable patterns of representation can be also found within the multimodal make up for each of the five figurative operations. This issue could be relevant for identification purposes: spotting stable configurations between words and images would facilitate the task of the analyst interested in coding metaphor and metonymies in real multimodal data. Likewise, it can help to clarify the nature of multimodality as something that happens across domains (i.e. between two domains that are rendered exclusively or predominantly between different modes", Forceville 2009a: 34) or can also happen within a domain (i.e. within hybrid source and target domains).

In doing so, additional Fisher Exact tests were conducted for each figurative operation. With respect to metonymy ($\chi_2(12) = 159.68$, $p < 0.001$), two strong patterns emerged: 11% of the metonymies identified connected a visual source domain and a verbal target domain (adjusted residual: 4.0); and hybrid source and target domains containing words and images (which, although it only made up for 3% of the corpus, exceeded the expected count, 4.8).

In turn, metonymic chains ($\chi_2(16) = 159.1$, $p < 0.001$) revealed a mixed pattern: 23% of the metonymic chains consisted of a visual source domain and a verbal target domain (5.9), and to a lesser extent, of a visual source domain and a verbopictorial target domain (12% of the total cases, 2.7). The reverse pattern was also observed: metonymic source domains that were coded in the verbal part of the advert were reliably connected to another metonymic visual target domain (in

a way that exceeded the expected count, 2.4, although it barely was observed in 3% of the cases). Additionally, 5% of the coded metonymic chains consisted of a verbopictorial source domain and a verbal target domain (3.0).

In the case of metaphor ($\chi_2(9) = 13.47, p < 0.05$), as in metonymy, multimodality takes place *within* the metaphorical domain: 50% of the annotated metaphors comprised a verbopictorial source domain and a verbopictorial target domain (2.7). Interestingly, only in 4% of the cases visual source domains mapped to verbopictorial target domains, thus characterising multimodality across domains highly unlikely (−2.7).

Finally, the tests did not reveal any reliably significant pattern between the modes of representation of metaphotonymy ($\chi_2(9) = 14.93, p < 0.08$), but the descriptive results showed that in 23% of the cases verbopictorial source domains were linked to verbopictorial target domains where the multimodality, i.e. the verbal element, happens at some intermediate point (2.4) (rather than to verbal target domains, only 2% of the total cases, −2.3). It was also observed that in 14% of the codings, visual source domains were connected to verbal target domains (2.9) but not verbopictorial target domains, which were very tangential (−2.4). No strong patterns were retrieved for metaphorical complexes.

These differences are relevant to refine our understanding of multimodal metaphor and metonymy. The fact there are strong connections between hybrid source and target domains in multimodal metonymy and multimodal metaphor shifts the traditional focus of multimodality occurring *across* domains accounts (e.g. for a visual source to a verbal target) to the multimodality *within* a domain (from a hybrid source of a hybrid target). As a result, this could expand Forceville's definition (2009a: 34) in order to accommodate the different ways that the combination of two different modes (the condition for multimodality) can adopt: hence, a multimodal metaphor is "a metaphor whose source and target domain are either rendered in two different modes, *and/or whose source and target domain are composed of different modes*" (my emphasis in italics to indicate the way in which the working definition could be expanded). What is even more significant, the results also show that multimodality tends to occur *within* domains for simple operations (that is, metonymy and metaphor), and *across* domains for complex operations (metonymic chain and metaphtonymy, although metaphor too). Table 5 summarises the nature of multimodality as happening *across* or *within* figurative domains.

The evidence shown in this section shows that the "type" of multimodality (within or across domains) can be added as another distinguishing feature to define multimodal metaphor and metonymy, and also to distinguish them from their interactions, that is to be added to the defining criteria (nature and number of figurative operations involved, and type of interaction) spelled out in Chapter 3.

Table 5. Reliable patterns in the mode of representation for metaphoric and metonymic source and target domains, and nature of the multimodal mapping

Figurative operation	Source domain	Target domain	Multimodality?
Metonymy	Visual	Verbal	Across & within domains
	Verbopictorial	Verbopictorial	
Metonymic chain	Visual	Verbal & Verbopictorial	Across & within domains
	Verbal	Visual	
	Verbopictorial	Verbal	
Metaphor	Verbopictorial	Verbopictorial	Within domains
Metaphtonymy	Visual?	Verbal?	Across & within domains
	Verbopictorial?	Verbopictorial?	
Metaphoric complex	–	–	–

7.4 Product type

As has been argued before, to date there has been no comprehensive research on multimodal metaphor across different types of products. The fact that the existent work has been limited to the study of metaphor and metonymy in isolation could also be related to the study of advertisements promoting a restricted range product types that are not representative of all the possibilities of advertising.

Hence, in my fourth research question I wanted to explore whether there was a connection between the figurative operation structuring an advertisement and seven different product types including physical goods, services, and NGO's. Since different types of product address different needs, it is reasonable to expect a variation in the marketing strategy at work in the advertisement, and this might be explained in terms of the figurative language used.

In consonance with my predictions, there was an overall reliable connection between the type of figurative operation used in an advert and the type of product advertised (Fisher Exact test: χ_2 (24) = 42.05, $p < .009$). Figure 45 offers below a graphic overview of the distribution of conceptual operations for each category of product.

Moreover, adjusted residuals revealed there were strong patterns of preference between certain types of figurative language and product type. As can be extracted from the graphic representation of residuals in Figure 46, there was a strong and reliably significant preference for metonymic chains in the promotion of unsought products (3.4). This contradicts my initial hypothesis for this type of product, which was that metaphor and its associated complexes played a predominant role in the promotion of unsought goods. By contrast, the greater inferential power of metaphor was shown to be significantly better suited for the structuring of shocking

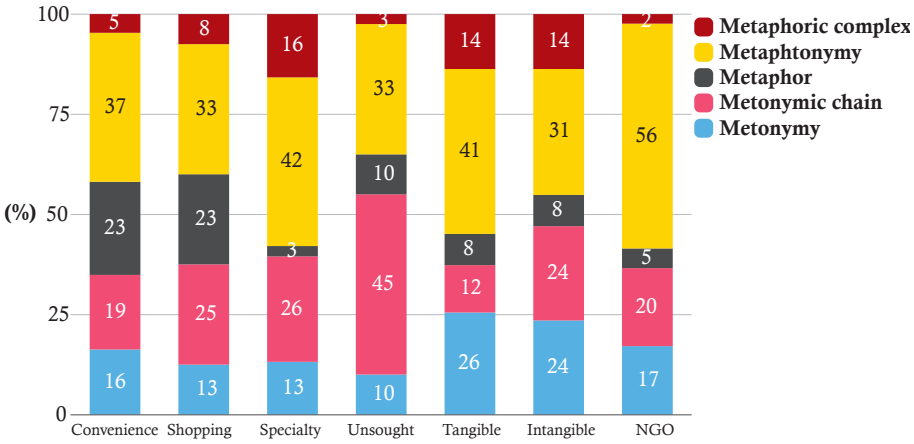


Figure 45. Distribution of the five types of figurative operations according to product type

advertising narratives, as required by the release of convenience and shopping goods that we encounter in our everyday life (yet to a lesser extent, 2.6 and 2.4, respectively). Finally, metaphtonymy played a relevant role in the construction of NGO advertisements (2.4). The suitability of this type of figurative language has already been discussed in the analysis of Example 13 Chapter 5, and in more detail in Pérez-Sobrino (2016b). These types of messages usually denounce an unfair situation by highlighting a single feature that is placed in an odd scenario. By way of reminder, Example 13 displayed several chimneys aiming at birds as if they were weapons aiming at a target. In order to unpack the meaning of the advert, a metaphor is usually needed to resolve the incongruence between two opposing scenarios (weaponry and chimneys) and a metonymy to frame it according to the intended message by the NGO (as an advert against environmental pollution).

The lack of more reliable correlations might be due to the fact that metaphtonymy pervades the seven product categories. As shown in Figure 44, metaphtonymy occupies a core role in advertising, regardless of the type of commodity promoted. It is only in very specific cases where the type of product can act as a predictor of the figurative operation that will be most likely at work. This is an outstanding result in itself, and ties up with the observation made in Section 7.2 about the suitability of combining the highlighting power of metonymy with the evocative potentiality of metaphors in advertising. A follow-up study should look at the interactions between product type in figurative operation type in a corpus of equal distribution of metaphors and metonymies. This was not, however, the aim of this chapter, as my goal was to look at the actual distribution of types of figurative language in real data.

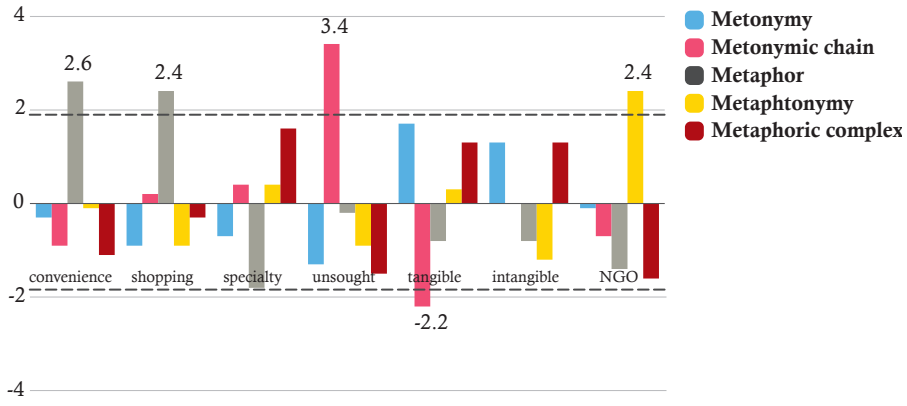


Figure 46. Graphic representation of the standardised residuals for figurative operation type and product type

7.5 Other interactions: Mode and marketing strategy

Given that there is a reliably significant effect between the type of figurative language used in an advert and the type of product advertised, and given that these figurative operations are multimodal, one might wonder if, by extension, the type of the product advertised might also have an effect on the amount of words and images used in the advertisement.

In response to my fourth and last research question, visible patterns between product type and mode used to represent source and target domain were identified (Fisher Exact test: source domain (χ_2 (18) = 52.81, p < .001; target domain (χ_2 (18) = 88.14, p < .001). Figure 47 shows the distribution of the three modes of representation for both source and target domain per each type of product. As predicted, over half of the source and target domains identified for physical goods were rendered exclusively in images, with a greater incidence in the source domains (convenience: source domain 75%, target domain 50%; shopping: source domain 65%, target domain 60%; specialty: source domain 66%, target domain 50%; unsought: source domain 73%, target domain: 40%, as the only exception). Conversely, words were more present in the promotion of products of abstract nature, such as services and NGO actions, but only to convey the target domain (that is, the service in question): tangible, 43%; intangible, 51%, NGO, 20%. This is likely to be due to the fact that the abstract nature of these services escapes the visual representation and needs words to convey specifically their goal. However, this trend did not apply to the source domains (thus partially contradicting my initial hypothesis), as they behaved in the same way as the source domains for physical goods. The visual and the verbopictorial modes were at work in most of

the advertisements for services and charities, thus rendering the use of words rather tangential (tangible: 2%, intangible: 14%; NGO: 15%).

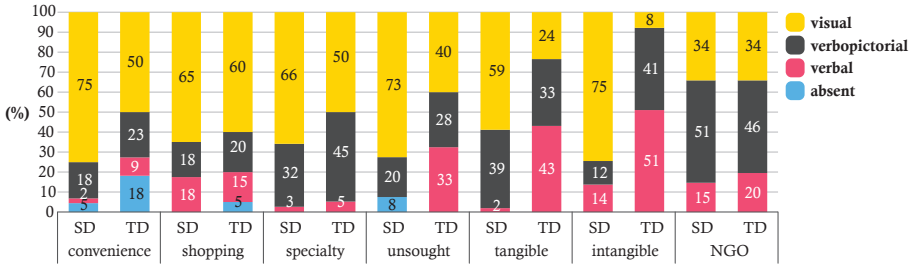


Figure 47. Modes of representation for the source and target domain of the main figurative operation at work for each of the seven product types

In addition to this, adjusted residuals revealed a number of combination of modes for source-target pairs that were overrepresented in the corpus, and thus contributed to the overall trend (see Figure 48). With respect to physical goods, images were used for target domains to a larger extent than words (visual target domains for convenience and shopping goods, 2 and 3.3, respectively; verbal target domains for convenience and specialty goods, −2.8 and −3.2, respectively). A similar trend can be observed for the promotion of services and NGO, where images in combinations with words are more likely to convey source domains (see, for example, tangible services, 2.2, and NGO, 3.8) in comparison with the use of words for target domains (tangible, 2.9, and more significantly, intangible services, where the use of words, 4.3, if significantly higher than images, −4.6). There are somewhat contradictory results in the case of in NGO, where the use of images on their own are underrepresented (−4.3). As has been argued before, this might be due to two reasons: first, because metaphotonymies are at work in most of this category of the advertisements (see Figure 45); and second, because metaphtonymies are usually characterised by verbopictorial source and target domains (see Figure 44).

As advanced elsewhere, this question is crucial to underscore the actual nature of multimodality in advertising. Even though advertising is a medium that allows for a great deal of creativity, the results indicate that there are more or less stable patterns for the representation of advertising messages that are generally connected to the more concrete or abstract nature of the product advertised. Also, these results might be relevant to ease the identification of metaphor and metonymy, as they might provide the analyst with a starting point (type of product and mode of representation) where to start looking for possible source and target domains, that will have to be subsequently characterised as metaphor or metonymy as established in the identification protocol in Chapter 4.

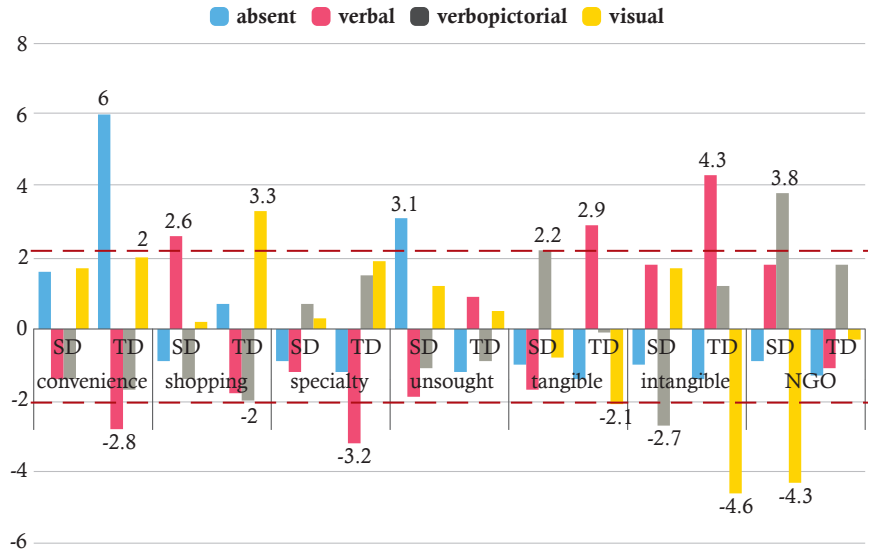


Figure 48. Graphic representation of the standardised residuals for product type and use of mode

7.6 Conclusions

This corpus-based investigation puts forward a number of generalisations about the presence of conceptual complexes in advertising, and about the role of discursive and communicative factors in determining the distribution and characteristics of the conceptual component of advertising. The originality and potential for innovation of the study presented in this chapter lies on three reasons: (1) it is the first broad-scale corpus-based multimodal metaphor study, given that multimodal metaphor studies are usually limited to the detailed examination of case studies; (2) it also accounts for the presence of multimodal metaphor but also of metonymy and additional conceptual complexes arising from the dynamic interplay of metaphor with metonymy; and (3) on the basis of corpus data, the present account deals with the distribution, frequency, and the characteristics of multimodal figurative operations in advertising, while analysing the weight of variables (such as product type and use of modes) that may determine the amount of conceptual complexity required to communicate in advertising. Therefore, this is the first study to offer statistical correlations between the conceptual, discursive, and communicative dimensions of multimodal advertising.

I have highlighted three specific conclusions that summarise the main findings of this chapter.

1. *Metaphtonymy is the most frequent conceptual operation in advertising*. This is due to the fact that it productively combines the potential of metonymy in providing viewers with an economic point of access to the advertisement with the ascription of features from a positively connoted domain to the product via metaphorical mapping. Additionally, metonymy is almost as important as metaphor in advertising. In fact, almost half of the annotated conceptual operations related to metonymy and/or its associated complexes. Moreover, there are more instances of metonymy than of metaphor working on its own. Additionally, metonymy also reports faster processing times (Klepousniotou and Baum 2007) and it is acquired at an earlier stage of language acquisition, if compared with the acquisition of metaphor (Rundbland and Annaz 2010). Hence, metonymy seems to involve a lower degree of complexity and therefore might require less cognitive effort. This could explain its productivity and extensive use in the corpus.
2. *Multimodality occurs across, but also within metaphorical and metonymic domains*. Even though advertising is a creative medium by definition, words and images do not always combine randomly in the construction of figurative messages; rather, there are stable patterns of multimodality depending of the type of figurative operation at work in the advertisement. Regardless of the main figurative operation at work, source domains are usually conveyed in the visual part of the advertisement; target domains, however, tend to be represented in pictures and/or in pictures with text. These results prove that the greater figurative weight in advertising is coded in pictures because of their high evocative potential. With respect to the specific types of figurative operations, multimodality was reliably shown to occur within domains (that is, with verbopictorial source and target domains) in metaphor, and *within* and *across* domains in metonymy, metonymic chains, and metaphotonymy. These results reveal that simple and complex operations are not only different in terms of how metaphor and metonymy combine, but also in terms of the way multimodality is construed.
3. *The nature of product is likely to determine how the advertisement is to be structured, both in terms of figurative operations and mode of representation*. The type of product was found to be a predictor for both the main type of figurative language at work in the advertisement and for the way multimodality was built, although not for all the seven categories. With respect to the way the message is constructed, in terms of figurative meaning, metonymic chains were shown to have a reliably significant relevance in the promotion of unsought goods. To a lesser extent, metaphor was also significant for the promotion of physical goods such as convenience and shopping goods. Additionally, this study has also shown that metaphtonymy plays a relevant role in NGO advertising, thus

providing quantitative evidence for the premise hold in Pérez-Sobrino (2016a). In terms of the use of images and words in the representation of each of the seven products, the use of images (or images in combination with words) was stood out in advertisements of convenience, shopping and specialty products, whereas tangible and intangible services reflected a higher probability of verbal targets to specify the nature of the service provided. This only comes as natural, given that they are more abstract in nature and are in need of the higher constraining power of words.

Figure 49 summarises graphically the main findings shown in this chapter.

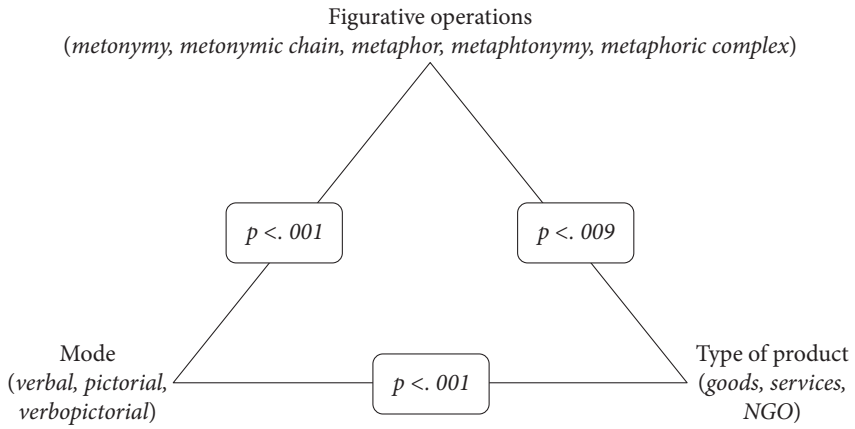


Figure 49. Graphic summary of the main results of this chapter

Besides the benefits to the cognitive-linguistic community, this research is also relevant to real world contexts as it raises the awareness of advertisers to the workings of conceptual tools, which should lead to a strategic deployment of multimodal figurative language in line with ethical selling plans. The discovery of the fact that such a significant amount of metonymy can be found in the advertisements and the explanations of why this might be are likely to be of similar use. Although many working in the field of advertising may be aware of metaphor, it is unlikely that they will have in-depth knowledge of metonymy and the ways in which it interacts with metaphor. This is likely to be a useful variable in determining the success, or otherwise, of an advertising campaign.

CHAPTER 8

Figurative complexes in advertising (II)

A cross-cultural investigation into the reception of advertisements

"When I use a word," Humpty Dumpty said, in rather a scornful tone,
"it means just what I choose it to mean – neither more nor less."
"The question is," said Alice, "whether you can make words mean
so many different things." "The question is," said Humpty Dumpty,
"which is to be master – that's all."
(Lewis Carroll, *Through the Looking Glass*)

8.1 Introduction

In Chapters 5 and 6 I illustrated the workings of metaphor, metonymy, and the multiple combinations arising from their combination in multimodal use. In Chapter 7 I offered an application of the theoretical postulates of this dissertation to the study of real advertising and marketing practices. In the spirit of showing yet another domain of application of the study of figurative language, I now turn to explore how participants from three different linguistic and cultural backgrounds (English, Spanish, and Chinese) perceive and understand multimodal advertisements containing different combinations of metaphor and metonymy. This second "reverse engineering" process seeks to investigate the extent to which the establishment of a cline of increasing figurativeness (in terms of metaphor-metonymy interactional patterns) can uncover the different variables affecting the comprehension of advertisements, and how they do so.

To date, only few studies have actually explored the relationship between figurative complexity in advertising and its effect on consumer perceptions and behaviour from a cognitive-linguistic approach. One example is the experiment conducted by van Mulken et al. (2010). This study tested participants' perceptions on complexity, deviation and understanding of different types of images in advertising, and how the varied across three European countries. In this study, the effects of Forceville's metaphor types (1996, 2005) were tested on consumer appreciation and comprehension of the advertisement. In his typology, Forceville distinguished between

similes (a side by side presentation of the source and target domain), hybrid metaphors (a fusion of the source and target domain of the metaphor into a single unit), and contextual metaphor (in which either of the metaphorical domains is present and the other is evoked by the surrounding pictorial context). 367 Dutch, French and Spanish-speaking participants were asked to rate advertisements for a number of aspects such as complexity, appreciation and comprehension, among others. They found that: (1) contextual metaphors were significantly perceived as more complex than the other types; (2) hybrid metaphors were significantly better appreciated overall than the other two types, but (3) contextual metaphors outweighed hybrid metaphors in the appreciation of adverts that were actually understood by participants. A similar study was conducted by Burgers, Eden, de Jong and Buningh (2016) on 500 app icons from Google Play Store. They found that visual-rhetorical devices such as the type of mode (verbal or visual) and the presence of multimodal metaphor (following Forceville's typology mentioned above) in app icons can actually predict app success in terms of downloads. The most relevant conclusion of their study for the present book is that apps with icons containing visual metaphors were found more persuasive compared to apps with icons that did not contain visual metaphors, and this was a predictor of app success.

Except for these two studies, the vast majority of the existent research on the effects of metaphor on consumer behaviour comes from the field of marketing (see Ang and Lim 2006; Chang and Yen 2013; Gkiouzepas and Hogg 2011; Jeong 2007; McQuarrie and Phillips 2005; Morgan and Reichert 1999; Phillips and McQuarrie 2009). However, it must be noted that these works have exclusively accounted for the effectiveness of metaphor in comparison with literal language, and of visual over verbal messages, in the comprehension of advertisements. Experimental research indicates that advertisements with metaphors are more effective than non-metaphorical advertisements (Chang and Yen 2013; Morgan and Reichert 1999). Additionally, brands using metaphors are generally perceived to be more sophisticated and exciting, but also less sincere and competent, than brands using literal words and pictures (Ang and Lim 2006). As regards the mode of representation, visual metaphors prove more effective at eliciting positive outcomes than non-metaphorical verbal arguments (Mitchell and Olson's 1981), or even than verbal metaphors (McQuarrie and Mick 2003; McQuarrie and Phillips 2005).

However, to date, little is known about the depth to which audiences process metaphor and metonymy when they appear in multimodal format in advertisements, or how long it takes them to do so. This aspect might be crucial for advertisements placed in locations where viewing periods are necessarily short, e.g., driving past billboards or browsing webpages with banner adverts. Neither it is known whether this multimodal figurative information evokes positive or negative

attitudes towards products, as some viewers may find overt visual and verbal metaphors less appealing. An exception is provided in Phillips and McQuarrie (2009), who give evidence that only a highly figurative metaphor is able to alter specific consumer beliefs under conditions of incidental ad exposure. Additionally, Jeong (2008) points out that the relative effectiveness of metaphorical rhetoric or visual argumentation seems to vary by outcome type (e.g. cognitive, motivational, and affective).

Another issue of concern to anyone involved in the production of advertisements is the fact that they must often appeal to an international audience, particularly when the advertisements are posted on the Internet. Metaphor has been shown to present significant difficulties to speakers of other languages (Littlemore, Trautman-Chen, Koester, and Barnden 2011), but it is not known whether this is also the case for metaphor when it occurs in images. Furthermore, many of the metaphorical connections intended may be closely tied to specific cultures, and thus fail to communicate to a global audience (even when rendered through visuals). Neither it is known whether speakers of different languages find complex combinations of metaphor even more difficult to interpret than single metaphors or metonymies. There is likely to be a degree of *cross-linguistic and cross-cultural variation* in terms of the amount of time required to understand the multimodal metaphors and metonymies, the ways in which they are understood, and their appeal.

Inspired by the work carried out by van Mulken, le Pair, and Forceville (2010) and Burgers, Eden, de Jong and Buningh (2016), this study seeks to investigate how figurative language in adverts has an effect on consumer behaviour. It expands the scope of these preceding works by taking into consideration metonymy and its patterns of combination with metaphor (for the purposes of this experiment I take into account metonymy, metonymic chain, metaphor, multimodal, and metaphoric complex, as a generic label to frame the compounding of several metaphors) rather than different types of metaphorical representation in images, and a different set of targeted linguistic and cultural backgrounds (English, Spanish, and Chinese). I have formulated four research questions to conduct this study, each of which is accompanied by its corresponding working hypothesis:

1. *Does figurative complexity relate to speed of comprehension?*

   Hypothesis: I expect reaction times to increase along a continuum based on figurative complexity ranging from metonymy, through metonymic chains, metaphor, and metaphtonymy, to metaphoric amalgams. The potential for conceptual enrichment grows as we move along this continuum since more mappings are available.

2. *Does conceptual complexity relate to the perceived persuasive potential of the advertisement?*

   Hypothesis: I do not expect conceptual complexity to affect the perceived effectiveness of the advertisements, as this will depend on other variables such as the viewer's linguistic and cultural background.

3. *Does conceptual complexity relate to the number of responses produced (here labelled "complexity of interpretation")?*

   Hypothesis: I expect greater inferential activity leading to greater complexity in the participants' descriptions as the advertisements move along the figurative continuum.

4. *How do the above variables (reaction time, perceived appeal, and complexity of interpretation) vary according to the linguistic and cultural background of the viewer?*

   Hypothesis: I expect an observable degree of cross-cultural variation in terms of reaction times, complexity of responses, and appreciation of the advertisements, but I do not know the exact form that this will take.

Figure 50 represents the expected interrelations between figurative complexity in advertising and these four variables of advertising comprehension: speed of comprehension, depth of understanding, perceived effectiveness, and cultural and linguistic background of the consumer.

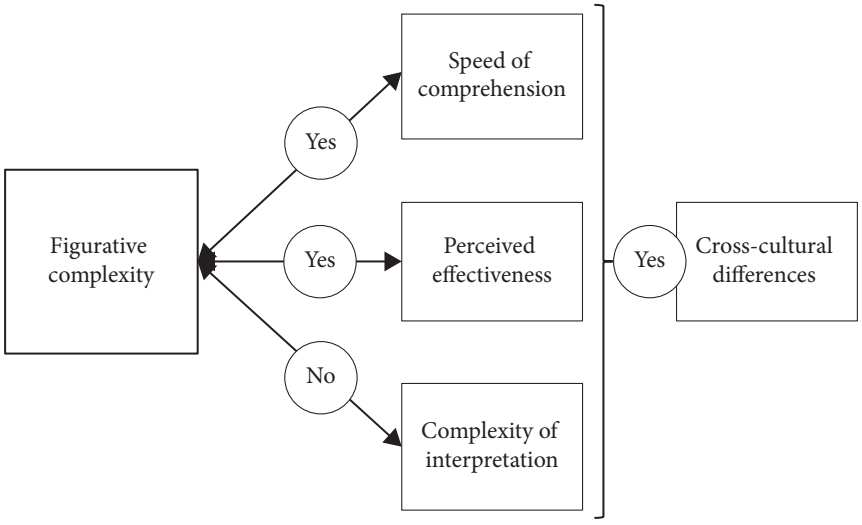


Figure 50. Summary of the working hypotheses in this chapter

The goal of this chapter is thus to test empirically how the various degrees of figurative complexity – organised on the basis of the criteria discussed in Chapter 3 – affect the time invested in comprehension, the perceived persuasive potential of the advertisements, the complexity of the interpretation, and how these variables relate to cross-cultural differences. Even though the degree of figurative complexity has been determined argumentatively, i.e. non-experimentally, I held in Chapter 4 that introspection, if carried out on the basis of a sound methodology (including corpus selection, sampling procedures, and the formulation of explanatorily adequate generalisations, as has been argued and exemplified over the course of this book), is also a source of evidence in favour of a set of theoretical postulates versus others. Thus, I firmly believe that the present experiment goes a step beyond by bringing together approaches and techniques from Cognitive Linguistics, Corpus Linguistics, Psychology, and Marketing.

However, I am not implying that the complex metaphor-metonymy combinations offered in Chapters 5 and 6 must lead to complex mental operations in terms of cognitive effort. As put forward by Gibbs (2006b: 148), it should not be assumed that people possess the same kinds of complex representations in their minds, or if they do possess that kind of knowledge, resort to it every time they reason and talk on the basis of certain verbal and/or multimodal cues. This could be highly uneconomical in terms of cognitive effort. Instead, my goal in this chapter is to show how introspective qualitative analyses, as long as they are based on explicit criteria, a rigorous methodology, and a large sample of real examples, can offer experimental psychologists a number of potential hypotheses to test empirically.

This chapter is structured as follows. First, in Section 8.2 I address methodological issues, such as the justification beneath the selection of participants (8.2.1) and material (8.2.2), and the activities designed for data collection (8.2.3). After that, I present the findings of this study and discuss their relevance in Section 8.3, in four parts: speed of comprehension (8.3.1), perceived persuasive potential (8.3.2), complexity of the interpretation (8.3.3), and cross-cultural variation of responses (8.3.4). Finally, in Section 8.4 I summarise the main conclusions arising from this experiment and formulate potential lines for further research.

8.2 Methodology

8.2.1 Selection of participants and materials

Thirty participants (15 male and 15 female) whose ages ranged from 19 to 33 were selected for this experiment. The participants were recruited by a public announcement, and were paid 10 GBP for taking part in the experiment. Their countries of

origin were the United Kingdom, China, and Spain (10 participants per nationality, 5 male and 5 female). British and Chinese participants were enrolled in undergraduate and masters courses at the University of Birmingham (UK). Spanish participants were recruited in Spain and were either master's degree students or young professionals studying and working in Logroño, Spain. The experiment took place in Birmingham during the months of April 2014, and in Spain during May 2014.

The vehicular language throughout the experiment was English for all the participants. I only translated the textual part of one advertisement from Chinese to English. In order to overcome this potential limitation, only participants with a proficient knowledge of English and/or who had been living in an English-speaking country for more than one year were selected for this experiment.

8.2.2 Selection of the material

This study is based on authentic data. Relying on real advertisements released over twenty years guarantees the reliability and relevance of the results, especially given the fact that studies of a similar nature have been based on advertisements devised by the authors for their specific experiments. I selected, at random, 50 advertisements with varying amounts of conceptual complexity from the corpus of advertisements gathered for this book (see Chapter 4).

Sticking to authentic data made it extremely difficult to achieve a balanced corpus of advertisements. I tried to keep the selection as heterogeneous as possible in order to achieve a balanced selection of conceptual complexity and simplicity, situationality, different types of products and services, and conventional and shocking designs. I tried to keep the text to a minimum, in order to reduce the impact of English for non-native participants (especially in the reaction time part of the experiment).

In order to reduce the amount of subjectivity in the selection of advertisements, two independent researchers rated the advertisements independently on a 1–5 scale of figurativeness (1 = metonymy, 2 = metonymic chain, 3 = metaphor, 4 = metaphtonymy, and 5 = metaphoric amalgam). The criteria employed to identify and characterise figurative operations was as specified in Chapter 4. Cases of disagreement (which constituted approximately 15% of the total number of ratings) were resolved through discussion until 100% agreement was reached. From the 50 advertisements selected, only 24 (plus two advertisement for the training part) were selected for use in this study.

8.2.3 Data collection and processing

This experiment was organised in two parts. The protocol of interaction with participants was the same for all 30 participants. Participants were given an answer booklet (see below). They filled in their personal details in the cover page for subsequent statistical treatment.[1] Subsequently, they were informed about the nature and instructions of the experiment.

The first part consisted of a reaction time study developed with DMDX software (10–15 minutes). Participants were shown the advertisements one after another on the computer screen and were asked to click on the mouse button as soon as they had worked out the meaning of the advertisement. In order to avoid false responses, participants were asked to choose one of three given interpretations offered for each advertisement in the answer booklet (a pilot test with a student was additionally conducted to check that the proposed answers were understandable and pertinent). Participants were only allowed to view the page for the advert they had been shown, so that their first impression was not contaminated by the proposed interpretations. Participants were also asked to rate the "effectiveness" of each advertisement on a scale from 1 (not very effective) to 3 (very effective).

After the reaction time study, participants were asked once again about their interpretations of the advertisements. They were allowed to look at the advertisements (shown in a Powerpoint presentation) and answer freely with no time constraints, although they were not allowed to look at their previous responses. They had to cover at least these three topics: (1) What is the advertised product? (2) What is being said about the product? (3) Do you think this advertisement is effective and why/why not? The interview was recorded for later transcription and analysis.

Once transcribed, the corpus of interviews was annotated using UAM Corpus Tool, a textual annotation programme.[2] This program enables the manual annotation of texts in several layers and sublayers. This study required layers for "number of participant", "nationality", "gender", and "interpretation" (Figure 51).

Open-ended responses were necessary to examine how conceptual complexity affected the depth of the viewers' understanding (operationalised in this study in terms of the number of possible interpretations arising from the same advertisement). Hence, the latter layer, "interpretation", had 26 sublayers (one per advertisement), which at the same time had as many layers as different interpretations produced by the participants (see Figure 52). In order to reduce the subjectivity in

1. Participants' identity and responses were treated anonymously. The experiment was reviewed and approved by the Ethics Committee at the University of Birmingham (UK) in compliance with the policy of the university for experiments involving human participants.

2. UAM Corpus Tool: http://www.wagsoft.com/CorpusTool/

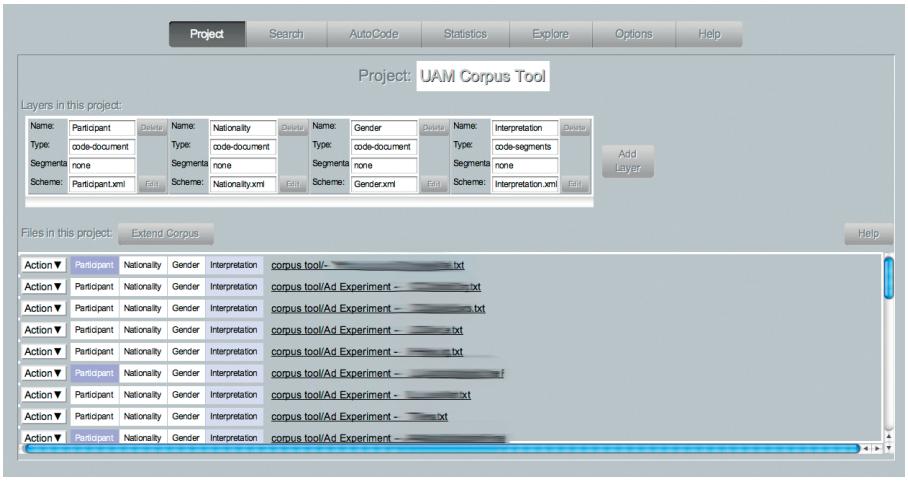


Figure 51. Layers and sublayers of annotation in UAM Corpus Tool

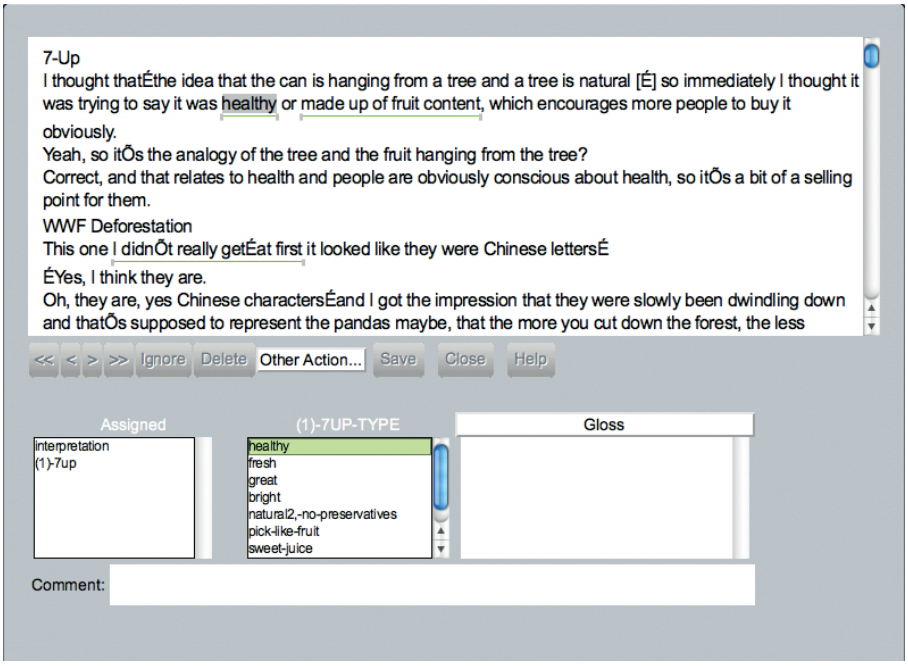


Figure 52. Manual annotation of the corpus with UAM Corpus Tool

rating the responses, two researchers participated in the annotation process. The first researcher identified a number of possible interpretations that came up during the annotation of the first half of the corpus. Subsequently, the second researcher tried to fit the annotation of the second half of the corpus within the same categories (unless a complete new interpretation emerged). Once the annotation was completed, both researchers went through the categories and merged similar labels in order to avoid the proliferation of similar categories.

This manual annotation software facilitates both qualitative and quantitative research. For the qualitative dimension, the software provides a global and comprehensive view of the metaphorical matrix, while it also provides exhaustive quantitative data on frequency and distribution of tokens.

8.2.4 Statistical procedures

Since every participant contributed to several data points (multiple-item between-subjects design), I used a linear mixed effects analysis models (Baayen 2008, Chapter 7; Baayen, Davidson, and Bates 2008) to model the relationship between the dependent variables ("reaction time", "effectiveness", and "number of interpretations") and the independent variable ("figurative complexity") as fixed effects. As argued by Baayen and Milin (2010), mixed models are particularly well suited to the analysis of reaction time data, notably because variation related to random factors, such as subjects (i.e., some subjects may be faster or slower responders than others, regardless of the stimulus) or adverts (i.e., some adverts may be easier or harder to process regardless of the controlled variables that are manipulated within them), can be factored in as random effects. To conduct this and the rest of the analyses reported in this chapter, I used the "lmer" function from the "lme4" package (Bates, Maechler & Bolker 2012) in the environment R (R Core Team 2017) to conduct mixed effect regression. In order to make the ensuing analysis fully reproducible, all the scripts and codings are made available in the public repository Github.[3] Visual inspection of residual plots did not reveal any obvious deviations from homoscedasticity or normality. P-values were obtained by likelihood ratio tests of the full model with the effect in question against the model without the effect in question.

3. https://github.com/paulapsobrino/book_multimodalmetaphor.git

8.3 Findings and discussion

8.3.1 Speed of processing

The first research question of this study sought to investigate whether the figurative weight of the selected advertisements affected the speed of comprehension by the participants. I predicted that reaction times would increase along a continuum based on conceptual complexity from metonymy, through metonymic chains, metaphor, and metaphtonymy, to metaphorical complexes.

I first took out the values equal to 4000 milliseconds because the DMDX did not record anything beyond that value. By doing this, values of 4000 milliseconds were considered as no response. The visualisation of the data did reveal a relatively normal distribution that did not violate the distributional assumptions of many statistical hypothesis-testing techniques. Hence, it was not necessary to normalise it by using functions such as inverse or log to reduce the effects of outliers (Luce 1986; Ratcliff 1993).[4] In this specific case, no statistically significant effect of figurative complexity was found on the processing time ($p < .70$). That means that the variations in reaction times reported by the participants could not be related to the presence of figurative operations at work in each advertisement.

I then looked into other possible variables that could explain the differences in processing time. In this new model, I replaced "Figurative complexity" for "Effectiveness" (how convincing the participants thought the advert was) and "Number of interpretations", and kept the same random effects for subjects and items. The new model did not revealed any significant relationships. The high p-values for effectiveness ($p < .31$) and number of interpretations ($p < .52$) indicate that they are not strong predictors for the different reaction times recorded.

In spite of the lack of reliably significant relationships, descriptive results showed an interesting indirect relationship between reaction time and effectiveness ratings, which in other words means that participants responded faster to those adverts that they considered more effective (the average response time in milliseconds for advertisements with different effectiveness ratings are shown in Figure 53). It could be that participants found effective the advertisements that were easy to understand, or that they found them easy to understand because they were effective. A possible reason why some advertisements registered longer reaction times is because they caused some sort of *cognitive dissonance*. This notion refers to a situation that produces a feeling of discomfort because it involves a conflict of attitudes, beliefs or behaviours. Festinger (1957) predicted that people would avoid disharmony and would seek consistency in their beliefs and attitudes in any

4. I would like to thank Florent Perek for his help and support with this.

situation where two elements are inconsistent. Hence, the fact that participants strived for conceptual consistency between their expectations and the adverts they were shown, the exposure to such highly contradictory messages would allegedly lead them to perceive the adverts as not effective and/or likeable.

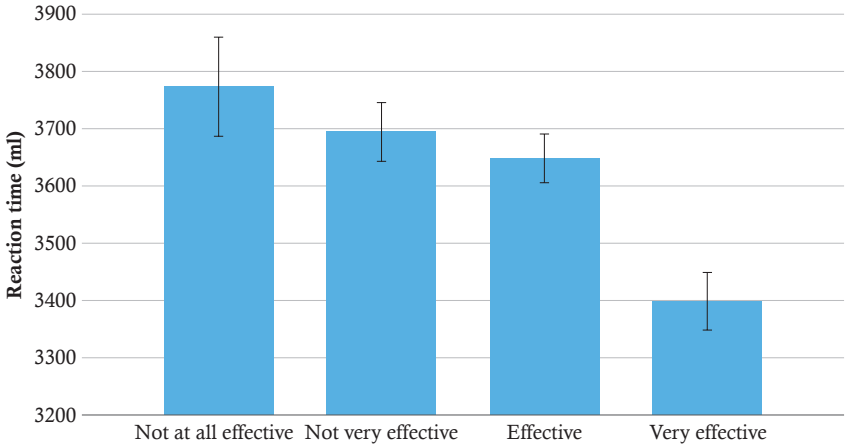


Figure 53. Average response times for advertisements with different effectiveness ratings

8.3.2 Perceived persuasive potential

For the second working hypothesis of this study I expected a significant relationship between the figurative load structuring an advertisement and its perceived effectiveness, with adverts featuring greater amounts of figurativeness being perceived as more effective.

See Figure 54 for the participants' ratings on effectiveness for the advertisements according to the five different types of figurative language under scrutiny. The model revealed that there was a reliably strong relationship between how effective participants rated the adverts depending on the type of figurative language used ($p < .001$). Contrary to my initial expectations, the results reveal a quadratic relationship between figurative complexity and perceived effectiveness, where intermediate degrees of figurative complexity were rated as more effective (metaphor, 2.30) and followed by metonymic chain and metaphotonymy (2.11 and 2.09, respectively). Metonymy and metaphoric complexes, at both extremes of the figurative continuum, were perceived as being less effective in comparison with the other types of figurative language (1.75 and 1.57, respectively).

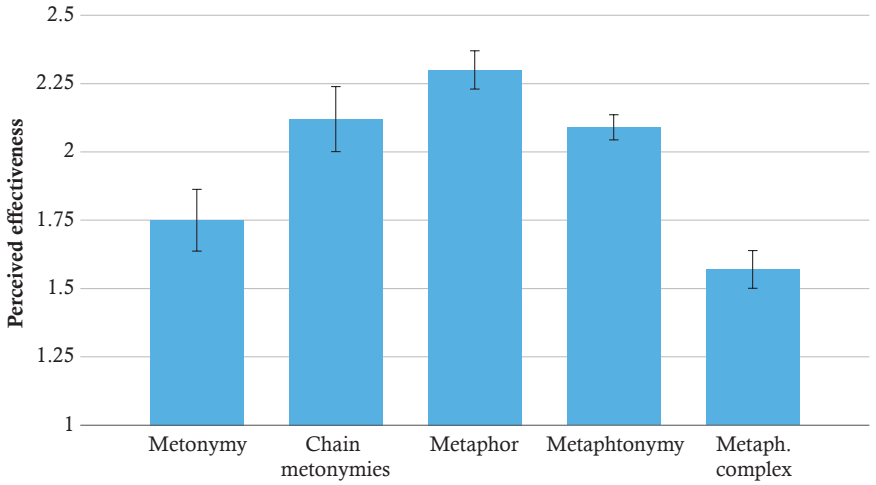


Figure 54. Perceived effectiveness of advertisements with different levels of complexity

These findings tentatively suggest an "optimal complexity hypothesis", which is reminiscent of the "optimal innovation hypothesis" (Giora, Fein, Kronrod, Elnatan, Shuval, and Zur 2004). Very broadly, this term refers to the idea that a piece of creative language or art has to be novel to be appreciated, but not so novel as to hinder its interpretation. In terms of metaphor, this hypothesis implies that an optimally innovative metaphor will exploit a conventional metaphor in a creative way, as long as it is perceived as part of the underlying conceptual metaphor. In line with the work by Giora and her colleagues, the present study suggests that the consumer's cognitive investment in the interpretation of an advert is not determined by how *figurative* it is, but rather by how *optimally innovative* it is. In other words, participants were more likely to think that adverts that featured an optimal degree of complexity, i.e., those adverts that conveyed a creative message in a recognisable manner, were more successful, and were also processed faster.

However, the marginal and conditional R squares (1% and 25%, respectively) raise a word of caution for these results. These figures evidence that, even though the model showed that figurative complexity is a strong predictor for effectiveness, in the end it cannot really explain much of the variation in effectiveness, and that this was better explained in terms of the differences between subjects and items.

8.3.3 Number of possible interpretations

Once I retrieved the first quantitative results of this experiment, I looked into the material gathered during the interviews with the participants. The analysis of their

responses of the adverts required a more qualitative analysis, and shed light on the the extent to which figurative complexity had a visible effect on the depth of the participants' interpretation of the advertisement. In answer to the third research question of this study, I hypothesised that more complex operations would lead to greater inferential activity, because they allow for a greater inference-triggering potential. Therefore, it could be expected a higher number of possible interpretations for those advertisements containing more complex figurative operations, if participants presumed such interpretation rewarding in some way.[5] The model did not reveal any statistically significant differences between the main figurative operations at work in each advert and the average number of interpretations produced by participants ($p < .751$). This high p-value contradicted my initial expectation, as it seemed that participants did not produce more elaborated interpretations for advertisements registering higher levels of figurative complexity. In turn, the observed trend is rather irregular. Overall, metaphor collected less interpretations per advert on average (2), which is probably connected to the fact that it was also perceived as more effective. It is followed by metonymy and (2.11) and metaphoric complexes (2.18), which neither were considered effective nor interesting enough to produce a wealth of different interpretations. Interestingly, metonymic chain (2.21) and metaphtonymy (2.25) engaged better with participants in trying to understand their meaning, although they did not rate as high as metaphor for effectiveness.

Finally, effectiveness was not found to be a strong predictor for the generation of alternative interpretations ($p < .572$). The descriptive results show that participants produced more interpretations for those adverts rated as "effective" (2.34) than for those as "somewhat effective" (2.20), "very effective" (2.04), and "not effective at all" (1.91).

8.3.4 Interim conclusions

Before moving on into how all these variables varied when taking into account the linguistic and cultural background of the participants, let me recover the main findings reported so far:

1. *Figurative language is not related to the speed of comprehension in a significant way*. Reaction times did not increase along a continuum based on figurative complexity ranging from metonymy, through metonymic chains, metaphor, metaphtonymy, to metaphoric complexes. There were not significant differences between reaction time and effectiveness either, but descriptive stats

5. This observation is consistent with the relevance-theoretic approach to effort-effect relationships in (optimally relevant) communication (see Chapter 2, Section 2.3.1).

showed a indirect relationship between the two as participants were faster at rating adverts that they considered effective.

2. *Figurative complexity is related to the perceived persuasive potential of the advert*. There was a statistically significant quadratic relationship between figurative complexity and how convincing participants thought the adverts were ($p < .001$). In particular, intermediate degrees of figurativeness (metaphor, metonymic chains, and metaphtonymy) scored higher for effectiveness than more basic operations (metonymy) and also more complex ones (metaphoric complex).
3. *Complex types of figurative language did not produce more interpretations of the adverts*. In contrast with my working hypothesis, neither figurative complexity nor effectiveness were identified as strong predictors for the number of interpretations produce for each advert. Participants reported fewer alternative interpretations for those adverts deemed to be "not effective at all" and also "very effective". In consonance with relevance-theoretic postulates, this result indicates that participants are not likely to invest cognitive effort in the interpretation of adverts that they think are convincing and successful; and also that it is possible that they rated advertisements as very effective because there was a single and straightforward interpretation for them.

Figure 55 shows the statistically significant relationships between the different variables of study: figurative complexity, reaction time, perceived persuasive potential of the advert, and number of possible interpretations of the advert.

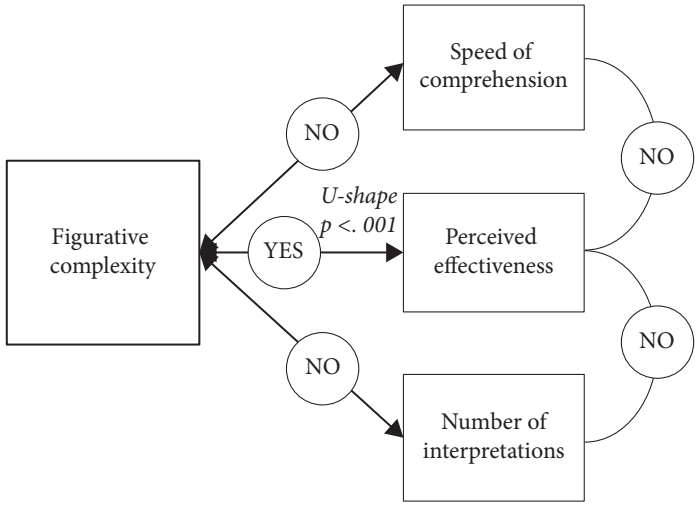


Figure 55. Statistically significant relationships between figurative complexity, reaction time, perceived persuasive potential of the advert, and number of possible interpretation of the advert

8.3.5 Cross-cultural variation

Finally, the last research question looked into the linguistic and cultural background of the participants, and sought to explore whether it had any effect on the variables studied above. A significant amount of differences among the participants on the grounds of their nationality was expected, although it was not possible to anticipate the form they would take.

(a) *Speed of comprehension*
On average, Spanish participants were faster at making sense of the advertisements (2577 ms) than the British participants (2890 ms) who were in turn significantly faster than the Chinese (3118 ms). Nevertheless, it should be noted that no significant effect was predicted between reaction time and nationality. I then entered an interaction of the linear terms "figurative complexity" and "nationality" to see if linguistic/cultural background had a significant effect on the time taken to process the advertisements, but once again, the model did not predict any significant interaction.

Recall here that participants responded quicker to adverts that they thought they were effective rather than to those that featured a specific type of figurative language. A natural question that arises, then, is the extent to which the nationality of the participant had an effect on the time taken to process the adverts, depending on how effective participants thought the were. Replacing "Figurative complexity" for "effectiveness" in the interaction with "nationality" did not produce any significant results, and no statistically significant interaction between nationality and the ratings for effectiveness to predict differences in processing time.

(b) *Effectiveness*
The linguistic background of the participants was not related in any significant manner with the differences in the ratings for effectiveness. This test confirms that, regardless the origin of the participants, the effectiveness of an advert is more likely to be related to the content of the advertisement in terms of figurative language and also to the number of possible interpretations that participants produced per advert (as shown in the previous section). The negative result in all these tests shows that nationality does not play a role in any significant way in determining the success and understanding of an advert. The type of figurative language at work, as shown in the previous section, was the principal predictor for effectiveness.

(c) *Number of interpretations*
The descriptive results show that English participants produced on average 2.54 different interpretations per advertisement, whereas the Spanish participants

produced 2.41, and finally the Chinese participants, with 2.21 interpretations per advert on average. However, neither of these differences was significant, and therefore nationality could not be a predictor for the complexity of the participants' understanding on the adverts. Likewise, there was no significant interaction of nationality with the perceived effectiveness of an advert and the number of interpretations produced per advert.

Figure 56 displays graphically the main findings reported in this section on cross-cultural variation.

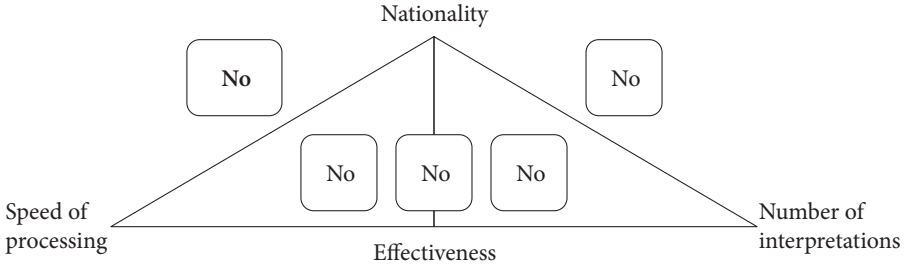


Figure 56. Graphic summary of the effects of nationality of variation in speed of processing, effectiveness and number of interpretations

All in all, the lack of significance in these results should not come as surprise given that the sample of participants was too small for the number of variables considered of this study. This experiment was conceived and developed as a proof of concept for a more ambitious project with similar fixed effects but with 90 participants and 30 adverts. The results of this research are reported in Pérez-Sobrino, Littlemore, and Houghton (forthcoming) and further information about this project can be found in www.multimodalmetaphor.com.

(d) *Content of the interpretations*

In turn, significant differences in the content of participants' responses to the adverts were found that could be accounted for by their nationality. By way of illustration, let me compare four interesting examples.

Example 22. Grand. Chinese participants were more likely to report that this advert was about "environmental presentation" ($p < .01$) due to the dry landscape that was shown, than Spanish and English, who in turn were more likely to say that the advert was meant to promote tourism in the state of Arizona ($p < .01$). Advertisers should have taken into account the existence of the alternative metonymy DROUGHT FOR DEATH, that overrides the metonymy GRAND CANYON FOR ARIZONA in countries where this natural phenomenon is not very well known.

Example 22. Arizona

Example 23. Schweppes[6]

Example 23. Schhhweppes. As analysed in Pérez-Sobrino (2013b: 431), the superimposition of the onomatopoeia "Schhhhh" onto "Schweppes" gives rise to an ad hoc variant of the brand name: "Schhhhhweppes", as shown in the website of a film festival sponsored by the company. "Schhhhh" is metonymic for the tonic water, as it closely resembles the sound that bubbles make in carbonated drinks. Additionally, given that the onomatopoeia grows out of the brand name, "schhhhh" also stands for the brand, making the bubbling quality the hallmark of the product. Interestingly, note that the same onomatopoeia "schhhhh" also applies for the request of silence at the beginning of a film, which related to the content and purpose of the website (the promotion of a short film festival). Further metonymic mappings would also relate silence with intimacy, as pointed out by the subtitle "Just for a mature audience".

Example 24. Grrrrrreen. Among the high number of visual metonymies available for the interpretation of this advert, there were significant differences across the three nationalities. English significantly more like than Spanish and Chinese ($p < .05$) to report that this advert is aimed at a mature, sophisticated audience, which primes the chain of metonymies (SHHH FOR SILENCE FOR ADULT CONTENT IN FILM) over the alternative possible metonymies that relate to the

6. Retrieved on 15th January 2013 from: http://www.schhh.eu/

properties of the drink. The fact the participants elaborated on the inferences triggered by the chain of metonymies, instead of interrupting their interpretation at the level of the drink, ties in with the findings reported in Section 8.3.2, in which it was shown that chains of metonymies were likely to be found more effective than metonymies.

Example 24. Saab. Grrrrrreen: Every Saab is green[7]

The run of *r*'s activates the metaphor SAAB IS A LION, thus representing a car's engine power in terms of a lion's (paradigmatic) power, which we experientially correlate with the loudness of its roar. Additionally, as argued in Pérez-Sobrino (2013b: 430), the series of *r*'s also activates two metonymic chains: ONOMATOPOEIA FOR CAR ENGINE FOR CAR and GREEN FOR NATURE FOR NATURE FRIENDLY.

Both British and Spanish subjects were more likely to focus on the metaphorical reading of the advertisement by significantly relating the *r's* to a powerful engine ($p < .01$) than their Chinese counterparts. Additionally, Spanish participants were significantly more likely to say that the *r's* were meant to describe a *very* eco-friendly engine, because they could count up to six *r's* in the word "green" ($p < .05$), hence combining two effective types of figurative language, i.e. the metonymic chains mentioned above with the primary metaphor IMPORTANT IS BIG/LARGE SIZE.

Example 25. Attractive power. The billboard displays two white speedometers without numbers and arrows over a black background, which is reminiscent of two (presumably female) eyelashes. This example is analysed in Pérez-Sobrino (2016a: 85) in terms of metaphtonymy. The metonymies SPEEDOMETERS FOR CAR and EYELASHES FOR WOMEN develop the visual material provided in the billboard to the extent required for the metaphor CAR IS WOMAN to take place. There are at least two possible interpretations of this advertisement: (1) it is either

7. Text: *Carbon emissions are neutral across the entire Saab range*

Example 25. Audi TT. Attractive power

the *centrality* of eyelashes to female beauty that is put in correspondence to the car's unlimited power (in terms of speed and fuel consumption); or (2) it is the understanding of the whole car as an attractive woman that makes the car appealing to prospective consumers.

Both the British and the Spanish participants were significantly more likely to report that the car was "as attractive to women to men's eyes" ($p < .05$) than Chinese participants, who found the minimalistic design confusing in a significantly more than their counterparts ($p < .05$). Thus, British and Spanish participants this showed a preference for the metaphor CAR IS WOMAN than for the metonymy that makes connects the speedometer to the car, maybe because metaphor was perceived as more effective than metonymy as it evokes a much more suggestive mental images.

8.4 Summary and conclusions

In this chapter I designed a study to measure the impact of varying degrees of figurative complexity (in terms of metaphor-metonymy combinations) on consumer interpretations and beliefs within and the context of advertising. I reported the results of an experiment that isolated the effect of figurative complexity on speed of processing, depth of comprehension and perceived appeal towards the product

by audiences coming from different linguistic and cultural backgrounds (English, Spanish, and Chinese). To conclude this chapter, I have extracted below four crucial findings arising from this work.

1. *Figurative complexity is not significantly related to speed of processing*. There is no significant relationship between the volume of conceptual operations structuring an advertisement and the required time to process them.
2. *Figurative complexity is significantly related to the advertisement's perceived persuasion power*. Participants were more likely to perceive intermediate degrees of figurativeness as effective, and thought that the most basic ones (metonymy) and the most complex ones (metaphoric complex) did not contribute to create a successful advertisement. It was additionally found that advertisements that were perceived to be convincing were processed faster in comparison to those perceived as less effective. This may relate to the amount of effort that participants needed to expend in order to understand the advertisements, given that they preferred those that did not posit any sort of cognitive inconsistence.
3. *Complex figurative language does not lead to complex interpretations*. Participants did not produce more varied interpretations for advertisements involving higher levels of conceptual complexity than for those with simpler conceptual operations. Variation in the number of responses was, however, better explained in terms of how effective the advert was perceived.
4. *There are cross-cultural variations in the role of conceptual complexity in the interpretation of advertisements*. With respect to the effect of the linguistic/cultural background of the participants in the variables mentioned above, cross-linguistic/cultural variation was found (in a reliable way) in (a) the time taken in processing the advertisements (where Spanish participants were significantly faster than British and Chinese), and in (b) type of interpretations given by the participants. However, no reliable significant interactions were found between nationality, figurative complexity, persuasive power of the advertisements, and number of possible interpretations per advertisement. In other words, all the participants in this study were equally likely to consider the advertisements convincing and to produce an average number of responses per advert in spite of their nationalities.

This study has shown a way to assess the effect of figurative complexity in participants in an empirical way that can be relevant for the marketing industry. Depending on their marketing strategies, advertisers may opt for more complex and elaborate advertisements that may take a little longer to process (e.g. in magazines, where there are no time constraints), or simpler advertisements that are processed more rapidly (e.g. for TV and cinema commercials, or road billboards). The nationality of the informants has been shown to play an important role in different aspects

of advertising comprehension, such as speed of comprehension and depth of the interpretation. By contrast, I have also shown that background nationality does not affect the likelihood of a campaign to be perceived as persuasive. Hence, advertisers should redefine the notion of "effectiveness" in advertising by taking into account the role of conceptual complexity and how it affects the speed of comprehension, and the accuracy and depth of interpretation.

Besides the benefits for the cognitive-linguistic research community, the practical applications of this research point directly to the effective design of more culturally-sensitive practices for tackling cross-cultural communication. Cognitive linguists are, therefore, in a position to improve the ability of multinational companies (and other organisations that need to address multinational audiences) to render their messages effective across audiences with varied linguistic and/or cultural backgrounds. The implications of this study can raise awareness among advertisers of the ways in which it is possible to make use of shared experiential knowledge for global campaigns, while selecting specific cultural content for local campaigns.

Future studies should delve deeper into the study of alternative variables (such as education level and professional background). Alternatively, it may be worth looking at psychological variables (such as Need for Cognition or personality type). In psychology, Need for Cognition refers to a personality variable reflecting the extent to which individuals are inclined towards effortful cognitive activities (Cacioppo and Petty 1982; Cacioppo, Petty, Feinstein, and Jarvis 1996). For instance, Chang and Yen (2013) offer evidence supporting the fact that visual metaphors are more likely to be successfully interpreted by people with a higher need for cognition, that is, people inclined towards a high elaboration in terms of appreciation of debate, idea evaluation, and problem solving. Complementarily, it would be worth examining the role played by the Big Five personality traits (openness, conscientiousness, extraversion, agreeableness, and neuroticism) (Costa and Crae 1992). There is empirical work (Schacter, Gilbert and Wegner 2011) that has found consistency in the Big Five personality traits shown in interviews, self-descriptions and observations across a wide range of participants of different ages and of different cultures. These five broad domains or dimensions of personality may be decisive to determine the involvement of the viewer in the interpretation task, and therefore, they may affect the speed of processing, complexity of his/her interpretations, and the emotional inclination towards the promoted product.

Another interesting line of enquiry relates to the role of emotion in the understanding and appreciation of metaphor. Citron and Goldberg (2014) have provided neurolinguistic evidence showing that conventional metaphors are more emotionally evocative than literal expressions. This account can be refined and expanded by including electrodermal activity (EDA) tests and by gathering interview data on the types of emotion provoked.

CHAPTER 9

Closing notes

From a certain point onward there is no longer any turning back.
That is the point that must be reached.
(Franz Kafka, *The Castle*)

9.1 Introduction

Throughout this book I have argued that metaphor in combination with metonymy contributes to the creative expression of advertising in a number of predictable ways. Metonymy is frequently found in advertising, hinting at the development of an array of desired attributes that are attached to the promoted commodity; metaphor, in turn, evokes the more or less free association with a positively-connoted scenario that allows us to perceive the product from a whole new perspective. Multimodal metaphor in interaction with metonymy sheds new light on the intricacies of creativity in advertising. A successful advertisement does not originate in magic, coincidence, or mystery. Rather, metaphor and metonymy are well-established conceptual routes with limited inferential potential that allow us to look at the ordinary and see the extraordinary.

In this chapter I sum up the main insights of this book, and show the ways in which the novelty of this research work redefines the traditional notions of multimodal metaphor and metonymy. This new knowledge has potential theoretical implications for Cognitive Linguistics, and also offers interesting practical applications for the cognitive sciences and advertising studies. I also suggest some specific ways in which the research lines of this work should be further expanded and developed.

9.2 What adds *Multimodal Metaphor and Metonymy in Advertising* to what we already know?

Let me review the main findings that have arisen over the course of this work in relation to the main research questions that motivated this research.

We live in a multimodal world

As we have seen throughout this book, metaphor is a particularly suitable communicative device for advertising, as it readily allows the establishment of a correspondence between the product and a positive scenario via cross-domain mapping. However, advertising is currently in the middle of an intensified shift from verbal language towards multimodality. Every day we, as consumers, are exposed to a progressively increasing number of figurative messages at the intersection of several modes. By setting focus on the non-verbal manifestations of metaphorical thinking, this book has shown new features of metaphor that have not yet been identified in verbal discourse. Furthermore, proving the existence of metaphorical manifestations in non-verbal domains, this research work has contributed to lend further support to the conceptual status of metaphor.

However, we need verbal metaphor to investigate multimodal metaphor

The novelty of this research topic imposes a significant research challenge, which is to address a new research need in the absence of a well-established set of analytical tools. However, it might be the case (as it is for multimodal metaphor) that the research topic is so new that there is as yet no widely accepted methodology available in the literature. However, if metaphor is primarily a conceptual phenomenon, multimodal theorists are entitled to borrow well-attested analytical inquiries from the domain of verbal metaphor. In the light of this, I have applied five patterns of conceptual interaction between metaphor and metonymy identified in verbal discourse *(multiple-source)-in-target metonymy, metonymic chain, metaphtonymy, metaphoric amalgam, and metaphoric chain*) to the study of the selected 210 advertisements. At the same time, I have borne in mind that the methodology must be determined by the topic of research, and thus I have developed specific mechanisms to account satisfactorily for the specificities of metaphor and metonymy in multimodal use. This flexibility has allowed me to detect in multimodal use a series of variants of the interaction patterns between metaphor and metonymy surveyed in verbal discourse: *(multiple-source)-in-target) metonymic chain, (multiple-source)-in-target metaphtonymy, parallel metonymic developments in both domains of a metaphtonymy, metaphtonymy scenario, single-source metaphtonymic amalgams, multiple source / target metaphoric amalgams, and metaphtonymic chains*. Interestingly, if the metaphor-metonymy combinations identified in verbal discourse have served as a starting point from which to investigate multimodal manifestations of these two tropes, it may be that these new multimodal variants will encourage researchers interested in verbal metaphor to find new patterns of interaction.

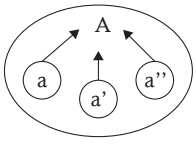
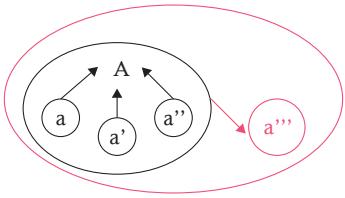
Metaphor is not everything

As has been extensively shown, the volume of inferential activity involved in metaphor-metonymy combinations in multimodal use are far more complex than that of a sole metaphor or metonymy, or of metaphor in interaction with metonymy in verbal discourse. The thorough examination of a corpus of 210 real advertisements has also shed light on novel multimodal conceptual complexes (still unidentified in verbal use) that have allowed us to enrich the inventory of metaphor-metonymy combinations.

This book has laid out in detail a comprehensive paradigm for the study of new meaning-making practices in multimodal contexts such as advertising. The model propounded herein, which is based on the recognition of the existence of complex combinations between metaphor and metonymy, has placed metaphor and metonymy on a continuum of increasing conceptual complexity. The considerable potential for interaction of metaphor with other operations (such as metonymy and/or other metaphors) allows us to expand the inventory of possible meaning construction processes.

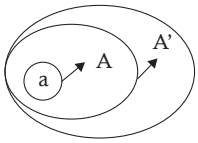
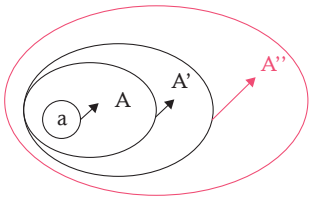
I will summarise the novel patterns one at a time. (Multiple-source)-in-target metonymy (Pérez-Hernández 2013a) is a type of metonymy where several subdomains provide simultaneous access to the most-encompassing domain. It was found that they could be paired with a metonymic chain, thus triggering a (multiple-source)-in-target metonymic chain (see Table 6, in red). This multimodal variant counts on additional inferential power to developing the array of related attributes. This is the case with the Cling Film advertisement (Chapter 5, Example 6) where the round piece of red meat plus white roll of cling film stand for a traffic signal, which subsequently stands for the prohibition on entering a place.

Table 6. Novel variant for (multiple-source)-in-target metonymy in multimodal settings (in red)

Conceptual complex	Schematic representation	New developments in multimodal use
(MS)iT metonymy (3.2.1)		Multimodal (MS)iT chain (5.2.1) 

A similar pattern was observed in metonymic chains (see Table 7). Whereas in verbal discourse up to two metonymies in interaction have been observed (Ruiz de Mendoza and Galera 2014), in Chapter 5 we observed that metonymic chains can be more productive in multimodal settings, and can even combine up to three metonymies within the same advertising unit. In Example 4, we saw a series of intermediate metonymic steps between the hospital, the ambulance, the siren, and then the verbal mention of the noise it makes. Besides developing the advertising message in a much more full way than single metonymies, this chain eventually connects with the product by means of another cause-effect metonymy, namely that using the product (noise-cancelling headsets) would block out the noise.

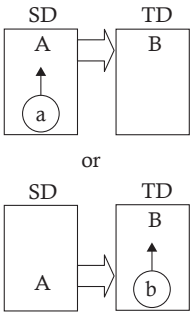
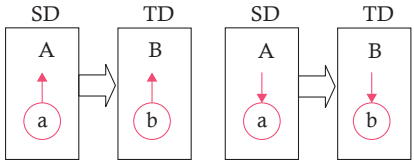
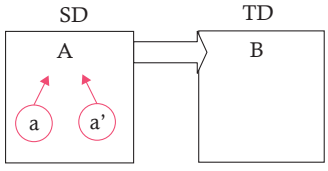
Table 7. Novel variant for metonymic chain in multimodal settings (in red)

Conceptual complex	Schematic representation	New developments in multimodal use
Metonymic chain (3.2.2)		Multimodal multiple metonymic (5.2.2) 

Metonymy also plays a crucial role in the development of metaphtonymies. While metaphor allows the consumer to explore the connection between the product and a different domain, metonymy provides the viewer with a vantage point from which to access any of the metaphorical domains in a cognitively economic way. Metonymic expansion and reduction processes have been already observed in either the metaphorical source or target domain, but as we saw in Chapter 6, in multimodal settings this expansion plus reduction is more frequent for parallel metonymic developments in both the metaphorical domains. This is the case in Example 12, where just by depicting a cream jar with a pause sign the viewer is able to infer the connection between humans and machines. This new layer of complexity not only facilitates access to the metaphorical mapping in question (or even to a metaphor scenario, as in the Durex lubricant advertisement in Example 11), but it also develops the persuasive message beyond the billboard, thereby allowing for a more minimalistic graphic display. Another possibility is to have several metonymic subdomains providing access to a metaphorical source (recall here Example 15, where the joint depiction of the Sex Pistols and the Beatles in an advertisement

about speed bumps helps the viewer to appreciate different heights in the road). See Table 8 for a summary of all these developments (in red).

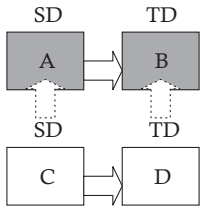
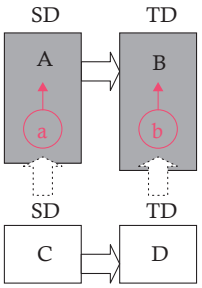
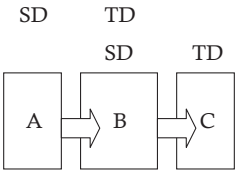
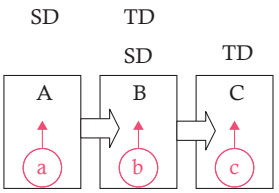
Table 8. Novel variants for metaphtonymy in multimodal settings (in red)

Conceptual complex	Schematic representation	New developments in multimodal use
Metaphtonymy (3.2.3)		Parallel metonymy (expansion/reduction) developments in both source and target domains of the multimodal metaphor (6.2.2 a,b)  Metaphtonymy scenario (6.2.2 c) (MS)iT metaphtonymy (6.2.2 d) 

Interestingly, metonymy was found also in the vast majority of the remaining metaphorical complexes, namely, metaphoric amalgams and chains (see Table 9). In both cases, the inclusion of a metonymy in the adverts has a twofold effect: on the one hand, it favours the inferential task required in metaphorical reasoning; on the other hand, it facilitates the graphical description of the advertising message by exclusively depicting a series of prominent features. In the case of the online version of La Republicca (Example 17) the fingerprints stand for the act of swiping/tapping, which through a subsequent metonymic projection stands for reading news on an iPad (which is presumably one of the devices likely to be used to read the newspaper online). A parallel metonymic expansion process takes place in the metaphorical target, where a series of footsteps accesses the notion of walking, which in turn is expanded onto the activity of exploring a landscape. Once we construct a scenario in which exploring a landscape is constructed as swiping/tapping an iPad, this metaphor is combined with NEWS IS A LOCATION in order to trigger an enriched version of the original metaphor, which specifies that the online news are the milestones of the recreated "iPad landscape". A similar conceptual structure can

be found in the Boddingtons advertisement (Example 21), where the word "Milk" grants access to the notion of "the cream of the crop", the quiff to the idea of Elvis, and the pint of beer to the brand, respectively. Choosing these salient features in each of their related domains eases the cognitive demand on the viewer, while at the same time positing the advertising riddle in a creative and appealing way.

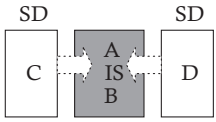
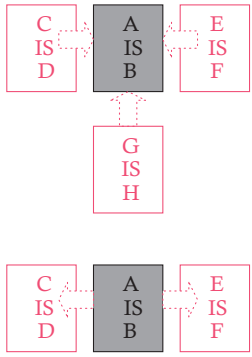
Table 9. Novel variants for single-source metaphoric amalgams and metaphoric chains in multimodal settings (in red)

Conceptual complex	Schematic representation	New developments in multimodal use
Metaphoric amalgam (2.1.4)	Single-source 	Multimodal single-source metaphtonymic amalgam (6.2.3) 
Metaphoric chain (2.1.5)		Multimodal metaphtonymic chain (6.2.5) 

Finally, the most intricate combination of metaphors was found in the advertisement for a medical insurance company in Example 19. In this example, I showed that three different metaphors (that were also combined with metonymy) mapped onto the receptor metaphor, thus triggering a much richer version of the original TREATING A DISEASE IS A RACE metaphor. As can be seen from the schematic description of this complex in Table 10, multimodal triple-source metaphoric amalgams surpass by far the complexity of single and double-source metaphoric amalgams already identified in verbal discourse. This shows that multimodal settings allow for greater interaction between metaphors and enable it to happen in new ways. The data yielded yet another variation of this kind of complex: a case where a donor metaphor is mapped onto two different receptor metaphors. In the Moleskine advertisement (Example 20), the metaphor IDEAS ARE MOVING

OBJECTS was mapped onto the notebook in order to provide it with conceptual structure as a container of ideas, but also in order to conceptualise remembering an idea in terms of physically securing a wild animal with a lasso.

Table 10. Novel variants for double-source metaphoric amalgams in multimodal settings (in red)

Conceptual complex	Schematic representation	New developments in multimodal use
Metaphoric amalgam (2.1.4)	Double source 	Multimodal multiple source metaphoric amalgam / double target metaphoric amalgam (6.2.4) 

Figurative complexity can be pinned down

Our approach to meaning construction highlights three different factors that can measure conceptual complexity. I have first taken into account the nature of the conceptual domain (establishing that metonymic domains are less complex than metaphorical domains), the type of interactional pattern (whereby integration is regarded as less complex than chaining), and the number of metonymic and/or metaphoric domains involved. As a result, multimodal metonymy and metaphor (and their patterns of interaction) can be placed along a cline of increasing qualitative complexity that results in a finer-grained account of the figurative continuum, as originally conceived by Dirven (2002). The multimodal variants shown in *Tables 16–20* not only enrich previous accounts of the interactional dimension between metaphor and metonymy, but can also fill the gaps between these two tropes in the *figurative continuum*. My proposed expanded version can be seen in Figure 57 below. It would be worth exploring whether these novel complexes arising from multimodal environments are also present in verbal contexts. Furthermore, it is worth emphasizing that the successful application of the figurative continuum

to multimodal settings lends further support to the greater explanatory power and efficacy of the cognitive-linguistic approach to meaning construction phenomena.

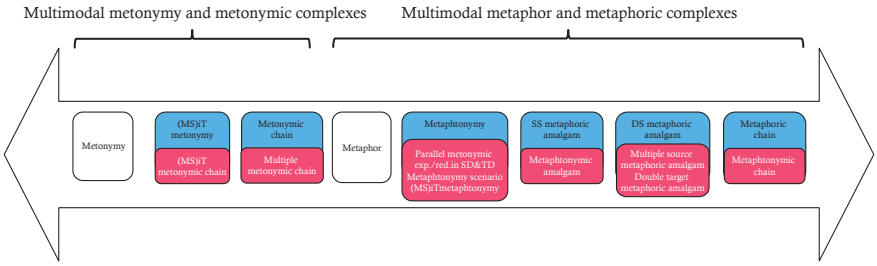


Figure 57. Expanded version of the figurative continuum (red for novel developments arisen in multimodal use)

Metonymy matters (a lot)

The reader of this book will have noticed that I've focused a great deal on overcoming the limitations of other analyses of multimodal metaphor in advertising. Perhaps the most relevant consideration is that metonymy is regarded as a core device in the construction of advertising messages. That such a significant amount of metonymy can be found in the advertisements highlights the need to focus on the study of this figure of thought in multimodal environments. Although multimodal researchers in the field of advertising may be aware of metaphor, it is unlikely that they will have in-depth knowledge of metonymy and the ways in which it interacts with metaphor, and this is likely to be a useful variable in determining the success, or otherwise, of an advertising campaign.

Besides demonstrating the significant presence of metonymy in our corpus, Chapter 7 also provided quantitative evidence of the high frequency of metaphtonymy, which was by far the most frequent conceptual operation in the corpus. I argued that this might be because it combines the potential of metonymy to provide viewers with an economic point of access to the advertisement with the ascription of features from a positively connoted domain to the product via metaphorical mappings. The inclusion of metonymy in the source or target domains of metaphor serves as a cognitively economic point of access to a broader scenario. This makes it possible for pictorial and multimodal metaphors to refer to abstract targets that do not necessarily need to depict the promoted commodity. This observation paves the way for the analysis of correlational metaphors in multimodal use. To date such metaphors have attracted little attention in this field of research (with the exception of Forceville 2011a; Forceville and Jeulink 2011; and Pérez-Sobrino 2014a, b).

Metaphor and metonymy are used creatively (yet to a limited and predictable extent)

The possibility of coupling metaphor with other cognitive mechanisms gives rise to more inferential activity than a sole metaphorical correspondence between positive values (source domain) and the advertised product (target domain). Therefore, the product does not have to be represented, but can instead be indirectly suggested via conceptual shortcuts. The ability of domain expansion processes to prompt a metaphorical mapping makes it common for advertisers to represent part of the product or part of a constructed situation in order to evoke the product. This conceptual strategy shifts the interpretative burden to the audiences who must derive the more abstract scenario in which the product is associated with its attributes.

All in all, the reader must keep in mind that the inferential power of metaphor and metonymy is limited to a certain extent. In spite of the embodied basis for many of the metaphors and metonymies analysed in this book, the reader (and advertisers) should always bear in mind that these two devices are also culturally bound to some extent.

Multimodal metaphor and metonymy can make better advertisements

Thanks to the pervasive presence of metonymic projections throughout the corpus, advertisers can omit the representation of the product if they wish to (as it is the case for taboo products, such as lubricant) or promote abstract services such as NGO messages. In doing so, campaign managers can consciously choose a prominent feature of their product and incorporate it in the advertisement. This facilitates the interpretation of the advertisement by singling out the core aspects of the message, and also helps advertisers to steer the interpretation of their campaigns as they wish.

The conceptual scaffolding of an advertisement has a significant effect on variables affecting the interpretation, such as speed of processing and depth of interpretation. It was found that conceptual complexity was significantly related to speed of processing, complexity of interpretation, and perceived appeal of the advertisement. In other words, when confronted with complex advertisements, our participants required more time to process them and were more likely to produce more different interpretations, but they were not inclined to perceive them as effective. In turn, it was shown that conceptual complexity does hinder or facilitate reaching the most salient interpretation of the advertisement (although salient interpretations were produced faster). It was found that there was a significant effect of cultural/linguistic elements on the variables mentioned above with the exception of the perceived

persuasive potential of the advertisement. Given that nationality does not affect the likelihood of perceiving an advertisement as convincing, it would be worth considering alternative psychological and socioeconomic variables.

Multimodal metaphor and metonymy matter to advertisers and cognitive scientists

This work has great potential for interdisciplinary research. It will raise awareness among advertisers about the ways in which it is possible to make use of shared experiential knowledge for global campaigns, while selecting specific cultural content for local campaigns. As was hypothesised at the beginning of this book, advertisers will find several ways of incorporating metaphor and metonymy when creating advertisements to facilitate the cross-cultural understanding of the persuasive narrative. More importantly, the book will help advertisers to avoid incongruent strategies that may render their campaigns unsuccessful, thus saving unnecessary costs. If advertisers use such conceptual mechanisms when designing adverts they may be better able to foster a positive image for the product or service involved, the correct interpretation of the advertisement by audiences, and the concomitant removal of any inaccurate interpretations.

9.3 Implications of this book for future research on multimodal metaphor and metonymy

This research has addressed a number of theoretical and empirical gaps in advertising, multimodal communication and figurative meaning making. Besides the contribution to linguistics, the practical applications of this research point directly to the design of more effective practices for tackling cross-cultural communication.

First, this is the first broad-scale empirical study of multimodal metaphor and metonymy in a large corpus of real advertisements. Research from a cognitive linguistic standpoint has reported experiments with a limited number of advertisements with an exclusive focus on metaphor (see Burgers, Konijn, Steen, and Iepsma 2015; Forceville 1996: Chapter 6; van Mulken, le Pair and Forceville 2010), whereas marketing studies have only reported post-hoc results with made-up examples which disregard aspects such as conceptual motivation and/or linguistic and cultural disparity (see Ang and Lim 2006; Chang and Yen 2013; McQuarrie and Philips 2005; Morgan and Reichert 1999).

Second, this work goes beyond traditional approaches to multimodal metaphor by taking into account the dynamic interplay of metaphor with other conceptual

operations (such as other metaphors and metonymies), thereby leading to a refined understanding of the "figurative continuum" (see Chapter 3), i.e. an inventory of conceptual complexes with varying degrees of cognitive complexity (which, for the purposes of the experiment reported in Chapter 8, ranges from metonymy, through metonymic complexes, metaphor, and metaphtonymy, to metaphoric amalgams).

Third, this research singles out and empirically tests different variables influencing the success of advertising that may play a role in the time and depth of comprehension, such as conceptual complexity and cultural/linguistic background. Likewise, I looked into additional variables, such as speed of processing and the perceived persuasive potential of the advertisement, thus leading us to a general statement of recommended best practice in the creation of advertisements.

Fourth, this is genuinely interdisciplinary research. This eclectic combination of methods is theoretical and empirical (both quantitative and qualitative) and design-focused. By combining quantitative and qualitative approaches, I believe I have improved on existent accounts of figurative multimodal communication in advertising. Cognitive linguists may find in this project a novel way of assessing and predicting the communicative impact of multimodal manifestations, while the same set of analytical tools could be deployed strategically by creative designers and marketing scholars to construct more cognitively-effective and persuasive messages.

9.4 Reverse engineering and suggestions for further research

Marketing experts and cognitive scientists have an important role to play in further advancing knowledge of multimodal meaning-making practices. Three main findings from this book that are compatible with and relevant to the needs and expectations of the marketing industry.

The economic use of visuals and text in printed advertising is not necessarily linked to the volume and complexity of the conceptual configuration structuring the advertisement

My incursion into the intricacies of metaphor-metonymy combinations has shown that even the most minimalist adverts have the potential to trigger a wide array of inferential activity. As a matter of fact, some of the most basic advertisements (from the point of view of the graphic design, as it is the case of Examples 18–20) exploit primary and correlational metaphors, that is, metaphors that arise from the generalisation and abstraction of two domains of experience that tend to co-occur

in everyday life. The main advantage of a design reliant on this type of metaphor (in contrast with other low-level, situational, resemblance metaphors) is that it is particularly suitable for accommodating additional operations due to its structural basis. For instance, in the case of MedicAlert (Example 20), the highly schematic structure of paths has room to accommodate aspects such as obstacles in the shape of hurdles. The resultant receptor metaphor inherits the schematic structure of both donor metaphors thereby producing richer interpretation of the advertisement, which in this specific case provides further information about the characteristics of the motion that will take place along the path. Another advantage of incorporating primary and correlational metaphors in advertising campaigns is that they have a greater generalizing power. Given that human beings share a more or less similar physiognomy that interacts in many similar ways within the diverse environments they inhabit, it is to be expected that the acquisition of such metaphors stemming from everyday life will be the same across different cultures. It is thus to be expected that advertisements based on primary and structural metaphors have a greater potential to reach a cross-cultural audience.

Keep it simple

The results reported from the advertising comprehension experiment across a cross-cultural audience revealed a good deal about the targeted consumers' preferences. It was found that advertisements that rendered complex figurative uses of language triggered a greater number of possible different interpretations by consumers. However, at the same time they were perceived as less convincing by all the nationalities consulted in the study. Therefore, a key for a successful campaign might be to select a prominent feature of their product and create an advertising campaign around it, instead of promoting several properties of the product.

Metaphtonymies are helpful

As has been shown, this is the most pervasive conceptual complex in the corpus, and there is a reason for that. As has been argued, metaphtonymy combines the strengths of metonymy and metaphor as conceptual shortcuts. On the one hand, the metonymy allows the advertiser to highlight and emphasise an aspect of their product, which will undoubtedly help them to keep the campaign simple and effective. On the other hand, this metonymic projection will help advertisers to guide audiences and constrain their access to the metaphor, which in turn will ascribe further positive attributes to the promoted commodity, still in a rather limited and predictable way. In sum, metaphtonymies offer advertisers a great opportunity to

construct a creative message that can be reconstructed by their target audiences in a largely directed manner.

Additionally, this work has offered a solid theoretical basis for further empirical investigation of multimodal communication. I reformulate below three insights from the book regarding conceptual complexity, communicative impact, and multimodality as testable hypotheses for psycholinguistic inquiry.

Conceptual complexes based on chaining are more likely to require greater cognitive effort than integration-based complexes

In Chapter 3, I argued that there are two possible conceptual interactions, namely chaining and integration, and that chaining is qualitatively more complex than integration because it involves a sequence of mappings that must be accomplished in full in order for the interpretation task to take place. By contrast, integration does not involve a logical order of mappings; in fact, metonymic and metaphoric correspondences may take place in any order without jeopardising the final interpretation. Even a partial interpretation would prompt a meaningful (yet incomplete) interpretation. If chaining actually requires the sequential accomplishment of mappings, a reaction time test would show whether chaining actually requires more processing time than integration. Otherwise, it would show that this is just a matter of qualitative difference.

Eye movements in multimodal metaphor processing are likely to be different from non-figurative images

Most of the literature published within advertising and marketing studies agrees that a metaphor is more likely to attract consumers' attention than a verbal statement, and that a visual metaphor is more appealing than a verbal one when it comes to selling products. However, little has been done to investigate the way in which visual metaphors are actually processed. Evidence from eye-tracking tests has demonstrated that eye movements tend to fixate on verbal manifestations of metaphor and metonymy rather than on literal statements (for seminal eye-tracking studies on metaphor and metonymy, see Inhoff, Lima and Carroll 1984; and Frisson and Pickering 1999, respectively). However, little has been done to ascertain the extent to which this also applies to visual and multimodal metaphor (with the exception of Bergh and Beelders 2014, and Holsanova 2014). An eye-tracking measurement of multimodal metaphor, multimodal metonymy, and their patterns of interaction, will shed significant light on the way audiences perceive and process multimodal meaning, and will serve as a valuable complement to the content of

this book. Additionally, if multimodal metaphor does indeed attract greater eye fixation, it would be of interest for advertisers to imbue their advertisements with a greater presence of multimodal metaphor to increase their visibility in the market.

Metaphor will create more positive attitudes towards a product

As mentioned above, prior work has suggested an affective response to advertising, but the direction, valence and type of emotion is yet to be fully explored in multimodal messages. For example, it remains to be seen whether a complex combination of metaphor and metonymy triggers a stronger emotional response than a single metaphor would, and which combination results in a greater appreciation of the advertisement by the viewer. It also remains to be seen whether multimodal figurative information evokes positive or negative attitudes towards products, as some viewers may find overt visual and verbal metaphors less appealing. Similarly, the extent to which multimodal advertisements evoke emotion is yet to be investigated. More attention needs to be paid to the role of emotions in advertising, particularly in the context of multimodal metaphor and metonymy in static, dynamic and viral marketing. The few studies that have been conducted either avoid the physiological responses and adopt self-report measures only (Dobele, Lindgreen, Beverland, Vanhamme and Wijk 2007), do not adopt any true empirical measures (Kaplan and Haenlein 2011), or use basic word counts for the number of positive or negative words used in particular online content (Berger and Milman 2012) that is neither an advertisement nor dynamic. A study of electrodermal activity will measure moments of arousal and intensity in metaphor/metonymy interpretation. In combination with qualitative interviews, it will allow the researcher to identify the positivity and perceived intensity of emotions induced by these two figurative mechanisms in multimodal settings. The Marie S. Curie project "Exploring Multimodal Metaphor (and Metonymy) in Advertising" (EMMA- 658079, www.multimodalmetahor.com) is already implementing this experimental technique in the study of the effects of metaphor and metonymy comprehension on consumers from different linguistic and cultural backgrounds. The preliminary results confirm the findings indicated above: multimodal metaphor interpretation evokes more intense emotions on participants than verbal metaphor interpretation. The unraveling of the kinds of emotion provoked remains a work in progress.

9.5 Closing notes

There are forms of creativity, equally skilful and astonishing as artworks in museums, that happen everyday. Such pervasiveness has trained us, perhaps without even noticing, to be *agile* thinkers (Veale, Feyaerts, and Forceville 2014). The agile mind knows how to identify, disentangle, and appreciate certain core aspects of the creative act. Metaphor and metonymy are central to ordinary creativity simply because they provide a number of constrained and well-established conceptual routes of reasoning suitable for creative meaning making practices, such as advertising. In a global world where advertising is a central component of our everyday routine, metaphor and metonymy also shape and influence the way we think of a product, and because they are emotionally engaging, they might be a key element in maintaining or modifying consumers' behaviour. As Littlemore (2015: 197) puts it: "Meaning is underspecified in all sorts of communication, leaving much of the interpretative work to the reader, viewer, or listener". The beauty of this is that meaning, even in the most creative advertisements, can be consciously devised, controlled or measured. All in all, interpretation can be steered to a certain extent, given that cultural and personal traits of the viewer will always have an effect in the interpretative task. Ordinary creativity exists, and it is all around us. Knowing the ways in which it happens will help to devise cognitively efficient advertisements.

Note

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Secondary references

Chapter 2

Example 1. 7UP: 100% natural
Agency: Y&R San Francisco
Source: http://www.advertolog.com/7-up/print-outdoor/humming-bird-15001355/
Date of release: 2011

Chapter 5

Example 2. Duracell: Lasts for ages.
Agency: Grey Mumbai
Source: http://es.coloribus.com/archivo-de-publicidad-y-anuncios/dise%C3%B1o-y-marcas/duracell-batteries-lasts-for-ages-18916555/resizes/1024/
Date of release: 2013

Example 3. Camel: Discover more
Agency: Saatchi&Saatchi, Italy
Source: http://adsoftheworld.com/media/print/camel_icebreaker
Date of release: 2008

Example 4. Polk Audio Headphones: Leave the noise outside
Agency: Advertising School: Miami Ad School, San Francisco, USA
Source: http://www.gutewerbung.net/polk-audio-noise-canceling-headphones-ambulance/
Date of release:

Example 5. Leica: Capturing history for 100 years.
Agency: GEOMETRY GLOBAL Berlin
Source: http://es.coloribus.com/archivo-de-publicidad-y-anuncios/impresos-al-aire-libre/leica-napalmgirlroad-19485155/
Date of release: 2014

Example 6. Koroplast cling film
Agency: Happy People Project, Istanbul, Turkey
Source: http://adsoftheworld.com/media/print/koroplast_cling_film_no_entry_beef
Date of release: 2014

Example 7. Oreo: double milk
Agency: Saint Luc
Source: http://es.coloribus.com/archivo-de-publicidad-y-anuncios/impresos/oreo-double-milk-19023755/
Date of release: 2014

Example 8. You are you when you are hungry. Snickers satisfies
Agency: BBDO, New York, USA
Source: http://adsoftheworld.com/media/print/snickers_lincoln
Date of release: 2014

Example 9. Boschhhh. The quietest vacuum cleaner: Bosch Relaxx Pro Silence
Agency: Robert Bosch GmbH
Source: http://es.coloribus.com/archivo-de-publicidad-y-anuncios/impresos/bosch-boschhhh-19165555/
Date of release: 2014

Chapter 6

Example 10. LEGO
Agency: Blattner Brunner, USA
Source: http://www.coloribus.com/adsarchive/outdoor/sw-randall-toyes-plane-8183155/
Date of release: 2006

Example 11. DUREX lubes. Get in anywhere
Agency: Mccann Erickson Italy, Kilato Studio
Source: http://www.coloribus.com/adsarchive/prints/durex-lubricant-club-crasher-14498855/
Date of release: 2011

Example 12. Nivea Visage Anti-Wrinkle Q10 Plus Night Cream
Agency: Beiersdorf AG
Source: http://es.coloribus.com/archivo-de-publicidad-y-anuncios/impresos/nivea-visage-anti-wrinkle-q10-plus-cream-pause-10957155/
Date of release: 2007

Example 13. WWF: Toxic emissions are the worst threat for wildlife
Agency: Contrapunto BBDO Madrid
Source: http://www.coloribus.com/adsarchive/prints/wwf-chimneys-8155455/
Date of release: 2006

Example 14. M&M: Vote for Green
Agency: Clemenger BBDO, Australia.
Source: http://www.coloribus.com/adsarchive/prints/mms-chocolate-vote-green-11242255/
Date of release: 2008

Example 15. Mato Grosso radio station
Agency: Casa D'Ideias, Cuiaba, Brazil
Source: http://www.coloribus.com/adsarchive/prints/governo-de-mato-grosso-illegal-speed-bumps-2-19600105/
Date of release: 2014

Example 16. Urzúa jewellery
Agency: Inbrax
Source: http://es.coloribus.com/archivo-de-publicidad-y-anuncios/impresos/felipe-urzua-jewelry-ring-14131555/
Date of release: 2010

Example 17. La Republicca online: Follow us in your iPad
Agency: Y&R Roma
Source: http://es.coloribus.com/archivo-de-publicidad-y-anuncios/impresos/la-repubblica-fingerprints-16141555/
Date of release: 2012

Example 18. LO & JACK Leaders in stolen cars track and recovery services
Agency: Garcia + Robles, Guatemala
Source: http://adsoftheworld.com/media/print/lojack_car_1
Date of release: 2012

Example 19. Medic Alert: Increase your odds in a life or death situation.
Agency: Bester Burke, Cape Town, South Africa
Source: http://adsoftheworld.com/media/print/medicalert_hurdles
Date of release: 2013

Example 20. Moleskine: Ideas come and go
Agency: Miami Ad School
Source: http://es.coloribus.com/archivo-de-publicidad-y-anuncios/impresos/moleskine-lasso-14664505/
Date of release: 2011

Example 21. Boddingtons, the cream of Manchester
Agency: Bartle Bogle Hegarty, London, UK
Source: http://badassdigest.com/2012/04/15/if-you-dont-get-boddies-you-dont-get-beer/
Date of release: 1993

Chapter 8

Example 22. Grand. Arizonaguide.com
Source: http://www.visitarizona.com/press-room/press-releases/arizona-office-of-tourism-launches-national-international-ad-campaigns-promoting-arizona-as-top-travel-destination
Year: 2012

Example 23. Schweppes Short Film Festival
Source: http://www.coloribus.com/adsarchive/online-viral/schweppes-bitter-lemon-schweppes-short-film-festival-12146755/
Year: 2008

Example 24. Grrrrrreen: Every Saab is green. Carbon emissions are neutral across the entire Saab range.
Agency: Saab Australia
Source: http://www.prwatch.org/node/6318
Date of release: 2008.

Example 25. New Audi TT: Attractive power.
Agency: Audi
Source: http://www.germancarblog.com/2007/12/audi-tt-nice-eyelashes-ad.html
Date of release: 2007

Index

Metaphor and metonymy appeal to us because they evoke mental images in unique but still recognisable ways. The potential for figurative thought exists in everyone, and it pervades our everyday social interactions. In particular, advertising offers countless opportunities to explore the way in which people think creatively through metaphor and metonymy. The thorough analysis of a corpus of 210 authentic printed advertisements shows the central role of multimodal metaphor, metonymy, and their patterns of interaction, at the heart of advertising campaigns. This book is the first in-depth research monograph to bring together qualitative and quantitative evidence of metaphor-metonymy combinations in real multimodal discourse. It combines detailed case study analyses with corpus-based analysis and psycholinguistic enquiry to provide the reader with a prismatic approach to the topic of figurative language in multimodal advertising. Besides its theoretical contribution to the field of multimodal figurative language, this monograph has a wide number of practical applications due to its focus on advertising and the communicative impact of creative messages on consumers. This book will pave the way for further qualitative and quantitative research on the ways in which figurative language shapes multimodal discourse, and how it relates to our everyday creative thinking.

"The book will be essential reading for anyone interested in the ways in which figurative communication can and should be employed in advertising. It will be of significant interest to both academics and professionals."

Jeannette Littlemore, *University of Birmingham (UK)*

"This volume presents practical guidelines for effectively using metaphor and metonymy in advertising and represents an excellent case study of how cognitive linguistics can illuminate critical features of multimodal creativity in action."

Raymond W. Gibbs, Jr., *University of California at Santa Cruz*

"This is certainly a ground-breaking study with important implications for communication studies both at the theoretical and applied levels."

Francisco J. Ruiz de Mendoza Ibáñez &
Lorena Pérez Hernández, *University of La Rioja*

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