The Effect of Visual Metaphor on Advertising Response An Integrative Framework

Adel Sakr

Doctor of Philosophy

Aston University

March 2016

© Adel Sakr, 2016

Adel Sakr asserts his moral right to be identified as the author of this thesis.

This copy of the thesis has been supplied on condition that anyone who consults it is understood to recognise that its copyright rests with its author and that no quotation from the thesis and no information derived from it may be published without appropriate permission or acknowledgement.

Aston University

The Effect of Visual Metaphor on Advertising Response

An Integrative Framework

Adel Sakr

Doctor of Philosophy

2016

Thesis Summary

This thesis contributes toward the better understanding of the use and effect of visual metaphor in print advertising through an integrative framework. Two overall research questions are answered in this context. Firstly, why is visual metaphor in advertising such an important phenomenon that is worth further research? Secondly, how does visual metaphor engage the consumer and elicits favorable responses to different print advertisements? Two studies were conducted to answer these questions. Study one, a content analysis on 320 print advertisements answered the first overall research question. This study provided a comprehensive assessment of the use of visual metaphor in print advertising. Results showed that visual metaphor is strongly present in print advertising and that this presence shows an increasing trend over time. Study two answered the second overall research question through two experiments. The first experiment compared the effect of different types of visual metaphor on different consumer responses. Results from this experiment showed that replacement metaphor had the most positive effect on effectiveness of the ad. Furthermore, replacement metaphor together with fusion metaphor had the most positive effect on attitude toward the brand and purchase intention. Verbopictorial metaphor on the other hand scored the lowest with regards to its effect on the three aforementioned responses. The effect of replacement metaphor on effectiveness of the ad, attitude toward the brand and purchase intention was positively mediated through elaboration and subjective ad comprehension. Objective ad comprehension also positively mediated the effect of replacement metaphor but only on effectiveness of the ad and purchase intention. The same results applied to verbo-pictorial metaphor. However, the mediation effects in this case were negative. Findings, also uncovered that ads that compare two metaphorical objects which are conceptually similar particularly in terms of their functional characteristics are better comprehended. Therefore, a specific visual structure may vary in its effect and hence effectiveness depending on the nature and character of this conceptual similarity as perceived by consumers. The second experiment tested the moderating effect of ad viewing time on consumer response to visual metaphor in advertising. Results, however, did not support the hypothesis related to this moderating effect. Finally, comparing the content analysis and experimental findings provides valuable insights for advertising practitioners. Practitioners can better frame their advertisements and make more effective use of the different types of visual metaphor for this purpose. Therefore, this thesis has also important practical implications.

Keywords: Advertising Effectiveness, Visual Metaphor, Ad Viewing Time

Dedication

To my parents

Helen and Mahmoud

Acknowledgements

I am delighted to take this opportunity to thank people without whose support, advice and company I would not have managed to complete this thesis. First and foremost I would like to express my sincere gratitude to my supervisory team Dr. Dina Rasolofoarison and Professor Heiner Evanschitzky. Their combined knowledge, expertise, support and words of encouragement made this doctoral research experience not only a valuable learning experience but also an enjoyable one. I would like to thank Dr. Dina for her flexibility, patience and support when I was selecting my research topic. Her guidance in the design of the content analysis as well as the experimental research was also valuable. I also appreciate her ability to keep a balance between providing directions and supporting my efforts while offering me the opportunity to find my own way forward. There are so many things to thank Professor Heiner for, but I will just single out a few that I really admired him for. His great ability to provide essential and continuous support at all the stages of my PhD studies. I am grateful to him for being able to fuel my motivation and enthusiasm to progress with my research even at the most challenging times. His expertise and guidance helped me prioritize my tasks and manage my time to meet the different deadlines throughout this project. His knowledge in research design and data analysis was also of great value to me and I did learn from him a lot in this regard.

Very special thanks to my friend and colleague Katharina Kils. Without her essential help and support, I would never had been able to complete the content analysis study on time. I will always be grateful and remember our chats on Christmas and new years' eve, which you generously devoted to support me and work on this study. I wish to also thank Aston Business School represented in all the faculty members in the Marketing Group. You were all more than generous with your time whenever I had a question or I needed any kind of support. Special thanks also to Mr. Paul Hebron, Head of Marketing and Alumni Relations at Aston Business School. Without his tremendous help in connecting me with Advertising practitioners I would never had been able to recruit the needed participants for the qualitative study conducted as part of this thesis. His valuable support enabled me to complete this study on time. I would also like to give special thanks to the RDP team (Dr. Elizabeth Bridges, Ms. Jeanette Ikuomola, Ms. Irene Vickers and Ms. Ranjit Judge) for ethically supporting the whole PhD experience. Your informal chats and kind words of encouragement had a valuable impact on my progress with my research. Thank you for being there for me. Last and definitely not least I would like to thank all my friends and colleagues at Aston Business School and also back home for their continuous encouragement and support.

Table of Contents

Thesis Summary	2
Dedication	3
Acknowledgements	4
Table of Contents	5
Chapter 1 Introduction	11
1.1 Introduction	12
1.2 Aim and Research Objectives	17
1.3 Organization of the Thesis	18
Chapter 2	23
Philosophy and Research Structure	23
2.1. Introduction	24
2.2. The Different Philosophical Approaches	24
2.2.1 Interpretivism	24
2.2.2 Realism	25
2.2.3. Positivism and Its Roots	26
2.2.4 Pragmatism	28
2.3. Critical Discussion of the Research Structure	32
Chapter 3	35
Literature Review (Part 1)	35
3.1. Introduction	36
3.2 What is a Visual Metaphor?	36
3.3. Typologies of Visual Metaphor in Advertising	41
3.4. Previous Research on the Presence of Visual Metaphor in Print Advertising	52
Chapter 4	55
Contemporary Uses of Visual Metaphor in Print Advertising	55
4.1. Introduction	56
4.2. Qualitative Study with Advertising Experts	57
4.2.1 Aim of the study	57
4.2.2. Context and Reason for Choice	57
4.2.3. Research Objectives	60
4.2.4. Method	

4.2.4.1 Why Qualitative in-depth interviews?
4.2.4.2. Sample
4.2.4.3. Interviews Structure
4.2.4.4. Materials
4.2.4.5. Data Analysis
4.2.5. Research Findings
4.2.5.1. Metaphor in Print Advertising
4.2.5.2. The Visual Element
4.2.5.3. The Textual Element
4.2.5.4. The Brand Element
4.2.5.5. Managerial Insights69
4.2.6. Conclusion
4.3. Content Analysis on Print Ads74
4.3.1. Aim of the study
4.3.2. Research Objectives
4.3.3. Method
4.3.3.1. Descriptive Study75
4.3.3.2 Why Content Analysis?
4.3.3.3. Steps of Content Analysis
4.3.4. Research Findings
4.3.4.1 Visual Metaphor
4.3.4.2 Visual Element
4.2.4.3. Textual Element
4.2.4.4. Brand Element
4.4. Discussion
Chapter 5
Literature Review (Part 2)
5.1. Introduction
5.2. Effects of Visual Metaphor Type on Comprehension

5.3 Effects of Visual Metaphor on Consumer Responses	114
5.3.1 Cognitive Elaboration	115
5.3.2. Comprehension	122
5.3.3 Attitude Toward the Ad	128
5.3.4 Ad Credibility	129
5.3.5 Attitude Toward the Brand	131
5.3.6. Purchase Intention	132
5.3.7. Perceived Quality of Advertised Product	133
5.3.8. Effectiveness of the ad	134
5.3.9. Ad Recall	134
5.4. Previous research on the effect of Forceville's (1996) typology on const	umer response.
	135
5.5. Moderating Factors	147
5.6. The Gap in the Literature	151
5.7. The Derived Conceptual Model	152
Chapter 6	154
Experimental Research	154
6.1. Introduction	155
6.2. Methodology	156
6.2.1. Why Experimental Research?	156
6.2.2. Why More Than One Experiment?	156
6.3. Experiment One	157
6.3.1. Introduction	157
6.3.2 Proposed Hypotheses	160
6.3.3. Methodology	163
6.3.4. Data Analysis and Results	173
6.3.5. Small Complementary Study	194
6.3.6. Discussion	197
6.4. Experiment Two	205
6.4.1 Introduction	205

6.4.2. Proposed Hypothesis	206
6.4.3. Methodology	206
6.4.4. Data Analysis and Results	214
6.4.5 Discussion	219
6.5. General Discussion	220
6.6. Ethical Considerations for Experiments	222
Chapter 7	223
Discussion	223
7.1. Introduction	224
7.2. Aim and Objectives of This Thesis	224
7.3. Meeting the Objectives	225
7.4. Managerial Implications	233
7.5. Limitations and Future Research	234
References	237
Appendices	257

List of Figures

Figure 1: Welti-Furer Ad Figure 2: Greenpeace Ad	12
Figure 3: Reflex Racquet Ad (Phillips, 1997)	41
Figure 4: Replacement Metaphor - Clerget ad (Source, Forceville, 1996)	42
Figure 5: Juxtaposition Metaphor - Chocolate Cherry Cookies Ad (Source, Lagerw	erf,
van Hooijdonk, & Korenberg, 2012)	43
Figure 6: Verbo-Pictorial Metaphor - BMW Motorbike Ad (source, Forceville, 1996) 44
Figure 7: Phillips and McQuarrie (2004) Typology	46
Figure 8: Gkiouzepas and Hogg (2011) Typology	49
Figure 9: Example of a Print Ad	80
Figure 10: Importance of The Three Ad Elements	81
Figure 11: Key Finding for the Ad Elements as Percentages of Total Sample	88
Figure 12: Visual Metaphor in Print Advertising – An Increasing Trend over Time	89
Figure 13: Presence of Visual Metaphor Types Over Time	89
Figure 14:Visual Metaphor in Different Print Media Categories and Award Winning	y Ads.
	90
Figure 15: Verbo-Pictorial Indirect Effect Metaphor - Harvey Nichols Ad	91
Figure 16: Total Replacement Metaphor - Terrain Ad - (Source: AdForum Databas	se) 92
Figure 17:Key Findings for Visual Content	93
Figure 18: Key Findings for Color in Ad	96
Figure 19: Proportion of Text in Ads over Time	97
Figure 20:Types of Headline Trends over Time	98
Figure 21: No Headline in Ads - Increasing Trend over Time	99
Figure 22: Types of Headline in Ads	100
Figure 23: Tagline Identity - Examples	102
Figure 24: Ads Including No Body Copy - Increasing Trend Over Time	104
Figure 25: Example of an award winning ad with a declarative tagline	109
Figure 26: Advertising Stimuli used by Mohanty and Ratneshwar (2015)	144
Figure 27: The Conceptual Model	153
Figure 28: Objective Metaphor Comprehension Results	190
Figure 29: Complementary Study - Results	195
Figure 30: Complementary Study Results	196
Figure 31: Procedures Followed in the Limited Ad Viewing Time Condition	212
Figure 32: Objective Metaphor Comprehension for the Four Conditions	218
Figure 33: Ad Recall for the Four Conditions	219

List of Tables

Table 1: Summary of Thesis	22
Table 2: The Pillars of Pragmatism as a Philosophy Underlying This Thesis	31
Table 3: Summary of The Research Design	34
Table 4: Previous Research on Elaboration	115
Table 5: Previous Research on Comprehension	122
Table 6: Previous Research on Attitude Toward the Ad	128
Table 7: Previous Research on Ad Credibility	129
Table 8: Previous Research on Attitude Toward the Brand	131
Table 9: Previous Research on Purchase Intention	132
Table 10: Previous Research on Ad Recall	134
Table 11: Summary of Previous Research on the Effect of Forceville (1996)	ГуроІоду
	135
Table 12: Advertising Stimuli used in Experiment one	165
Table 13: Mean and Standard Deviations For Dependent Variables (N=200).	173
Table 14: Open Ended Questions Results – Replacement Metaphor	191
Table 15: Open Ended Questions Results – Fusion Metaphor	191
Table 16: Open Ended Questions Results – Juxtaposition Metaphor	192
Table 17: Open Ended Questions Results – Verbo-Pictorial Metaphor and Ve	erbo-
Pictorial Indirect Effect Metaphor	193
Table 18: Means and Standard Deviations For Subjective Comprehension	208
Table 19: Means and Standard Deviations For Subjective Comprehension	210
Table 20: Advertising Stimuli used in Experiment Two	211
Table 21: Linear Model of Predictors of Subjective Comprehension	216
Table 22: Linear Model of Predictors of Objective Comprehension	217
Table 23: Linear Model of Predictors of Elaboration	217

Chapter 1

Introduction

1.1 Introduction

Figure 1: Welti-Furer Ad Figure 2: Greenpeace Ad





Illustration removed for copyright restrictions

Illustration removed for copyright restrictions

Figure 1 is a visual of Van Gogh depicted as a passenger sitting in a comfortable first class seat of an airplane. In the lower right part of the visual a tagline reads 'Finest Art Transport'. This tagline is placed just above the brand name 'welti-furer'. This visual is actually a print advertisement for a leading company for fine art transports in Europe. Van Gogh, the first class comfortable passenger represents the utmost care with which different artworks (similar to Van Gogh the passenger) are transported through this carrier, the advertised brand. This ad was designed in Switzerland. Figure 2 is another visual showing a plastic bag on green grass that blows up in the shape of an atomic mushroom, surrounded by the gloomy sky. This time the visual stands on its own with only one word 'Greenpeace' placed in the lower right part of the visual. This is another print advertisement for Greenpeace. Greenpeace communicates with this visual the severe environmental damage caused by exploitation of plastic bags, and hence calls for reducing the civil use of plastic bags. This advertisement was designed for Greenpeace Greece. But how did the visual of Van Gogh the passenger help in communicating the ad's key meaning? and how did the plastic bag in the shape of an atomic mushroom communicate this environmental concern? This thesis examines these visuals as carriers of meaning.

Print advertising relies heavily on visuals to persuade. Pollay (1985) states that during the course of the 20th century, visuals occupy an ever-increasing portion of magazine ads, compared to the number of words that have steadily decreased (McQuarrie and Phillips, 2005).

Research evidence also suggests that particularly in print ads the emphasis on visual rather than words has increased remarkably over the last century (Phillips and McQuarrie, 2002; Phillips and McQuarrie, 2004). Indeed, consumer researchers have recognized visual imagery in advertising as something other than an irrelevant cue or a simple mean of effect transfer (McQuarrie and Mick, 1999). The visual element is understood to be an essential, interrelated, meaningful, and culturally embodied characteristic of contemporary advertising (McQuarrie and Mick, 1999). Despite the fact that visuals are an integral part of print advertising, not enough research attention has been dedicated to produce a systematic understanding of how different facets and characteristics of visual advertising work (Gkiouzepas, 2006). The two visuals described above are also examples of a rhetorical figure in visual form. Aristotle defined rhetoric as the art of effective communication, which uses all the possible means to persuade (Kenney and Scott, 2003). In the aforementioned definition it can be seen that rhetoric can go beyond words and can include also other 'means' of communication and persuasion (i.e. visuals) (Kenney and Scott, 2003). Despite the tradition of this discipline, visual rhetoric is a newly researched area in the field of advertising. The main purpose of visual rhetoric research is to understand how visuals in advertising actually work (e.g. McQuarrie and Mick, 1999; Phillips, 1997, 2000; Gkiouzepas, 2006). "Visual rhetoric may be described as a form of communication that uses images for creating meaning or constructing an argument" (Bulmer and Buchanan-Oliver, 2006, pp.55). Advertising also uses visuals and images to create and communicate meaning, usually brand meaning.

According to Scott (1994), this approach understands imagery as a symbolic system. More specifically, Scott (1994) suggested that visuals are an inherently persuasive device rather than a supplement to a verbal message. Furthermore, she proposed that visuals in advertising do not just reflect the reality depicted in them. Instead they also have a symbolic character or meaning that goes beyond what is simply depicted (Bulmer and Buchanan-Oliver, 2006). Therefore, communicating an indirect meaning. For this reason, Scott (1994) stated that advertising visuals can pose arguments, raise questions, create fictions, present metaphors and hence introduced the concept of 'visual rhetoric' to the consumer research literature (Scott, 1994; Bulmer and Buchanan-Oliver, 2006).

Visual rhetoric is broadly employed in advertising. From a research perspective, however, it is only recently that academic research has begun to give visual rhetoric proper consideration (Andrews, 2011; Kenny and Scott, 2003; Scott, 1994). One of the most commonly employed rhetorical figures in print advertising, is visual metaphor.

A visual metaphor compares two dissimilar objects to imply similarities that may not literally exist (McQuarrie and Mick, 1996; Mothersbaugh, Huhmann, and Franke, 2002). For example, the Greenpeace ad described above shows a plastic bag that blows up in the shape of an atomic mushroom. This visual is actually a visual metaphor in which the plastic bag is compared to the atomic mushroom in terms of the harm and severe damage it causes for the environment. The designer of this visual implied a similarity between two literally unrelated objects, the plastic bag and the atomic mushroom. The way, however, the plastic bag was presented taking the shape and form of an atomic mushroom, created a relation between the two object. This metaphorical relation constructed also the key meaning of the ad. This is that the exploitation of plastic bags is similar to an atomic explosion in terms of the severe damage it causes to the environment. Using this single metaphorical visual, the advertiser was able to build a convincing argument about an important but also a relatively intellectual issue. This was done, however, in a simple and convincing way that a layperson can understand and also relate to. Moreover, this ad also won an Act Responsible Tributes prize at the Cannes Palais des Festivals in 2008.

With regards to academic research, for a long time, metaphor studies focused almost exclusively on language or verbal metaphor. Over the past two decades, however, the concept of visual metaphor has been fairly developed, and employed particularly in the context of print advertising. Kaplan (1992) examined 464 current print ads for automobiles and alcoholic beverages and found that 31% of the ads in his sample contained visual metaphors (Phillips, 2003). Another study conducted by Phillips and McQuarrie (2002) focused on the development, change and transformation of rhetorical style in magazine advertisements from 1954 to 1999. This study showed that visual figures, specifically tropes (i.e. visual metaphor) doubled in appearance between the periods 1954-1974 and 1975-1999 from 11.3% to 20.1% (Phillips and McQuarrie, 2002). The most recent study was conducted by McQuarrie and Phillips (2008). This study documented change in advertising style between 1969 and 2002. Results for the overall levels of visual rhetorical figures were consistent with the ones reported by Phillips and McQuarrie (2002). The only noted change was that the ratio of visual figures to verbal figures increased remarkably when ads from the 1960's (1:10 ratio) are compared with ads from 2002 (1:4 ratio). This further supports the growing importance of the visual element in print advertising. Indeed, many leading companies and brands are employing visual metaphors in their communication campaigns. Examples of which are such as: Club Med and also Clinique. Club Med used a total of 16 visual metaphors in its advertising campaign for 2013 to communicate the idea of happiness. A meaning that is manifested in the DNA of the brand (PR Newswire US, 2013).

Clinique lipstick also used a glass of soda in an advertisement to claim that the lipstick is cool and fresh (Scott, 1994). Other examples of top international brands that have used the same creative strategy include among others: Lipton tea, BMW, and Adidas (van Mulken and Pair, 2012).

One of the overall research questions raised in this dissertation is: why is visual metaphor in advertising such an important phenomenon that is worth further research? The answer to this question as framed in this thesis builds on and updates the research conducted by Kaplan (1992) and also Phillips and McQuarrie (2002). It does so by comprehensively analysing the presence of visual metaphor in contemporary print advertising over the last fifteen years as well as the nature of this presence (i.e. the types and forms by which visual metaphor is depicted in print advertising). Different previous attempts to synthesize the set of rhetorical figures have been disabled by one or more reasons.

One main reason is that the taxonomic categories of these figures are vague and illdefined. A second reason is that the categories are not linked to consumer responses (McQuarrie and Mick, 1996). Despite of that, McQuarrie and Mick (1996) developed a framework which was presented as a taxonomy of verbal rhetorical figures in advertising. This framework was grounded on a large sample of real ads and only rhetorical figures that were found in this sample were included in the framework. This framework was to a high extent capable of reflecting the range of rhetorical figures present in advertisements (McQuarrie and Mick, 1996). This taxonomy differentiated between two different modes of figuration. These modes correspond to the distinction between what is referred to as schemes and tropes. To define and further clarify this distinction, the same authors state that a figure in the schematic mode occurs when text contains excessive order or regularity, while a figure in the tropic mode occurs when a text contains a deficiency of order or irregularity. Thus, schemes and tropes include two distinguished modes of formal deviation (McQuarrie and Mick, 1996). A typical example of a trope figure is metaphor. The detailed discussion of those figures and the properties that differentiate each of these rhetorical figures is, however, beyond the scope of this thesis. Moreover, McQuarrie and Mick (1999) transferred and applied these verbal rhetorical figures to the visual domain. For example, they created mock ads in which they presented different figures including metaphor in a visual form.

The approach followed by the same authors was criticized by other researchers (e.g. Gkiouzepas, 2006), as not taking into consideration as much as it ought to the distinguishing characteristics of the visual domain. This mere transference of the verbal figures into a visual mode did not explain the specific visual manipulations involved in this process in a systematic way. And how these visual manipulations affected consumers' processing of these visual rhetorical figures. After McQuarrie and Mick's work, other researchers took alternative approaches in categorizing visual rhetorical figures. One of the most important typologies developed in this visual domain, was proposed by Forceville (1996). Forceville (1996) categorized specifically visual metaphor in advertising. He was driven by the need to identify formal visual properties through which this important figure can be defined. The importance of the specific typology stems out the fact that the differentiating characteristics between the different types of visual metaphor were very clear and paid attention to the structure of the visual. Moreover, these visual manipulations were realistic, meaning that they were based on corpus of real print ads. In this way they directly corresponded to how visual metaphors are actually encoded in print advertising. The types of visual metaphor proposed by Forceville (1996) are the following: Juxtaposition metaphor, fusion metaphor, replacement metaphor and verbo-pictorial metaphor. These type will be discussed in detail in chapter two of this thesis.

Visual metaphors as employed in advertising are "artful deviations" from audiences' expectations and manifest in them the meaning of novelty. Moreover, they 'decorate' and 'beautify' the ad meaning, making it more attractive and impressive for audience. This same beautification and decoration is the essence of 'figuration' which is manifested in a visual metaphor as a rhetorical figure. This is also showed in the visual ads described above. For example, depicting a plastic bag as an atomic mushroom in the Greenpeace ad, creates and comparison but also a relation that is not expected by the audience of this ad. Moreover, it deviates from their expectations. The same ad, however, still managed to attract their attention and create an interest about the issue addressed in this ad. Furthermore, as mentioned earlier, this visual ad is just one of many. From the above-mentioned ad it can be seen that a visual metaphor embodies novelty and figuration. Indeed, this novel atomic mushroom made out of a plastic bag could be perceived as an error at one point by the audience. This may lead to negative tension. When the ad's metaphorical meaning is understood, however, the negative tension is relieved. Viewers feel that they finally 'got it'. This subsequent resolution of the initial ambiguity of the ad is rewarding and elicits pleasure (McQuarrie and Mick, 1992; Jeong, 2008).

This same pleasure could contribute to positive attitude towards the ad, which in turn could enhance the positive attitude towards the brand as well as the overall advertising effectiveness (Mick, 1992; Jeong, 2008; Dillard, Weber, and Vail, 2007). The existing academic research on visual rhetoric and more specifically on visual metaphor in advertising shows that indeed this creative advertising strategy has an effect on consumers and also has a persuasive power. Advertising and Marketing literature has recognized the effect of visual metaphor on consumer response to advertising. This research, however, is still underdeveloped and partial, with regards to the number of response variables measured and also the types of visual metaphor investigated for their effect. Moreover, research results related to this stream of literature tend to be fragmented and contradictive to a high extent (Gkiouzepas, 2006). For example, Gkiouzepas and Hogg (2011) found that fusion metaphor provokes more elaboration than juxtaposition metaphor. Madubu, Sen and Ranganathan (2013), however, found the opposite. In this study juxtaposition metaphor elicited more elaboration than fusion metaphor. Furthermore, many conditions that could also affect the impact of visual metaphors (e.g. consumer characteristics) have also not been fully tested (Myers, Faber, Duff and Lutchyn, 2011). To cover this lack of research this thesis answers another important overall research question which is: How do visual metaphor engages the consumer and elicits favourable responses to different print advertisements?

1.2 Aim and Research Objectives

Considering the aforementioned the aim of this thesis is to provide an integrative framework for the use and effect of visual metaphor on consumer response to advertising.

More specifically the different parts of this thesis and their related research objectives are the following:

The first part represented in this introduction is followed by a presentation and a discussion of the philosophical underpinnings of this thesis. The second part starts with the critical literature review that has the objective of identifying and examining previous research on the nature and the different typologies that have been developed to categorize visual metaphor in advertising. Following that the first study that takes the form of a small qualitative study with advertising experts is presented.

This study sought after the managerial practices and knowledge of these advertising practitioners. The key objective of this qualitative study was to question existing advertising theory and use the insights of these advertising experts to formulate realistic and valid operational definitions for the different ad elements to be analysed (e.g. headline, types of visual, etc.) in a subsequent content analysis study. The main objective of the content analysis study is to provide a comprehensive assessment of the use of visual metaphor in print advertising. In this way also the *relevance* of Forceville's (1996) typology with regards to its actual existence in print advertising is identified. Therefore, this study answers the first overall research question (*why is visual metaphor in advertising such an important phenomenon that is worth further research?*) Following that the second part of the critical literature review is presented and has the objective identifying and examining previous research on the effect of visual metaphor in advertising. This in turn leads to the proposed hypotheses, the research gap, and derived conceptual model.

The third and final part of this thesis presents the final study conducted as part of this research project, which answers the second overall research question: (how do visual metaphor engages the consumer and elicits favourable responses to different print advertisements?) It answers this question through two experiments, which also test the derived conceptual model empirically. The objective of the first experiment is to compare the effects of the different types of visual metaphor proposed by Forceville (1996) on consumer responses to advertising. Moreover, to test the mediating effects of elaboration, subjective ad comprehension and objective ad comprehension on consumer response to visual metaphor in advertising. The objective of the second experiment is to test the moderating effect of ad viewing time on consumer response to visual metaphor in print adverting. The thesis then concludes with a general discussion chapter.

1.3 Organization of the Thesis

Chapter two presents the philosophical underpinnings of this thesis. This chapter starts by discussing the different philosophical approaches to research and explains further, which of these approaches represents the philosophical stand applied to this thesis. Moreover, it discusses the rationale for choosing this particular stand to represent the philosophical approach that drives this current research. Following that, a critical discussion of the proposed research structure followed in this thesis is presented and the rationale for using the specific structure is provided.

Chapter three reviews literature on the nature of visual metaphor as well as the different typologies of visual metaphor in advertising. Moreover, it shed light particularly on the importance of the Forceville (1996) typology and provides the rationale for this importance and hence for choosing this particular typology to be used and further researched in the context of this thesis. This chapter also highlights the need for further research on the presence of visual metaphor in print advertising as existing previous research is limited and dated.

Chapter four presents two studies. The first study is a qualitative study conducted with advertising experts. This study presents an overview of managerial practices and state of knowledge regarding visual metaphors. The chapter discusses the methodology represented in the qualitative in-depth interviews conducted with copywriters and art director. These results of this study represent the insights of these advertising practitioners regarding print advertising design as a process. These insights also provided 'realistic' operational definitions for the different print ad design elements (e.g. headline, visuals, etc.). These definitions fed directly the development of a comprehensive and detailed coding grid that is used in the second study presented in this chapter. This study is a content analysis. The rationale and steps followed in conducting this content analysis are discussed in detail. This content analysis was conducted on 320 print ads representing four different print media categories. These categories are: magazine ads, outdoor ads, billboard ads, poster ads. In addition, a sub-sample of award winning ads was also analysed in this study. The sample of ads used in this study covers a time period of fifteen years, from 2000 to 2014. The results of this study provide an update on the frequency and percentage of visual metaphor in print advertising. This update, covers the different types proposed by Forceville (1996) as they appear in print advertising. Moreover, it extends the Forceville typology and identifies two new additional types of visual metaphor in print ads. These new types are also presented as part of the results related to this study in chapter four.

Chapter five presents the second part of the literature review on the effect of visual metaphor in advertising in terms of the different consumer response outcomes to visual metaphor in advertising. This leads to the proposed hypotheses related to each of these response variables. This literature review also introduces a 'new' potential moderating factor that could moderate the effect of visual metaphor on consumer response to advertising. This factor is ad-viewing time. Moreover, it proposes a hypothesis related to this moderating factor based on the review of relevant literature. The lack of research conducted on the effect of visual metaphor on consumer response to advertising is highlighted. This lack of research is related to the types of visual metaphor investigated (i.e. Forcevile's 1996 typology), the number of the response variables tested as well as the hierarchy of these responses. The literature review leads to the proposed hypotheses related to each response variable discussed. Following that, the research gap is presented and finally, the conceptual model derived and proposed in this thesis is presented.

Chapter six, this chapter presents two experiments that answer the second overall research question (How do visual metaphor engages the consumer and elicits favourable responses to different print advertisements?). This chapter starts by providing the rationale for using experimental methodology. It then presents the rationale as well as the purpose of conducting the first experiment. The first experiment compares the effect of visual metaphor on consumer responses across five different types of visual metaphor. Moreover, it investigates the mediating effect of elaboration, subjective ad comprehension and object ad comprehension on consumer response to visual metaphor in advertising. The design of this experiment is a between subject design which takes the form of a multiple-independentgroups-design (5 groups). Experiment two tests the moderating effect of ad viewing time. It tests this effect across two types of visual metaphor. These two types are: replacement metaphor and verbo-pictorial metaphor. These two type are also the ones that differed mostly with regards to their effect on consumer's response in experiment one. The experimental design is a between subject design: 2 x 2 (2 types of visual metaphor - verbopictorial metaphor, replacement metaphor) x (2 ad viewing time spans – unlimited time, limited time of fifteen seconds). The two aforementioned experiments are presented in the following format: Firstly, the purpose of the experiment is stated, followed by hypothesis section which present the specific hypothesis tested in each experiment. Following that the details of the experiment with regards to the sample, the advertising stimuli used, the procedures, the measures as well as the data analysis and results are presented. Each experiment ends with a discussion section. Finally, a general discussion is presented at the end of this chapter.

Chapter seven, this final discussion chapter primarily serves an evaluation purpose for the whole thesis in terms of how it managed to meet its initial objectives. It starts by restating the aim and the objectives of this PhD thesis that were mentioned earlier in this chapter. Following that each chapter will be discussed separately in terms of its specific objectives and how it met them starting with chapter three and ending with chapter six while also reflecting on the key findings of the different studies.

The key contributions of this thesis as well as the managerial implications will then be presented. Finally, this chapter will end with the limitations of this research project and the recommendations for future research.

Table 1 below presents a summary of this thesis. The key research objectives addressed in each chapter are stated.

Table 1: Summary of Thesis

Chapter	Objectives
Chapter 2	To discuss the philosophical underpinnings underlying this thesis
	To critically discuss of the research structure
Chapter 3	To identify and examine previous research on the nature and the different typologies of visual metaphor in advertising.
Chapter 4	To question existing advertising theory and use insights of advertising experts to formulate realistic and valid operational definitions for the different ad elements.
	To provide a comprehensive assessment of the use of visual metaphor in print advertising.
Chapter 5	To identify and examine previous research on the effect of visual metaphor in advertising.
Chapter 6	To compare the effects of the different types of visual metaphor proposed by Forceville (1996) on consumer responses to advertising.
	To test the mediating effects of elaboration, subjective ad comprehension and objective ad comprehension on consumer response to visual metaphor in advertising.
	To test the moderating effect of ad viewing time
Chapter 7	To evaluate the whole thesis in terms of how it managed to meet its initial objectives

Chapter 2

Philosophy and Research Structure

The Philosophical Underpinnings and the Research Structure

2.1. Introduction

This chapter will present and discuss the philosophical and theoretical orientation of this thesis as well as the rationale behind choosing the particular research design. The chapter starts by presenting and discussing four main philosophical approaches. These approaches are the following: interpretivism, realism, positivism, and pragmatism. Following that an explanation is provided with regards to why the philosophical underpinning underlying this research project is pragmatism. Finally, a critical discussion of the proposed research structure is presented together with a table summary of the research design employed in this thesis.

2.2. The Different Philosophical Approaches

There are a number of philosophical stands that could be taken in approaching a research project. In this section four main philosophies will be discussed. These philosophies are, Interpretivism, realism, positivism, and pragmatism. Moreover, this section explains why and how pragmatism is applied as a philosophical approach in the context of this thesis.

2.2.1 Interpretivism

The legacy of this philosophical stand originates from two intellectual traditions: Phenomenology and symbolic interactionism. Phenomenology refers to "the way in which we as humans make sense of the world around us" (Saunders, Lewis and Thornhill, 2009, pp. 116). According to symbolic interactionism on the other hand we are in a continuous process of redefining and adjusting our own meanings and actions.

This is caused through the process of interpreting the actions of others with whom we interact and the 'world in large'. In this regards, crucial to the Interpretivism philosophy is that the researcher tries to understand the 'world' of the subjects or participants point of view.

The 'world' that they themselves have constructed according to their personal interpretations. This does not diminish, however, the validity of this approach. Indeed, the main criterion in any research that takes this philosophical stand is validity. To achieve this interpretivists try to be as objective and systematic as possible in their research. Moreover, there are traditional methods that interpretivists use and which aid them in understanding the 'world' from their participants' point of view.

These methods are such as unstructured observations, in-depth interviews (Marsh, 2002). In this regards interpretivism has been powerful enough to influence a whole field of research brightening up in this way people's everyday life experiences.

2.2.2 Realism

The essence of this philosophical position is that the "truth" is what the senses show us as reality. This means that object's existence stands independent of the human mind. In this way realism is opposite to idealism which stresses that only the mind and its context exist. Realism shares some similarities with another philosophical stand which is positivism in that it supposes a scientific approach to the development of knowledge (Saunders, Lewis and Thornhill, 2009). There are two main types of realism.

Direct realism, this type of realism states that "what you see is what you get: what we experience through our senses portrays the world accurately" (Saunders, Lewis and Thornhill, 2009, pp. 114). The second type of realism is called critical realism, argues that what we experience is not the things directly but rather sensations and images of these things. Critical realism presumes that our senses often deceive us. A simple way to differentiate between direct and critical realism is as follows. Critical realism presumes that experiencing the world one should follow two steps. The first thing is the thing itself and the sensation that is conveyed through this thing. The second is the mental processing that lasts for some time after that sensation meets our senses (Saunders, Lewis and Thornhill, 2009). Direct realism stops at this first step. Another distinction that is made between direct and critical realist is concerned more with the stand that a researcher takes with regards to his research. For example, a researcher who adopts a direct realist's perspective would suggest that the world is relatively unchanging. This means that it operates only at one level. A critical realist on the other hand would suggest that a phenomenon could be studied at a more multi-level (e.g. individual's level, group level, and organizational level). This multi-level approach could in turn change the researcher's understanding of the phenomenon being studied (Saunders, Lewis and Thornhill, 2009).

Feigl a member of the Vienna-circle was the first to develop and disseminate a logical empiricist philosophy of science, which is also referred to as realist position. Feigl argued that concepts (e.g. motivation, electron, force, etc.) are not defined by their observation (meaning that they are unobservable) but yet "real" and they can be defined in the context of their theoretical explanations.

2.2.3. Positivism and Its Roots

The Renaissance era was an era during which several artistic and also scientific endeavours took place. Furthermore, the time of Reformation, was also an era that was associated with an increase in scientific thinking. Galileo, (1564-1642) for example made fundamental discoveries. In the same period Francis Bacon (1561-1626) began to give explanations for the idea of physical causes, and scientific methods which can lead to the discovery of laws of nature.

Rene Descartes (1596-1650) an original modernizer questioned the assumption that evidence is provided by the senses. Instead he tried to determine a method in order to accurately discover scientific knowledge. "I think therefore I am".

Descartes' belief rationalism gives more value to pure reason as opposed to observed data that are seen as inferior and untrustworthy. Enlightenment, however, arrived bringing a new era of belief in the primacy of science and reason over unfounded belief and dogma. On this basis came John Locke (1632-1704), one of the founders of empiricism. Empiricism stresses that knowledge can come only from observations, and any innate human idea comes only from experience (Lee and Lings, 2008). George Hegel (1770-1831) was another contributor to the philosophy of science. Hegel suggested that reality is better represented through a dialectic process, which normally takes place between the idea thesis and its opposite antithesis.

The solution to the struggle between the ideas usually occurs when a synthesis or a more truthful idea, is attained. Therefore, the dialectic process is essential for the creation of knowledge. Betrand Russell (1872-1970) further supported this stand by considering that breaking something down into components (i.e. analysis) and further constructing it again from its component parts (i.e. synthesis) is essential for understanding it as well as being certain about it. At this same time this purely philosophical contribution to the understanding of science was replaced with a more scientific approach as scientists started presenting their thoughts regarding the philosophy of science (Lee and Lings, 2008).

In this regard the Vienna circle consisted of practicing scientists (e.g. Moritz Schlick, Otto Neurath, etc.), who strongly believed that knowledge only comes from science, with philosophy playing merely a supportive role through which concepts are clarified and confusions are cleared. This in turn led to the introduction of the term logical positivism, which was seen as a natural evolution of empiricism.

For the logical positivists only empirically tested ideas and hence verifiable ones are the ones that were meaningful. This means that anything that cannot be directly observed was impossible to actually "know" about. Indeed, positivism is based on the assumption that empirical knowledge relies on the principles of objectivity, verificationism, and reproducibility which represents the ground base of original knowledge (Bryman, 2001).

This philosophical approach stems out of an objectivistic stance towards scientific enquiry and human knowledge that assumes there is an external 'reality' that exists independently of the observer (Gkiouzepas, 2006). Under this philosophical stance a researcher prefers to work with observable social reality. Accordingly, the outcome of this type of research can be law like generalizations similar to those produced by the natural scientist (Remeney et al, 1998; Saunders, Lewis and Thornhill, 2009). Moreover, credible data will be produced only from phenomena that can be observed. The key construct research in this case has to be objectively defined and its effect measured. Existing theory has to be used and hypotheses have to be developed to collect this data. These hypotheses are tested, are wholly or partially supported or rejected. This in turn leads to further development of theory that can be also tested with more research (Saunders, Lewis and Thornhill, 2009). This means that the researcher in this case is concerned with facts rather than impressions, and this is an important characteristic of the positivist approach.

Another characteristic of this approach, is that the research is taken, as far as possible in a value-free way. Hence, the researcher is seen as external to the process of data collection, and there is nearly nothing that could be done to change the substance of the data collected. Moreover, the researcher in this case is independent and does not affect the subject of the research. Therefore, little can be done to alter the substance of the data collected. This is also another important characteristic of the positivist approach. For this reason, a research that considers this approach will employ a methodology that is highly structured, so that replication is facilitated. Furthermore, large samples are used in these experiments which will lead to quantitative data that will undergo statistical analysis. Again this conforms more with the characteristics of positivism in research (Saunders, Lewis and Thornhill, 2009). Advertising research usually relies on empirical knowledge and the principles of objectivity and verificationism. For this reason, positivism is typically the "mainstream advertising research paradigm" (Saunders, Lewis and Thornhill, 2009; Gkiouzepas, 2006). In some cases, however, researchers think that it is somewhat unrealistic to choose one single epistemological position that define their research. This kind of debate often occurs when having to choose between either positivism or interpretivism.

In this case then a researcher could be adopting another approach. This approach is pragmatism. In the following section this approach will be discussed. Moreover, the rationale for adopting this approach in this thesis will be explained.

2.2.4 Pragmatism

Similar to the other philosophical stands pragmatism represent also a worldview. Pragmatism essentially can be better known through the practicality or usefulness of the concepts (Harvey,2012). Under this philosophical view knowledge, concepts, and their related values are true if are also practically useful. In this way pragmatism and in turn pragmatists emphasize the importance of the practical function of knowledge (Harvey,2012). Through this practical function, knowledge can be used to adopt to reality and also control it.

Therefore, truth is relative to the time, place and purpose of the enquiry. For this reason, it is modified through new discoveries. This by all means does not mean that we do not 'know' things. Instead it means that we can always 'know more' about things and concepts. This is because concepts subsume a variety of meanings and dimensions that cannot be understood always directly. Concepts can be understood and also acquire meaning through researchers who encounter with these concepts through their research enquiry and further define it in practice (Harvey, 2012).

According to Saunders, Lewis, and Thornhill (2009), the most important determinant of adopting the pragmatic epistemology is the research question. Research questions are entwined with the purpose of the research. The purpose of this thesis is to provide an integrative framework for the use and effect of visual metaphor in advertising. Moreover, the two overall research questions that this thesis answers are the following: a) why is visual metaphor in advertising such an important phenomenon that is worth further research?

b) how do visual metaphor engage the consumer and elicits favourable responses to different print advertisements?

These two research questions clearly reflect this practical function of knowledge mentioned above. The answer to the first research question provides the justification for further researching the concept of visual metaphor. This thesis answers this question through a comprehensive assessment of the contemporary uses of visual metaphor in print advertising. This provides knowledge about the relevance and the actual use of visual metaphor in contemporary print advertising. This same knowledge justified why it is important and useful to research this concept further. It is important because it is a relevant and existing phenomenon in print advertising. Moreover, this also represents the practical function of the knowledge derived from this research. Based on this practical function, this research progresses with answering the second research question. The knowledge provided by answering the second research question, again is not interesting for its own sake (Harvey, 2012). Instead it is seen more as an aid to action. If advertisers indeed employ visual metaphor in print ads, they probably do this for a reason. In this thesis it is suggested that visual metaphor is used because it can result in possible positive response outcomes from consumers. For this reason, hypotheses are developed to predict these possible consumer responses.

Therefore, the knowledge derived provides empirical and practical proof of how consumers will respond to the use of visual metaphor in print advertising. This again represents the practical function of the knowledge gained from this research (Harvey, 2012). Therefore, pragmatism is indeed the philosophy that should underlie this research. In this thesis the researcher uses qualitative research method and seeks 'realistic' definitions for the different print ad designs elements from practitioners. Moreover, qualitative interviews probe further into how practitioners understand, use and interpret the concept of visual metaphor and its importance to advertising. The knowledge sought from this qualitative enquiry has a practical function because it is useful. It is useful because it directly contributes to the operational definitions of the different ad elements analysed in the subsequent content analysis study. Furthermore, results from this content analysis aided in 'knowing more' about visual metaphor and further defining this concept in practice. Moreover, it confirmed the wide usage of visual metaphor in print advertising. Therefore, it provided useful knowledge with a practical function. This useful knowledge aided the researcher to further investigate the concept. Indeed, the researcher objectively defined visual metaphor and further used quantitative methods to measure its effect on consumer response. In this way the phenomenon was observed and tested to produce credible data (Saunders, Lewis and Thornhill, 2009). Large samples are used to collect the data. Furthermore, this data was collected using existing theory to develop hypotheses.

These hypotheses are tested using experiments. As a result of this, these hypotheses will be confirmed, wholly or partially, or refuted, leading to further development of theory and further research (Saunders, Lewis and Thornhill, 2009). Therefore, the 'truth' of the propositions made in this research are measured by their correspondence with the experimental results. This is also one the principles that pragmatism is based one. In a small part of these experiment an open ended enquiry was also employed. This open ended part sought after the interpretations of consumers regarding the different visual metaphors. The objective was to better understand how consumers interpret and assign meaning to visual metaphor in advertising. From the aforementioned, it can be seen that in this thesis the visual metaphor phenomenon was both observed and its effect was measured. Moreover, it was also better understood through the interpretations and meanings that both practitioners and consumers assigned to it. Both the observable phenomenon and the subjective meanings provided useful and acceptable knowledge that answers the research questions. This is also a key characteristic of pragmatism as an epistemology.

Traditionally the theme in research is that positivism is linked more with quantitative methodologies and interpretivism is more with qualitative. To answer the two overall research questions stated in this thesis, both qualitative and quantitative methods were used. In this way this research employed a mixed method approach. Indeed, mixed method approach involves the use of quantitative and qualitative methods within the same research project. Moreover, pragmatism is seen as an appropriate philosophical underpinning for research that employs mixed methods (Creswell, 2008). "As a philosophical underpinning for mixed methods studies, Tashakkori and Teddlie (1998), Morgan (2007), and Patton (1990) convey its importance for focusing attention on the research problem in social science research and then using pluralistic approaches to derive knowledge about the problem" (Creswell, 2008, p.10). The aforementioned is again related to what was stated earlier regarding the pragmatist's view of truth and reality and how both are related 'to what works at the time'. Similar to pragmatic views about reality mixed methods research use both quantitative and qualitative data to provide the best understanding of a research problem at a certain point (Creswell, 2008). Indeed, the researcher in this thesis had the freedom of choice and he chose the methods, techniques, and procedures of research that best meet the needs and purpose of this thesis. As a pragmatist researcher he drew liberally from both quantitative and qualitative assumptions to engage in his research (Creswell, 2008) Therefore, pragmatism provides a philosophical basis for this thesis.

Pragmatism does not see the world as an absolute unity. Similarly, the researcher by employing mixed methods, looked to many approaches for collecting and analysing data. Instead, of considering only one way (e.g., quantitative), that is widely agreed upon (Creswell, 2008).

Table 9 below, summarizes how pragmatism relates and is used as philosophical approach for this thesis. It explains this in terms of the ontology, the epistemology, the axiology as well as the data collection techniques used.

Table 2: The Pillars of Pragmatism as a Philosophy Underlying This Thesis

Based on: Saunders et al (2009)	
Ontology: "The researcher's view of the nature of reality" (Saunders et al, 2009, p. 119) Epistemology: "the researcher's view regarding what constitutes acceptable knowledge" (Saunders et al, 2009, p. 119)	The researcher choses external, multiple views that best enable him to answer the research questions raised in this thesis. Based on the research questions, both observable phenomena and subjective meanings provide acceptable knowledge in this thesis. Uses practical applied research. Integrates different perspectives (e.g. practitioners, consumers) to help interpret the data and derive useful knowledge.
Axiology: "the researcher's view of the role of values in research" (Saunders et al, 2009, p. 119) Data Collection techniques used	Values are critical for the interpretation of the results. Both objective and subjective points of view are adopted in this case. Mixed method design, both qualitative and quantitative data collection methods.

Pragmatism opens the door to different worldviews, multiple methods, and different forms of data collection and analysis. Mixed methods researchers however, have to specify the purpose for using mixed methods, and why quantitative and qualitative data need to be mixed in the first place (Creswell, 2008). The following section explains this through a brief critical discussion of the research structure used in this thesis.

2.3. Critical Discussion of the Research Structure

This thesis aims at providing an integrative framework for the use and effect of visual metaphor in advertising. As mentioned in the previous chapters, research on the use of visual metaphor in advertising is limited (e.g. Kaplan, 1992). Moreover, there are not many studies that have investigated how consumers also respond to visual metaphor in advertising (e.g. Philips, 1997; McQuarrie and Mick, 1999; Morgan and Reichert, 1999; Ma, 2008; van Mulken, Pair, and Forceville, 2010). The research investigating the factors that moderate consumer's response to visual metaphor is even more limited (e.g. McQuarrie and Mick, 1999; Myers, Feber, Duff, and Lutchyn, 2011).

The text-interpretive perspective or approach is sometimes used by the researchers. This perspective draws on semiotic, rhetorical, and literary theories. Under this approach a systematic analysis of the individual elements that make up an ad is conducted (e.g. Durand 1987; Scott, 1994). Moreover, under this approach visual elements are treated equally to verbal elements with regards to their ability to convey important meanings as well as their ability to be differentiated and worth analysis. On the other hand, however, this approach hardly collects or analyses advertising responses from consumers. Moreover, the causality under this condition is usually assumed rather than demonstrated (McQuarrie and Mick, 1999). Another approach is the reader-response approach, which emphasizes on meanings that consumers draw from ads (Mick and Politi, 1989; Phillips, 1997; McQuarrie and Mick, 1999). Using this approach Mick and Politi (1989) for example in one of the early studies employed the protocol interpretive method, which was also used by Phillips (1997) in her study later on with some slight variations in the procedures. McQuarrie and Mick (1999) took this a step further and used a more sensitive elicitation technique represented in interviews to get a more thorough and sensitive exploration of the meanings consumers actually derive or interpret from the visual ads and further clarify and relate this to the cultural competence of consumers. In this study, however, McQuarrie and Mick (1999) conducted a small number of interviews (12 interviews), and used this method to supplement two experiments that were conducted in the same study.

Indeed, experimental research is the predominant method that has been used by researchers investigating the effect of visual metaphor on consumer response. The main strength of the experimental tradition is represented in the rigorous causal analysis combined with theoretical specification. On the other hand, under this tradition the consumer response elicited tend to be abbreviated and weakened (McQuarrie and Mick, 1999). Furthermore, the theoretical specification is mostly applied to consumer processing rather than to the visual element per se (McQuarrie and Mick, 1999). Considering the in-depth investigatory nature of this research, the researcher will follow McQuarrie and Mick's (1999) recommendations, and will use a combination of different methods as presented in the following section. These different methods will complement one another and this research will draw on the strengths of each method.

The approach used is mixed method research as it uses both quantitative and qualitative data collection techniques and analysis procedures. In this case these different techniques are used one after the other (sequential). It does not combine them. as it will be described below. This means that, although this research uses both qualitative and quantitative techniques at the research method stage, quantitative data are analysed quantitatively and qualitative data are analysed qualitatively (Saunders, Lewis, and Thornhill, 2009). Furthermore, usually when using this mixed method research one of the two techniques (either the qualitative or quantitative predominate) predominates. In the case of this research project the quantitative techniques are the predominant ones (Saunders, Lewis, and Thornhill, 2009). Finally, this mixed method approach builds on previous attempts to show the value of a critical pluralism for consumer research (McQuarrie and Mick, 1999). In table 10 below each research question answered in this thesis is stated. Moreover, the type of research that is proposed as well as the specific research study designed to answer each research question is stated. For this reason, this table represents a summary of the research design employed in this thesis. A detailed discussion for each of the research studies stated below will be provided in the relevant chapters related to each study.

Table 3: Summary of The Research Design

Research Question	Proposed Research Type	Study(s) designed to answer the research question
Why is visual metaphor in advertising such an important phenomenon that is worth further research?	Qualitative + Quantitative	Study 1: Qualitative in-depth- interviews with advertising experts
		Study 2: Content analysis on print ads.
Which type of visual metaphor is the most effective with regards to consumer response (i.e. juxtaposition, fusion, replacement etc.)?	Quantitative	Study 3: Experiments 1
What is the mediating effect of elaboration, subjective ad comprehension and object ad comprehension?		
What is the moderating effect of ad-viewing time?	Quantitative	Study 3: Experiment 2

Chapter 3

Literature Review (Part 1)

A review of literature on visual metaphor in advertising

3.1. Introduction

The main objective of this chapter is to examine previous research on the nature of visual metaphor in advertising. This chapter starts by defining the concept of visual metaphor and its importance in the advertising context. Following that the different typologies that have been developed to categorize visual metaphor in advertising are critically discussed. An evaluation of these different typologies is also presented. Finally, this chapter ends with a discussion on previous research that has been conducted on the actual presence of visual metaphor in print advertising. This further highlights the lack of this research with regard to its scope or in other words the types of visual metaphor investigated as well as their relation to other ad elements (e.g. text elements). In addition to the limited print media categories (e.g. magazine, billboard, etc.) that were covered in this previous research. The chapter concludes with the need for further research that updates and complements previous research on the presence of visual metaphor in advertising. Furthermore, it stresses the importance of this research considering the quick and rapid evolution and change that takes place in print advertising style over time.

3.2 What is a Visual Metaphor?

Rrhetoric has an established history, which links back to Aristotle, the ancient Greek philosopher. Despite its tradition, consumer and marketing researchers have only recently adopted the rhetorical approach in the advertising context (McQuarrie and Mick, 1993; Scott, 1994). Metaphor is one of the most important rhetorical figures. It has received the majority of marketing researcher's attention (e.g. McQuarrie & Mick, 1999, Phillips, 2000, Phillips and McQuarrie, 2004; Gkiouzepas, 2006; Boozer, Wylde, & Grant, 1992; Ward & Gaidis, 1990; Gkiouzepas, 2006). Previous research has organized, categorized and tested verbal rhetorical figures in different ways (e.g. Tonar & Munch, 2001; McGuarrie, 2000; McQuarrie & Mick, 1996). This thesis will focus and give emphasis to visual metaphor.

"The essence of metaphor is understanding and experiencing one kind of thing in terms of another" (Lakoff and Johnson, 1980, pp.5). Consumer researchers agreed on the fact that metaphor invites a comparison between two objects or terms by suggesting that one term is like another while they are literally quite different (McQuarrie and Phillips, 2005; Philips, 1997; Stern, 1990; Ward and Gaidis, 1990). This means that for a metaphor to exist a 'relationship' between two different terms or objects must be established; signifying that for a metaphor to exist, two conditions must also exist. The first condition is the presence of the two different objects. The second condition is the relationship that is established between these two objects.

This relationship is established by transferring certain features from one object to the other. In this way the first object or term *borrows* some characteristics or features from the second object and hence becomes similar to that object in terms of those features or characteristics. What makes this *relationship* unique is the fact that it is established between two very different things or objects, therefore this relationship is unexpected. The same unexpectedness, novelty and uniqueness of this relationship is what makes a metaphor a rhetorical figure. A rhetorical figure is defined as an artful deviation from the normal or usual way of expression (Corbett, 1990; McQuarrie and Mick, 1996; Tom and Eve, 1999).

A metaphor presents or expresses an idea in an artful and creative way that is not expected by the audience. This artfulness and creativity again stems out of the unexpected relationship that a metaphor establishes between two very different objects. This deviation however, occurs, only at the level of style and not content. This means that metaphor as a rhetorical figure is concerned with the style or the 'way' in which a particular message is conveyed, but not with the content or 'essence' of this message. The core idea of the message remains unchanged and the meaning is not altered as a function of variation in rhetorical style (Mothersbaugh, Huhmann, and Franke, 2002). Hence, the metaphorical expression is not seen or rejected by the audience as senseless or inappropriate (McQuarrie and Mick, 1996; Phillips, 2003; Tom and Eves, 1999). Rather it is seen as a creative and novel way of communicating a message. Furthermore, the metaphor may aid in enhancing the intended meaning (Mothersbaugh, Huhmann, and Franke, 2002). From the aforementioned a metaphor should be seen more as a 'vehicle' or a 'mechanism' through which meaning is communicated.

From the above mentioned it can also be seen that metaphor embodies in its essence the concept of creativity. Creativity is a concept that is central to advertising. Creative advertising attracts consumers' attention and also persuades (Ang and Low, 2000). Oglivy (1983) supports that the 'big idea' with regards to advertising is essentially based on creativity. Moreover, Zinkhan (1993) states that advertising involves 'dreaming up' new ways to present selling propositions (Ang and Low, 2000). Ang and Low (2000) define creativity as "something novel, divergent from the norm, unique, original, meaningful, value added and acceptable". Novelty refers to" the degree to which an ad is unexpected and deviates from the norm". Meaningfulness on the other hand "concerns whether the elements in an ad are relevant to the message conveyed". According to the same authors, these two dimensions are also complemented by a third dimension which is emotional content. This dimension can be seen more as an outcome of novelty and meaningfulness.

Emotional content "concerns the feelings generated by an ad" (Ang and Low, 2000, pp.836). In other words, a creative ad is constructed out of three main elements, novelty, meaningfulness, and generation of positive feelings. Moreover, a common theme can be seen between the definition of novelty and the definition a rhetoric work. This element is represented in the deviation from audience expectations.

Ang and Low (2000) state that such works that deviate from expectations are also described as incongruent or irregular. These same characteristics make novel work in advertising, original (Ang and Low, 2000; Baron, 1963; Csikszentmihalyi, 1988). This novelty or 'creativity' is always an outcome of imaginative thinking that results in the formation of objects that do not exist (Ang and Low, 2000). Furthermore, the constructed metaphor is very similar to the novel creative element. A metaphor is a novel way for conveying a meaning which results from imaginative creative thinking. A metaphor also produces new implications of meaning through linking two different objects to express a particular meaning. This unexpected metaphorical relation does not alter the meaning, but it rather reinforces it. This further adds to the 'meaningfulness' of the ad.

Moreover, novelty and meaningfulness resulting from the use of the visual metaphor, can subsequently generate positive feelings about the ad. For this reason, it could be said that metaphor is 'a form' of creativity in advertising. A metaphor is constructed through words and also through visuals, and this is what is referred to as visual metaphor. Visual metaphor is expressed with visuals that encourage metaphorical insight in viewers (Carroll, 1994). It is hard to differentiate the definition of visual metaphor from that of the concept of metaphor, because a visual metaphor is just one 'way' of expressing a metaphor. It is a metaphor in its visual mode. According to Carroll (1994) for a visual metaphor to exist again two objects must exist and these two different objects must occupy the same space simultaneously (Carroll, 1994; Forceville, 2002).

There is a bit of a debate about the visual structures that visual metaphors capture. For example, Carroll (1994) restricts visual metaphor to the cases in which the two objects of the visual metaphor are 'fused' together. Forceville (2002) on the other hand contradicts this view and argues that this 'fusion' metaphor is only one kind of visual metaphor. Indeed, Forceville (1996) presents a number of other 'visual structures' through which a visual metaphor can be constructed and presented in advertising. Based on this categorization developed by Forceville (1996), other researchers developed their own typologies of visual metaphor that extended the ways visual elements are combined to construct a visual metaphor.

Carroll's (1994) definition is limited and restricts the different creative 'ways' in which visual metaphors can be formulated. The reason for this is that it does not correspond to the 'essence' of metaphor which is represented in the departure from expectations and identifying novel ways of establishing a relationship between two different terms and expressing this 'relationship' visually. Carroll's definition also defines visual metaphor in terms of its surface formal characteristics. Visual metaphor, however, should rather be viewed as a way of expressing metaphorical thoughts or concepts. This in turn leaves more space for creativity with regards to the ways these concepts can be expressed and hence the 'ways' that a visual metaphor can be constructed. This view complies more with Lakoff and Johnson's (1980) view of metaphor as a matter of thought rather than language. This view is also supported by related theories. The Contemporary Theory of Metaphor is based on a premise, that the "source" of metaphor is thought not language. Furthermore, it suggests that metaphor is an essential part of our normal way of conceptualizing the world and that our metaphorical understanding and experience is reflected in our everyday behavior (Lakoff, 1993).

According to Lakoff (1993), the premise that metaphor is primarily conceptual and part of the normal system of thought and language goes back to Michael Reddy's (1979) classical essay "The Conduit Metaphor". Reddy was the first theorist who demonstrated this conceptual nature of metaphor via a rigorous linguistic analysis (Lakoff, 1993). According to this view a conceptual metaphor is defined as understanding one conceptual domain (i.e. love) in terms of another conceptual domain (i.e. journey) (Kövecses, 2002). A suitable way of comprehending this view of metaphor is the following: Conceptual Domain (A) is Conceptual Domain (B), which is what is referred to as Conceptual Metaphor (e.g. Love is a Journey) or (Love as a Journey) (Lakoff, 1993; Kövecses, 2002). It is important here to differentiate between these two conceptual domains. The conceptual domain from which we draw metaphorical expressions to understand the other conceptual domain is referred to as the source domain (Lakoff, 1993; Kövecses, 2002). On the other hand, the conceptual domain which is understood this way is the target domain (Lakoff, 1993; Kövecses, 2002). So, for example in the conceptual metaphor: Love as a Journey, the source domain is journey while the target domain is love (Lakoff, 1993; Kövecses, 2002). This process is also understood as mapping from the source domain (i.e. journey) to the target domain (i.e. love) (Lakoff, 1993). Moreover, there is a set of systematic correspondences between the source and the target. These conceptual correspondences are often referred to as mappings (Kövecses, 2002), meaning that elements of the source are mapped onto elements of the target (Kövecses, 2002).

What is important to note here is that based on our understanding of this pre-existing metaphorical correspondences of for example Love is a Journey metaphor is how we can also understand the more imaginative or in other words figurative uses of this same mapping. It is this imaginative or figurative dimension of metaphor that we are usually confronted with in advertising where metaphors are employed.

Max Black's Interaction Theory of Metaphor, on the other hand states that a metaphorical statement has two distinct subjects, which are defined as the primary subject and the secondary subject (Forceville, 1996). In visual advertising context the primary subject would be the product being advertised and the secondary subject would be the figurative object that the primary subject is supposed to resemble or draw aspects from. According to Black again the metaphorical expression works by projecting upon the primary subject a set of associated implications, comprised in the implicative complex, that are predictable of the secondary subjects (Forceville, 1996). The term 'implicative complex' here refers to the set of ideas and the meaning embodied in the secondary subject. To make this clearer let's consider an illustrative example from a visual metaphorical advertisement. For example, in figure 3 below, we can see the Reflex Racquet advertisement. In this advertisement an image of a racquet is fused with an image of a shark's jaw. The metaphor here is 'Reflex Racquet is Shark'. The primary subject is the Reflex racquet, which is recognized from the handle of the racquet in the visual, and the secondary subject is the Shark which is recognized by the shark's jaw which replaces the racquet's head frame. This also represents the deviation in this particular visual. Moreover, the meaning that is projected from the secondary subject (Shark) upon the primary subject (Reflex racquet) is 'powerful attacker' (as interpreted by the consumers) (Phillips, 1997).

Figure 3: Reflex Racquet Ad (Phillips, 1997)



In the following section the main typologies of visual metaphor in advertising will be presented.

3.3. Typologies of Visual Metaphor in Advertising

An early attempt to categorize visual metaphor in advertising was made by Forceville (1996). Forceville identified four types of visual metaphor. These types are the following:

a. Replacement metaphor (Phillips and McQuarrie, 2004), also referred to as Contextual metaphor (van Mulken, Pair, and Forceville, 2010). This type of metaphor compares the image of an object to an implied secondary object that is not shown (Phillips, 2003). Contextual metaphor signifies the importance of the context in recognizing the visual metaphor, given that one of the two objects of the metaphor will be absent from the visual. To better define and explain this type of visual metaphor, the following illustrative example will be used. In figure 4 below we see an ad for Clerget Shoes.

In this ad the Clerget shoe is located where we usually would expect to see a tie. Therefore, here the viewer is invited to understand and perceive the shoe not literally, but rather metaphorically in terms of a tie. The shoe which is the product being advertised represents the primary subject of the metaphor. On the other hand, the tie (the absent object) is what the shoe is intended to look like and is referred to as the secondary subject of the metaphor or the source domain (Forceville, 1996).

The metaphor here is: 'Shoe is Tie'. Clerget shoe is as beautiful and elegant as a tie and for this reason it is worth being placed where one would usually expect to see a tie. This is exactly what is depicted in this ad.

The reason why the shoe is understood here in terms of a tie is due to the pictorial context in which the shoe is placed. In addition, the viewer here is aware that the specific visual he is exposed to is an advertisement for a shoe brand (Clerget). Hence the 'context' here is also extended to include the assessment of the genre in which the metaphor occurs (Forceville, 1996).

Figure 4: Replacement Metaphor - Clerget ad (Source, Forceville, 1996)



- b. Fusion metaphor, compares two objects (the two terms of the metaphor) that are both at least partially pictured. The objects are fused together into a hybrid object (Phillips and McQuarrie, 2004). One of the two objects will be the product being advertised and which is also referred to as the primary subject of the metaphor. The other object will be what the advertised product is intended to look like which is also referred to as secondary subject of the metaphor (Forceville, 1996). Figure 3 presented earlier is an example of an ad containing this type of metaphor.
- c. *Juxtaposition metaphor* is similar to fusion metaphor in that both objects are pictured in the ad (Kaplan, 1992; Phillips, 2003). In this type, however, the two objects are presented separately and on their entirety next to each other.

Figure 5 is an example of an ad containing juxtaposition metaphor. In this ad we see the image of a Pim's chocolate cherry cookie side by side to an image of

a cherry. The metaphor is: Pim's Chocolate Cherry Cookie is Cherry. Pim's chocolate cherry cookie is as sweet as a real cherry.

Figure 5: Juxtaposition Metaphor - Chocolate Cherry Cookies Ad (Source, Lagerwerf, van Hooijdonk, & Korenberg, 2012).



d. Verbo-pictorial metaphor (VPM), rests on a comparison between a visual object and verbal object where the visual object is usually an image of the product and which also, represents the primary subject of the metaphor (Forceville, 1996; Phillips, 2003). Figure 6. is an example of an ad containing a verbo-pictorial metaphor. In this Dutch ad we can see the image of BMW motorbike, with a headline that could be translated as 'Instead of dating'. The complete body-copy in the lower part of the ad presents BMW motorbike as a lover or a girlfriend. The complete body-copy actually reads translated:

"With a BMW motorbike you know what you've got. And with a date that remains to be seen. Of course dating someone (or: a date) can be very attractive. But so is a BMW motorbike. If, however, you are really looking for a long-lasting relationship, what could be more reliable than a BMW motorbike? A BMW motorbike is what you could call the very opposite of a dayfly. For one of its strong points is its life expectancy. It lasts for years. Without ageing quickly. And without high maintenance costs.

They are machines of almost indestructible quality. Moreover, they are comfortable. The rider controls his machine. And not the other way around. What is noticeable is the sense of peace when you're riding on a BMW. You will discover that you are not the only one who wants to ride on a BMW. That becomes particularly apparent when you find out about the very-high trade-in value if you sell it. But that won't happen until much later. First make a test-ride at your BMW dealer. A date can wait. BMW makes riding marvelous" (Forceville, 1996, p 149-151).

According to Forceville (1996) The metaphor constructed from the aforementioned reads as: 'BMW Motorbike is Lover' or 'BMW Motorbike is Girlfriend'.

Figure 6: Verbo-Pictorial Metaphor - BMW Motorbike Ad (source, Forceville, 1996)



As mentioned in chapter one of this thesis, a main reason that gives importance of the specific typology is the fact that the differentiating characteristics between the different types of visual metaphor were very clear and paid attention to the structure of the visual. Yet this typology was not free from criticism. Gkiouzepas (2006) argues that Forceville (1996) in developing the types followed a verbal rhetoric paradigm. In other words, he focused on finding visual equivalents of verbal rhetorical figures by analyzing formal visual attributes (Gkiouzepas, 2006). This criticism, however, neglected the following: Firstly, Forceville was not concerned with several rhetorical figures, but rather he focused on one figure which is metaphor in its visual mode. Therefore, he could not essentially borrow anything from the verbal domain but the definitions that specify the mechanism through which a metaphor operates (i.e. the conceptual mapping process).

Secondly, Forceville originally developed specific visual manipulations for each proposed type. Even if these manipulations can find some roots in verbal rhetoric, they are still equally particular to the visual domain (e.g. juxtaposition). Indeed, this typology is simple, yet its simplicity does not diminish its importance but rather highlights it. Moreover, although this typology could be considered a basic typology, it is also the most realistic. This is because the characteristics of each type are clear and the differentiating boundaries between these different visual structures are explicit enough.

Moreover, they do not depend only on the *subjective* judgment of the creator or the audience. For these same reasons this typology will be considered for the purpose of this thesis.

Other typologies that were developed at later stages were strongly based on these categories suggested by Forceville (1996). For example, Phillips and McQuarrie (2004) proposed another typology. Phillips and McQuarrie's (2004) typology consists of a matrix of cells generated by crossing two dimensions. The first dimension is the visual structure, which refers to the way the two objects that comprise the visual metaphor are physically pictured in the ad. In this dimension, three possibilities are distinguished (Juxtaposition, fusion, and replacement). This typology also suggests that these types of visual structure vary in their complexity. Juxtaposition is regarded as the simplest, fusion as the more complex, and replacement as the most complex visual structure. From the aforementioned it can be seen that the types of visual metaphor presented by Forceville (1996) represent the basis for this typology with regards to the visual structures it proposes.

The second dimension in this typology is the meaning operation, which refers to the target or focus of the cognitive processing required for comprehending the visual. In this dimension again three possibilities are distinguished (connection, comparison for similarity, and comparison for opposition). Meaning operations are also arrayed according to their degree of ambiguity, polysemy or richness of reference. The authors in fact argue that operation of comparison, whether directed at similarities or differences, is inherently "richer" than the operation of connection, as it provides and allows for a larger number of alternative responses. So, 'richness' here refers to the 'richness' of inferences that can be derived from the meaning operation. According to this typology, there are, hence, nine fundamentally distinct, kinds of visual metaphor (Phillips and McQuarrie, 2004), as shown in figure 7 below.

Figure 7: Phillips and McQuarrie (2004) Typology



Illustration removed for copyright restrictions

Phillips and McQuarrie (2004) had stated that the objective of their typology was to describe the internal structure for one type of advertising picture. The kind that can be comparable in certain aspects to verbal metaphor or verbal rhetorical figures more generally. It can be noticed here that the authors in their statement were not very clear with regards to whether their typology was specifically concerned with visual metaphor or visual rhetorical figures in general.

This unclearness in turn prompted some researchers (e.g. Maes and Schilperoord, 2008) to describe this typology as one that classifies visual figures of rhetoric in general and not particularly visual metaphor. This typology suggested by Phillips and McQuarrie (2004), however, indeed leans more towards being considered a categorization of different types of visual metaphor rather than of visual figures of rhetoric in general. The reason for this is that this typology is very much based on the typology of visual metaphor proposed by Forceville (1996). However, it also goes beyond Forceville's typology by including and combining additional dimensions. In this regard it represents in a way a more 'sophisticated' typology yet still of visual metaphor. This will become clearer as we present and discuss this typology in the following paragraphs.

Although a more complex typology compared to Forceville's (1996) typology, it is hard to differentiate between the different types of visual metaphors described in this typology. Also the differences constructed through the 'visual' elements are not very explicit and obvious specifically with regards to the meaning operation dimension. This means that they depend heavily on the subjective interpretation of the audience. This is also important given the fact that this typology has not been tested empirically. It must be noted here, however, that one of the contributions of this typology is the identification of 'connection' and 'comparison aimed at opposition' among the meaning operations. The meaning operation for connection figures is stated as: 'A is associated with B' rather than 'A is like B' like in figures of similarity or comparison aimed at similarity. In the operation of comparison aimed at opposition on the other hand, the visual figure suggests that two images are different in some way, meaning that 'A is not like B' rather than 'A is like B' like in figures of comparison aimed at similarity. Another contribution of this typology is the introduction of "moderating factors" that according to the authors, moderate the impact of both complexity of visual structure and richness of meaning operation on consumers' response to visual rhetoric in advertising. One of these important moderating factors is consumer competence.

Consumer competence again according to the authors could take different forms. It may develop as a function of cultural assimilation (McQuarrie and Mick, 1999); product category expertise; or familiarity of the particular kind of advertising (i.e. heavy magazine readers). The higher the level of consumer competence, the more the consumer will be able to deal with complex visual structures and take advantage of rich possibilities for inference (Phillips and McQuarrie, 2004). Most notably this study was one of the first which attempted to link the taxonomic categories to differences of consumer response. The study, however, as mentioned above did not actually empirically test these consumer-processing predictions derived from the proposed typology (Phillips and McQuarrie, 2004).

One of the most recent typologies of visual metaphor in advertising was developed by Gkiouzepas and Hogg (2011) who tried to systematically categorize the different patterns of representational violations found in visual metaphors through developing a conceptual framework which aimed at this categorization. Furthermore, it categorizes visual forms with reference to two broad dimensions. These dimensions are the objects' mode of representation (Juxtaposition and synthesis) or in other words what is being related, and the second dimension is the *visual* scenarios (realistic symbiosis, replacement and artificial symbiosis) (Gkiouzepas and Hogg, 2011). This dimension focuses on how these whole/part objects are constructed in order to be related to each other visually, and the extent to which the relation between the two objects complies or fits with real life visual experiences. These two dimensions together provide a matrix for six types of combinatory mechanisms (Gkiouzepas and Hogg, 2011). Figure 8 below illustrates this Conceptual Framework of Metaphorical Visual Structures proposed by Gkiouzepas and Hogg (2011) with Ad examples.

Figure 8: Gkiouzepas and Hogg (2011) Typology



Illustration removed for copyright restrictions

The authors argue that this is a starting point for proposing a syntax of visual imagery of the metaphorical relationships developed by advertisers. This study also did not stop at the mere categorization of different types of visual metaphorical relationships, but further empirically investigated how the different visual forms (e.g. juxtaposition or fusion) may have impact on consumer responses as elaboration, attitude towards the ad, attitude towards the brand, etc., which are variables that contribute to the overall persuasiveness of the ad. Overall results showed that in some cases fusion visuals were consistently more persuasive compared to juxtaposition visuals (Gkiouzepas and Hogg, 2011).

This framework used two well-established modes of representation; juxtaposition and synthesis. What this framework added however is "how" these "whole" objects (the case of juxtaposition) or "part" objects (the case of synthesis) are constructed so that they relate to each other visually. Moreover, the visual scenario dimension of this framework relates to how advertisers 'justify' the appearance of the key visual objects complies or fits with real life visual experiences. This same dimension is divided into three main categories; realistic symbiosis, where the objects are unified by real life visual scenario; replacement, where the two objects are interrupting a real life visual scenario; artificial symbiosis, which is clearly established from the outset. In this last case the metaphorical intent is depicted in the most explicit way because the advertiser does not suggest a metaphor under an appearance of seemingly real visual event (Gkiouzepas and Hogg, 2011). Another contribution of this model is the introduction of the moderating role of conceptual tension or conceptual similarity. Conceptual similarity is defined as the degree of relatedness between the two metaphorical objects. For example, results showed that synthesis visuals were more able to point to the implicit meaning of the visual metaphor to a greater extent than juxtaposition visuals in low-tension conditions or in other words in low level of dissimilarity (Gkiouzepas and Hogg, 2011). Furthermore, conceptual tension appeared to be a limiting condition for the impact of synthesis visual structure. Results suggested that for the superior impact of synthesis visuals to be achieved the metaphorical objects should not be excessively dissimilar to each other (Gkiouzepas and Hogg, 2011).

Discussion and Evaluation of the Typologies of Visual Metaphor in Advertising

From the above description of the typologies developed by Phillips and McQuarrie (2004) and Gkiouzepas and Hogg (2011) commonalities can be seen in the types of visual metaphor identified in these two typologies. For example, juxtaposition and synthesis metaphors are mentioned in both typologies (Gkiouzepas and Hogg, 2011; Phillips and McQuarrie, 2004) as examples of 'object's mode of representation' or 'visual structure'. These are two different terms used by the different authors, however, refer to the same thing. This is the form of the visual rhetorical figure or how the two objects that comprise the figure are physically pictured (side by side in the case of juxtaposition metaphor or fused together in the case of synthesis metaphor). It can also be noticed that these modes, or structures are based on the typology of visual metaphor proposed by Forceville (1996). Another important point is the fact that while 'replacement' as a concept is used as one of the three possibilities of visual structure in the typology of Phillips and McQuarrie (2004), it is also used in a different dimension or as type of visual scenario in the framework proposed by Gkiouzepas and Hogg (2011).

Despite of the relative 'sophistication' of these two later typologies compared to Forceville's typology, it would be risky to take these different types of visual metaphor identified in these two typologies for granted as they are very subjective and their development depends heavily on the views of the individual researchers who created them. Furthermore, it would be challenging for the consumers or audience to identify these differences as well as the distinguishing characteristics of each type. For example, in Phillips and McQuarrie's (2004) typology the differences between the meaning operations of connection and comparison are not very clear in the visual form or when depicted in the visuals. Similarly, in Gkiouzepas and Hogg's (2011) typology, the differences between the different visual scenarios although the logic behind them is clear when explained on a theoretical level, these differences are hard to recognize in the visuals as such.

For this reason, and for the purpose of this thesis the more basic and visually explicit categories of visual metaphor proposed by Forceville (1996) will be used. Although these categories developed by Forceville can be equally complex as metaphorical images, the distinguishing characteristics that differentiate the different types of visual metaphor, as mentioned earlier, are clearer.

Therefore, it is easier to recognize and agree upon. Moreover, it will be easier to relate these specific types to specific consumer responses. Gkiouzepas (2006), conclude from his analysis on which he bases his own framework of visual metaphor that it is not possible to quantify meaning as if it was a physical attribute. The same author, however, argues that in the attempt to define meaning it would be necessary to reduce the basic units of meaning to such an extent that they themselves would not be labeled 'meaning' anymore. On the other hand, these same units cannot be detached from meaning. In other words, these visual structures (e.g. juxtaposition structure, fusion structure, etc.) do not constitute meaning in themselves but rather they can be seen as vehicles through which meaning is 'conveyed' and 'communicated'. Hence the difficulty or easiness lays not in understanding the visual structure as such, but rather in the difficulty or easiness of deriving meaning 'through' the specific visual structure. From the aforementioned it can be seen that visual structure is the 'context' that makes the meaning-making process more easy or difficult. For this reason, the visual structures cannot be separated from this meaning-making process but rather they an integral part of it. These same visual structures could strongly contribute in defining the cognitive resources demanded from the consumers to process the message.

Considering the abovementioned visual structure is considered a main basis on which metaphors are categorized for the purpose of this thesis. Forceville's (1996) categorization of visual metaphor in advertising is mainly based on differences in visual structure between the different types. Moreover, the types of visual metaphor proposed by Forceville (1996) were tested in only a very limited number of research studies (five studies). Furthermore, the fourth type in this same typology which is the verbo-pictorial metaphor was never tested for its effect in comparison to the other three types (juxtaposition metaphor, fusion metaphor, and replacement metaphor). A reason for this past exclusion may be the difficulty of this type of metaphor with regards to its operationalization, as it is the only type of visual metaphor proposed by Forceville (1996) that is constructed of both a visual part as well as a verbal part. Forceville typology will be used for the purpose of this thesis. Moreover, this verbo-pictorial metaphor type proposed by Forceville (1996) will also be included and its effect on consumer response will be investigated.

The abovementioned presentation and discussion illustrates the research that has been conducted on the concept of visual metaphor, its nature and the different typologies that have been developed throughout the years. An attempt to link this discussion to the philosophical stand or approach that this research follows naturally leads to the first overall research question to be answered in this thesis (*Why is visual metaphor in advertising such an important phenomenon that is worth further research?*). The answer to this question is reflected in the actual use of visual metaphor as a creative strategy in print advertising. This in turn also represents a functional aspect of the knowledge derived from this research project. The following section will briefly highlight previous research that has been conducted on the presence and use of visual metaphor in contemporary print advertising.

3.4. Previous Research on the Presence of Visual Metaphor in Print Advertising

Research that has focused on identifying and quantifying the forms and percentage of visual metaphor in print advertising is limited. Kaplan is the only researcher that has been particularly concerned in content analyzing visual metaphors in print advertising. Kaplan, (1992) in his study focused on identifying the presence and the types of visual metaphor in the ad. In this study, the author, however, did not develop codes for the other ad elements (other parts of the visual, textual ad elements, etc.), and he did not provide enough information to replicate the coding procedures. Moreover, as stated in chapter one, the most recent study conducted by McQuarrie and Phillips (2008) on the change in advertising style between 1969 and 2002, did not primarily focus on the rhetorical figures. From the aforementioned, it can be seen that content analysis research particularly on visual metaphor in advertising is very limited and also dated. Moreover, the extant content-analytic

studies on print advertising in general (e.g. Daechun, 2003; Bu, Kim, and Lee, 2009; McQuarrie and Phillips, 2008; Cutler, Javalgi, and Erramilli, 1992; Kaplan, 1992; Feasley and Stuart, 1987) are characterized by the following: Firstly, a narrow focus approach, the number of ad elements (e.g. visual, text, etc.) and hence codes related to these elements are very limited in past content-analytic studies.

Secondly, there was a tendency in these content analysis studies to replicate previous research rather than expand into unexplored areas of print advertising. Therefore, existing empirical findings do not provide a complete evaluation of the elemental parts of print advertising. Thirdly, the information provided in these content analysis studies regarding the definitions and operationalization of these different ad elements/codes (brand element, textual element, and visual element) is also very limited. This is the case especially with regards to the 'rationale' behind the choice of the specific operationalization. The same applies regarding the coding procedures.

There are three key studies that have provided a comprehensive list that include a large number of ad elements/codes. The first study was an attempt made in the 1970s by David P. Forsyth, vice-president of research at McGraw-Hill Publications, who identified a comprehensive set of print advertisement characteristics that contribute to readership (Naccaratto and Neuendorf, 1998). Unfortunately, however according to Naccaratto and Neuendorf (1998), the available reports on this study fail to provide sufficient information regarding this content analysis study including information about the specific list of ad elements/codes that were covered in this study. From this information however, it is known that sample size of ads was 3,600 print ads covering the five-year period.

The sample was taken from McGraw-Hill's Ad Sell Performance Studies. Moreover, the study focused exclusively on form ad elements (e.g. color of ad, size, headline type, etc.). It did not include any content variables (e.g. use of specific persuasive appeal like humor, fear, etc). Moreover, the lack of sufficient information about the specific study questions the significance of its findings. The second study was conducted Pollay (1984). This study is maybe the most comprehensive content analysis ever conducted on magazine ads. Moreover, it tracked the development of the advertising style and tactics over the first eight decades of the 20th century, 1900s – 1980s. A sample of 2000 magazine ads was subjected to an intensive content analysis along many dimensions (e.g. information content, values employed, language character and art, behaviors displayed, the nature of the advertiser, product, and the tactical intent of the ad). This study was published in a series of three papers (Pollay, 1984a, 1984b, 1985). In the third paper particularly the author also provided selected coding definitions, instructions and illustrations.

Considering the time periods covered by this study, it is considered dated. Indeed, due to the great development and change in the advertising style since the 1970s, many the codes used do not even apply to modern print advertising. This study, however, still remains a valuable source and reference for the current content analysis.

The third study is a much more recent study that was conducted by Leonidou, Spyropoulou, Leonidou, and Reast in 2006. This study has provided a detailed coding grid. However, it focused exclusively on newspaper advertising. To the best of the researcher's knowledge no other study has provided such a comprehensive and detailed coding grid that encompasses all the ad design elements, and also provided detailed information regarding why and how the specific codes are chosen for analyzing the ads.

The aforementioned highlights the lack of this type of research with regards to visual metaphor in terms of its scope or in other words the types of visual metaphor, the ad elements it covers but also with regards to the print media categories that are researched. More, importantly, this research is also dated and this adds even more importance for conducting research that can further update the previous research that has been conducted. This becomes even more important in the light of the quick and rapid evolution and change that takes place in print advertising style over time. This change directly also influences and is reflected in the form and the use of the different ad elements including visual metaphor.

Chapter 4
Contemporary Uses of Visual Metaphor in Print Advertising
A presentation and a discussion of a qualitative research pre-study with advertising experts and a content analysis research

4.1. Introduction

This chapter answers the first overall research question raised in this thesis which is: Why is visual metaphor in advertising such an important phenomenon that is worth further research?

Indeed, there is a fair understanding of the nature of visual metaphor as a concept. However, is this relevant to real world print advertising? Is visual metaphor actually present in print ads? Is this presence limited to specific print media categories?

In order to answer the above-mentioned questions a comprehensive assessment of visual metaphor in print advertising is needed. This assessment should investigate the different types of visual metaphor in print advertising as well as the relationship between the visual metaphor element in ads and all the other elements of print advertising design (e.g. visual element, text element, brand element).

This chapter presents two research studies. The first study which took the form of eight in-depth interviews with print advertising experts (both copywriters and art directors) provided insight concerning the role of visual metaphor in print advertising. Moreover, it contributed to the operational definitions of the different ad elements. These definitions were vital for the development of a comprehensive coding grid for analyzing print ads. This coding grid was used in the second study which was a content analysis study. This content analysis was conducted on 320 print advertisements. Stratified sampling was used. Four print media types were equally represented in this sample. These types are: magazine ads, poster ads, outdoor/out of home ads, and billboard ads. In addition, a sub-sample of award winning ads was also analyzed. Results of this content analysis provided an update and empirical evidence for the use of visual metaphor in real world campaigns, including award winning ads. The types of visual metaphor investigated were preliminary the four types proposed by Forceville (1996). These types are juxtaposition metaphor, fusion metaphor, replacement metaphor and verbo-pictorial metaphor. Furthermore, two 'new' types of visual metaphor were also identified as part of this study. This chapter presents the aim, reason for choice, objectives, method, and results of each of the two aforementioned studies. Finally, the chapter ends with a discussion section and the key contributions of this research.

4.2. Qualitative Study with Advertising Experts

4.2.1 Aim of the study

The overall aim of this research study is to investigate the process and the elements of print advertising design from the practitioners' perspective.

4.2.2. Context and Reason for Choice

Advertising Design Research – A need for practitioners' point of view

Print advertisements are comprised of three elements: brand, visual, and text element (Pieters and Wedel, 2004). Research has recognized the effect of these elements of print ads on consumer responses (e.g. Edell and Staelin, 1983; Messaris, 1997; Rossiter and Percy, 1980; Mitchell, 1986; McQuarrie and Mick, 1999; Phillips, 2000; van Mulken, Pair and Forceville, 2010; Ma, 2008; Phillips, 1997). The 'definitions' of these elements as such, however, have not received the adequate attention from advertising researchers. In every advertising text book there is a chapter on print ad creation and copywriting, where these different elements are defined (e.g. Wells, Burnett, and Moriarty; 2000; Arens and Shaefer; 2007; Semenik, Allen, O'Guinn and Kaufmann; 2012; Jefkins and Yadin; 2000; Belch and Belch, 2009). These definitions, however, tend to be very general and in many cases overlapping and not precise enough particularly with regards to the differentiating characteristics of each element (e.g. ad headline, ad subhead, types of headlines, type of visuals etc.). As a result of this, the operationalization of these elements for research purposes becomes a difficult and in most cases a very subjective task.

What makes this issue even more important is the rapid evolution and change in print advertising style. Moreover, the research on the development, change and transformation of magazine advertising style and content is concerned more with the 'change' and the development of these ad elements rather than their actual definitions (e.g. McQuarrie and Phillips, 2008). This research is again very limited. On the other hand, advertising creatives and copywriters in many cases break the rules and the agreed upon norms and present these ad elements in very "creative" ways and forms for the purpose of attracting more attention from audience. This in turn makes the recognition as well as the classification of these elements (i.e. headline, subhead, types of visuals, etc.) by viewers a more difficult task.

From the above-mentioned it could be noticed that the need for more realistic and valid operational definitions of the ad elements as well as principles framing these definitions is needed. Practitioners' point of view is needed for this purpose as they are the 'creators' of these ads. The insights of advertising practitioners will result in more 'realistic' and hence operationally 'valid' definitions. This study aims for these insights.

Print Advertisement Elements

As mentioned above, print advertisements are usually comprised of three main elements: brand, pictorial, and text element.

1- Brand Element

The brand element includes things such as: brand name, trademark, and brand logo which represent the visual brand-identity cues in any print advertisement (Keller 2003; Pieters and Wedel; 2004).

2- The Text Element

The text element includes all textual information of the advertisement, excluding the brand element (i.e. brand name) (Pieters and Wedel, 2004).

In most Advertising textbooks the textual element of print advertisements is referred to as 'copywriting' or 'copy' (Wells, Burnett, and Moriarty; 2000; Arens and Shaefer; 2007; Semenik, Allen, O'Guinn and Kaufmann; 2012; Jefkins and Yadin; 2000; Belch and Belch, 2009). Moreorver, the textual element is divided into two main categories: display copy and body copy (Wells, Burnett, and Moriarty; 2000).

Display copy

Includes all elements that readers primarily see and take notice of in a print advertisement. These elements are the following:

a. Headline

It is maybe the most important display element. It is indeed a key element in print advertising. It is through the headline that audience usually gets the main point of the ad, as it conveys the message.

Advertising researchers throughout the years have grouped and categorized headlines in different ways. Appendix 2 summarizes the different types of headlines proposed by the different authors. From a close look into these types, it can be seen that there are some common and more 'explicit' types that exist in all these typologies.

There are a number of other types that are also mentioned that are less common and less clear and hence more 'implicit'. These types are more difficult to identify in an advertisement.

b. Subheads

Subheads are also considered display copy in that they are normally in print smaller than a headline but larger than the body copy, printed in different type (Semenik, Allen, O'Guinn, and Kaufmann,2012). Subheads are seen as sectional headlines that divide the ad into sections if there are different ideas or items. Subheads are crafted in order to continue to aid and induce the reader to continue reading and reach the body copy (Jefkins and Yadin, 2000; Wells, Burnett, and Moriarty, 2000; Belch and Belch, 2009).

Recently, Semenik, Allen, O'Guinn, and Kaufmann (2012) defined a subhead as comprising out of a few words, a short sentence and usually appearing above or below the headline. Furthermore, the same authors state that the subhead should support the headline. When the subhead appears above the headline it is called a kicker (Arens and Schaefer, 2007).

c. Taglines/Slogans

Taglines are short and catchy phrases. Usually used at the end of an ad to complete and wrap up the advertisement's idea in a particularly memorable way (Wells, Burnett, and Moriarty, 2000). Headlines, subheads, or taglines which are repeated in more than one advertisement as part of a campaign become 'slogans' (Wells, Burnett, and Moriarty, 2000). Some authors refer to slogans as theme lines or taglines (Arens and Schaefer, 2007).

Body Copy

The body copy is the main and actual text of the ad. It explains the main argument of the ad, by summarizing the proof that supports the initial excitement and interest provided by the display copy (i.e. headline, subhead, etc.).

Advertising researchers again proposed different types of body copy. Appendix 3 summarizes the different types of body copy. From a close look into these typologies it can be seen that there are again some common and 'explicit' types that exist in all these typologies. There are a number of other types which are less common and also more difficult to identify in an advertisement. This in turn makes the process of coding more challenging. For this reason, it is important again to have the input and insight of the original sources, the ad copywriters, who are the 'owners' of this ad element.

3- The Visual Element

The visual element consists of all non-textual information of the advertisement, excluding the brand element (Pieters and Wedel, 2004).

Advertising researchers argue that readers of a print ad spot the picture first, then the headline, and then they proceed with the body copy. Considering the great responsibility that the visual hence carries with regards to the ad's success, it is usually designed to achieve several goals. These are: capturing the reader's attention, supporting the claims made by the copy, identifying the subject of the ad, presenting the product actually being used, arouse the reader's interest, stress the product's unique features and create favorable impression about the brand being advertised (Arens and Shaefer, 2007). Please see tables 1 and 2 in appendix 4 for the definitions of the different types of visuals and ads provided by advertising researchers.

From a close look to these definitions, a high degree of subjectivity can be noticed and sometimes even an overlap. More research in this area is needed considering particularly the fast and continuous evolution and development in print advertising styles, including the types of visual layouts used in advertisements (McQuarrie and Phillips, 2008).

Visual Metaphor in Advertising

The importance of visual metaphor in print advertising has been discussed in chapter 2. It is worth mentioning, however, that research has not looked at the ads' producers and creative side of the process. It is important to listen to the voice of the 'creators' of these ads in the first place. Indeed, this voice has been silent in previous research with very few exceptions (i.e. Phillips, 1997; Kover,1995). This qualitative research study with advertising experts aims and 'hear' these important voices of ad copywriters and art directors.

4.2.3. Research Objectives

Based on the above mentioned discussion the key objectives of this qualitative research study are the following:

- 1- To accurately define the different parts of the textual element in a print ad (i.e. headline, subhead, slogan, etc.) from the copywriters' point of view.
- 2- To explore the main distinguishing characteristics between these textual elements (e.g. with regards to their position in the ad).
- 3- To identify how creatives, categorize the different types of visuals they employ in print ads.

- 4- To investigate the intentions and motivations of creatives when employing visual metaphors in advertisements
- 5- To identify how creatives, categorize these visual metaphors employed in advertisements.
- 6- Based on the resulting definitions and findings, to develop a comprehensive, and detailed coding grid that will be used in a subsequent study for the purpose for coding and analyzing print ads.

4.2.4. Method

Qualitative research design in the form of one to one, semi-structured in-depth interviews with both copywriters and art directors.

4.2.4.1 Why Qualitative in-depth interviews?

Qualitative method allows the researcher to explore in depth the views of the two types of participants in this research study. This helps unpack these differing yet complementing views within the context of the creative advertising design process (Choy, 2014). The primary strength using this qualitative approach is to uncover the views of the creatives regarding the following:

Firstly, what are the roles of two types of participants in the print advertising design process and what frames these roles. Further, how do they work together to achieve the goal of designing a print advertisement. Secondly, what are their assumptions about the definitions of the different ad elements. How these definitions agree, differ or complement the already existing advertising theory (Choy, 2014).

It is an open-ended enquiry, allowing the participants to raise issues that matter most to them. The researcher here is trying to explore and identify a set of already existing theoretical assumptions about these different ad elements, yet he is not presenting these elements in the form of any pre-conceived or finite set of terms to examine. Instead, he is questioning existing advertising theory. The researcher is employing a broad and openended form of enquiry, allowing the participants to develop their own definitions as advertising practitioners and present their more 'realistic' perspective that directly relates to how 'actually' these print ads are designed (Choy, 2014; Yauch and Steudel, 2003). This in turn is another advantage of the qualitative approach employed in this study. This qualitative study will take the form of semi-structured in-depth interviews. Qualitative interviews are relevant to this study compared to other qualitative methods. The reason is that interviews are flexible, both in terms of content and time.

In the case of this study the look is for both specific information but also experiences of the respondents that would enable the answer of the specific research questions (Lee and Lings, 2008). For this reason, semi-structured interviews are suitable as they allow the researcher to order the topic in some consistent way. This will help the flow of the interview, and make best use of the time available. This is achieved by the use of the interview guide which will include the key points/questions to be covered in the interview. The interviewer also in this case is able to obtain instant feedback from the respondents and follow their nonverbal language as the interviews will be face to face (Hair Jr, Money, Samouel, and Page, 2007). In depth interviews are mostly suitable for this research as it will give the interviewer the chance to get "deep" information and understanding (Gubrium, and Holstein, 2002). The flexibility that this type of interviewing offers will allow the interviewer to achieve this aim (Babbie, 2004).

4.2.4.2. Sample

The sample size for this study was eight participants - 50% copywriters, and 50% art directors.

Considering that the main aim is to provide insight needed for the content analysis study and also considering the study's time frame and the availability of potential participants with the specific profile, snowball sampling was implemented.

Eight face-to-face interviews were conducted. Each interview lasted for 1 hour.

4.2.4.3. Interviews Structure

Each interview lasted for approximately one hour and was divided into the following two main parts:

Part one

In this part participant answered questions related to his/her role (copywriter or art director) in print advertisements' creation as well as the elements of print advertising design. Considering that copywriters are more concerned with the verbal element of the ad, while art directors are the ones involved more in the visual part. The questions asked were a bit different for copywriters compared to art directors. Please see appendix 5 for the interview guides used for the interviews with copywriters as well as art directors

The interview structure followed to a high extent the questions listed in appendix 5, however, these questions in this case formed part and somehow guided the discussion (or the interview) but did not comprise the whole "structure" or content of the interview.

Part Two

Section 1: Coding

After answering the questions, the interviewees were invited to view three print ads (one at a time) and code each ad. In this section, participants were first asked to describe all the ad elements and then code each of these elements. (i.e. headline, type of headline, types of visuals, etc.). The rationale for this section was to see how the participants actually apply the definitions they provided during the first part of the interview on the actual different print ad elements as depicted in these three ads. Please see appendix 6 for an example of a coded ad by one of the participants.

Section 2: Interpretation

In this section the interviewees were asked to interpret the meaning(s)/message(s) conveyed through the ad's elements (e.g. overall message conveyed, meaning of the metaphor, type of the metaphor, etc).

4.2.4.4. Materials

The exact three ads that were used for the purpose of this research study were chosen by the researcher and supervisory team. Ads chosen belonged to different print media categories (e.g. magazine, outdoor/out of home). These ads reflected different advertising styles, both metaphorical, non-metaphorical. Please see appendix 7 for the three ads which were used in this study.

4.2.4.5. Data Analysis

The audio recorded interviews were firstly transcribed. Professional transcription services were used to transcribe the interviews. Each transcribed interview was saved as a separate word-processed file.

In order to maintain confidentiality and preserve anonymity of participants, all participants were assigned a reference code. Following that data was analyzed by categorizing or coding data. The primary objective was to feed the development of a coding grid, to be used in the content analysis study. Therefore, the data analysis focused on part one of the interview and section one of part two of the same interview.

The reason for this is that these parts related directly to the operational definitions needed for the different ad elements and hence the coding grid.

Interviews' data (the transcripts) were processed and initially coded using the Nvivo software. Initial codes were created based on the different ad elements under study and the objectives of the study. These codes created in Nvivo were further broken down into subcodes manually. This resulted in a table which summarized the answers that each of the eight participants gave on each of the ad elements under study. Interpretations were drawn based on the analysis, integration and synthesis of these answers. Please see appendix 8 for a part of this table that summarizes the answers of one the participants regarding a specific ad element (the headline).

4.2.5. Research Findings

4.2.5.1. Metaphor in Print Advertising

Findings showed that metaphor was viewed as a successful and effective advertising strategy, yet also as risky one. It could be very successful if it is comprehended, and disastrous if not. It was easier for participants to give examples of visual metaphors compared to verbal metaphors.

Participants acknowledged that different types of verbal metaphor and visual metaphor do definitely exist but they could not clearly label any types. One participant, however, thought that one way to categorize metaphors, could be based on the responses they induce in consumers (e.g. positive emotion, thought provoking, etc.).

4.2.5.2. The Visual Element

Only participants who were more involved on the art direction side of things were asked about the visual element of print ads, or in other words the visuals employed in print ads. Only one participant could actually literally categorize visuals into the following three types.

1- **Lifestyle Photography**: Visuals mainly depicting humans or consumers without however depicting the actual product or brand.

"Lifestyle would be a happy family showing the benefits of our product" (Art director 3).

2- **Product photography** which is divided into two sub-types:

- Straightforward Product Photography: a straightforward and direct picture of the product.

"...you want to just kind of show off your product and have a straightforward picture of the product say for some kind of sales led leaflet in a trade magazine (Art director 3)

- Exciting product photography or brand photography which is "creative product photography". For example, "With one of our brands a lot of the photography style is the product kind of coming out of darkness; so it's moodily lit" (Art Director 3)

3- Crossover of product photography and lifestyle photography.

Example: "here you have the product in use" (Art Director 3)

Another participant mentioned things like funny and humorous versus something incredibly straight and serious without going into much detail about it. Most participants agreed that the size and location of visuals in a print ads are not standard.

4.2.5.3. The Textual Element

a. The headline - "The big boss, the leader"

The 'essence' and importance of a headline does not stem necessarily so much from its position or location in the ad nor from its font size as such, but rather from its 'role' and 'effect' on the reader or the viewer of the ad. This 'effect' should meet the following two important criteria:

- 1. To have the ability to 'grab attention' and engage the reader when he or she is initially exposed to an ad.
- 2. To create the 'initial' interest and 'desire' in the reader to continue looking at and 'reading' the ad.

The headline does not have necessarily to answer 'all the questions of the reader, because 'its partners' and 'helpers' (e.g. the subhead, the body copy, the tagline or even the visual) can do that. When a print ad does not literally have a textual headline, a strong visual or image can 'metaphorically' act as a headline. Therefore, the headline can be seen as the 'big boss' and the 'leader' in any print ad, the most important part of the ad that 'leads' the way and which everything else follows on from it.

Furthermore, from the data the following types of headlines where identified:

- 1- A statement
- 2- A question
- 3- A proposition of benefit
- 4- Emotional

- 5- A construct of two or three words that don't make a full sentence
- 6- Unexpected e.g. 'Wham Bam, thank you Mam!

b. The Subhead - "the clarifier, the helper"

Again, the 'essence' of a subhead does not stem necessarily so much from its position or location in the ad nor from its font size. Rather from its 'role', which is mainly to clarify and hence 'support' the headline. It maybe answers a bit more, the 'questions' or 'issues' raised by the headline.

It can be used to purely 'organize' the print ad layout when a lot of text is used. It does not necessarily have to exist in an ad unless needed. Therefore, the subhead can be seen as the 'loyal' partner and helper of the big boss, the headline.

Moreover, from the data the following types of subheads were identified:

- A question
- Answer to the question (to the headline)
- · A proposition of benefit
- Emotional
- A construct of two or three words that don't make a full sentence
- Simply used to split large amounts of copy
- A quotation
- Bullet points

c. The Body Copy - "The doer, the labor"

For many print ads readers, the body copy is the bit of a longer text (not necessarily always long and preferably not very long) which is usually found at the lower part or bottom of the ad.

The 'essence' of what a body copy is does not, however, necessarily stem out of its location in an ad (which is usually at the bottom) nor from its word length (which is usually a bit longer than the headline or subhead) but rather again from its 'role'. A main role of a body copy in a print ad is what is referred to as the 'call to action' or in other words 'what to do next' after viewing this ad.

This 'call to action' can be represented or achieved by giving more detailed information about the product or service being advertised and how it can be used (e.g. product features, ways of using it) or merely by aiding the viewer to call a phone number or visit a website or by simply stating a postal address (e.g. company's' address).

Therefore, the body copy can be seen as the 'hardworking' worker or labor who actually illustrates and explains to the ad viewer or reader what to actually 'do' based always on the instructions or the 'inspirations' provided by the big boss, the headline and his possibly loyal helper, the subhead. This does not mean however, that this 'body work' or 'call to action' is necessarily 'solely' the task of the body copy in a print ad. Indeed, a 'call to action' can be also an integral part or task of the big boss, the headline, or the helper and clarifier, the subhead or even the visual. And this is at the end what makes advertising such a 'creative' and hence 'flexible' process. It is the 'team work' which is 'orchestrated' by all the print ad elements and which in turn contributes to the effectiveness of the result or the end product, the ad.

d. The Tagline/slogan - "The old wise man"

'Wisdom' is an important element when facing any situation. We, humans, usually need some inspiring words of wisdom that can encourage and guide us in taking the right decisions. When viewing or reading a print ad we often 'search' for a few words or even one word of wisdom, that could 'sum up' the key message or mission of the ad, the brand/company being advertised or even the user experience (the consumer) of this brand. This word or words of wisdom is exactly what the tagline or slogan represents in a print ad.

Tagline and slogan are two terms that were used interchangeably by the participants in this study to refer to a word, an expression or a statement that "signs off" the ad. A tagline or a slogan is usually placed close to the logo or a brand name because it actually and literally "sums up" the brand. It strongly relates to how the brand or company wants to be seen. Whether by possessing or owning a unique strength or offering a particular benefit or consumer experience. A tagline can also act as a headline if it is the main "attention grabber" in the ad. A tagline or slogan can also be 'a call to action' (e.g. Nike's slogan: 'Just Do It'). Therefore, in a way, the tagline and/or the slogan in a print ad acts like the *Old Wise Man* who 'sums up' and offers the reader the 'essence' of his experience in a few words of wisdom. In this case his 'brand experience'.

Moreover, from the data the following types of taglines/slogans were identified:

- A question
- A proposition
- Just a word
- Motivational e.g. Nike's 'Just Do It'
- a statement/phrase
- a mission

From the data it was also inferred that the tagline/slogan has to have an 'identity'. Accordingly, the tagline/slogan could be representing one of three things. It can be corporate. This means that it is related to or it represents the company's values, or mission. Alternatively, it may be related to the consumer. Characterizing the consumer as being for example: adventurous or punctual, etc. And finally it can be simply campaign related. This means that it could be a statement or a maybe just a word or two that represents a *theme* that is 'repeated' throughout the campaign (in more than one ad).

4.2.5.4. The Brand Element

The majority of participants stressed on the importance of the brand element (logo and/or brand name) and that it should definitely be present in the print ad. There are some 'usual' positions where the brand element is usually placed (e.g. top or bottom of the ad) but these are not standard positions. The decision on where to put a brand name and/or logo differs depending on the ad layout, types and the use of imagery in the ad as well as where the ad itself is to appear.

Size of the brand element can differ. It could be big and sometimes it could be small like when for example the visual is the protagonist of the ad and 'tells the story'. Brand name/logo, however, should not be too small so that it is lost in the ad. The are two main types of logos.

- 1- The logo type which is basically the brand name
- 2- **The symbol logo** which is symbol that stands for the brand. Within the symbol logo there is another subtype which is the **iconic style logo** like for example VW which is based again on the brand name.

In the following sections findings that shed light on the creative advertising 'process' more generally will be discussed.

4.2.5.5. Managerial Insights

a) Skills that Creatives Must Possess

From the data the following was inferred regarding the main skills that an art director and a copywriter must possess.

Art Director

Most art directors start their career as talented graphic designers, mostly concerned with the visual ad element. In order to develop into a successful art director their knowledge should expand and go beyond their design 'tasks'. An art director should have a good knowledge and understanding of the different products/services, brands, target audience and the market as a whole. Furthermore, he or she should have some clear objectives for the ad. This will aid an art director to direct other people to meet these objectives and to realize the vision. He or she has to have the ability of "doing a little bit of everything for everything" (Art Director 2).

A good knowledge of how all the bits of the creative process are done so he or she can direct others.

Copywriter

Copywriter obviously has to have good writing skills. He or she has to have a "very good eye for consistency" (Art Director 1) and write concisely and with brevity. In order to do that a copywriter has to have a clear idea of the 'message' he or she want to get across. This is particularly important considering that consumers do not usually have much time to 'read'. So the copy should be written in a way that is instantly understood and 'taken in' while being in the meanwhile attractive and 'engaging' for the audience. To be able to achieve this 'engagement' a copywriter has to have to know what motivates consumers. Copywriter has to possess skills and knowledge that goes beyond his or her technical skills.

He or she has to have also a good understanding of the brand, the consumers as well as the overall market and what drives it. Yet, for a copywriter 'writing' remains the main thing that he or she has to master. An art director or anybody can come up with a good advertising idea, but being able to write it and make it sound appealing is a bit of a skill that a good copywriter must obviously have.

b) The 'roles' of Art Director and Copywriter in the 'Creative Process'

From the data the following was inferred with regards to the role that each of art director and the copywriter play in the creative process.

Art Director

"You know, normally you would probably tend to have a creative director who oversees everything" (Art Director 2). The aforementioned statement really emphasizes the important and key role that an art director plays in the ad creation process. Other than coming up with the main ad idea and the visual style through which this idea will be communicated, the art director is usually responsible for a number of other parts of this process.

The art director usually has the direct contact with the client. He or she is the one who receives the brief from the client with regards to the objectives of the specific ad or ad campaign to be designed. For this same reason the art director is the one responsible to get the idea across and coordinate work with the other parties involved in the ad creation process (e.g. copywriters).

Although there is great deal of collaboration in this process between the work of art director (idea generation, visual elements, etc.) and the work of copywriter (e.g. deciding on and writing the copy), an art director may 'oversee' the work of a copywriter. Art Director makes sure that work of copywriter is consistent with the overall 'idea' of the ad, that it is viable in terms of making it happen. For example, "if it's a concept that requires something that's way beyond the budget it's never going to happen" (Art Director 2).

Furthermore, Art directors are very much involved in the finishing of the ad from purely the technical or design aspects of things (e.g. focus on the color of ad) equally as they are involved in what the ad is finally trying to convey or in other words the main message of the ad. In addition to this and obviously due to their roles as creatives but also 'managers' of this creative process they are more free to explore and push the boundaries looking for something different, a 'fresh' and challenging idea that has not been used before in an ad. This is how an art director but also an agency can stand out among its competitors. This same role is what justifies the diverse skills that a successful art director must possess in order to be able to carry out the job responsibilities both from a technical (design) perspective and also from the more managerial perspective.

Copywriter

Primarily the copywriter is involved in providing the text content of an ad (e.g. headline, body copy, etc.) so that to make sure that the message makes sense and obviously conforms with the main idea of the ad. Copywriters have to consider the 'tone' of voice' or the way that the advertiser would like to approach the audience or consumers (e.g. in a very relaxed informal way or in a very formal way, with humor, etc.).

Furthermore, a copywriter does indeed collaborate with an art director so that he or she can make the messaging work with the visual element of the ad. "The graphics need to work with the messaging so you're never led by that. It all evolves together" (Art Director 3). Although a copywriter would not be heavily involved in choosing the visual, he or she may still simply suggest the kind of visual that they think could be suitable. Compared to art directors the copywriter is usually more constrained with regards to how much he or she can push the boundaries, as this is limited with the 'idea' and the overall layout of ad. "Sometimes you may be presented with some relevant, seductive and irresistible imagery that leads the look of a communication piece and the copywriter then needs to find the words to link the key messages to the imagery" (Copywriter 4). Alternatively, however, in some cases the copywriter's words can "provide 'a hook' for the art director to hang the design on and bring in imagery and/or illustration that bring the words to life and support them" (Copywriter 4). Finally, the overall creative process is definitely a collaborative process. "You've got to try and collaborate". "So I think the two are not interchangeable because they're two different skill sets, but they need to work together quite closely to produce something incredibly strong" (Art Director 2).

c) Differences between Print Media Outlets

From the data the following was inferred with regards to how ad design may differ between the different print media outlets.

The main elements that determines these difference are obviously size but also the time consumers have available to view the ad. When viewing an outdoor (e.g. billboard) ad consumers have much less time to engage.

For this reason, creatives are required to get the message across very quickly as opposed to a magazine ad. So whilst the space is bigger in an outdoor ad, a magazine ad can still be a bit more sophisticated because the consumers have more the chance and the time to consider. A poster visual could be obviously bigger, stronger and impactful, however, yet much simpler. "I'm always more keen on something that perhaps could be cut out and perhaps has got quite a lot of areas of clear space, white space or flat color" (Art director 1).

"In a magazine context you might decide that your visual can be more complex and that the area which your headline's going to sit on might be a bit more disguised, a bit more complex or the contrast of colors may be more subtle so that the immediateness of the headline may not jump out at you quite so much" (Art Director 1). Some participants also viewed outdoor advertising (e.g. poster) more of a teaser type of advertising that creates awareness about the company brand. Consumer, however, might make the connection between a particular brand or organization and the visual or the text message. If the consumer, then sees the same ad again in a magazine he or she is more likely to do something or take action. With regards to the text element, the words would normally be bigger in size but not in quantity as opposed to a magazine ad. Commonly an outdoor ad would have a massive headline, very few words, 3 or 4 words, and the brand logo so that consumers can at least connect to the brand and build brand awareness.

Text has to be quite eye-catching and simple so that consumers can get the message straightaway, when normally they have maybe few seconds to look at the ad. In a magazine ad, however, text could easily be much as consumer would be reading it quite in-depth, and have much more time to look at the ad. Despite these differences mentioned above, creatives can be equally creative in all print media outlets. In other words, the size of the ad and the time consumers have to view the ad does not limit creatives with regards to how and to what extent they can be creative. The nature of this creativity might differ, however. "I think there's a different element of creativity to both. I wouldn't say one was more creative than the other" (Copywriter 1). "..you know, they're quite different, so you still have to be quite creative with them both and you're just thinking you've got more space to fill with one than the other" (Copywriter 2).

d) Current & Emerging Trends in Print Advertising

With regards to the current and emerging trends in print advertising the following was inferred from the data.

Advertising tends to appear more asymmetrical with regards to its layout. Print advertising tends to be more sophisticated over time. This sophistication is not reflected in necessarily richer layout in terms of images or text.

It is however, reflected in terms of the overall 'ad message' conveyed which is 'implicit', less direct and with much less text. For example, in the past advertising was maybe far more typical in the sense of employing a lot more body copy to explain something. Placing for example a beautiful picture of a product accompanied by explicit text or tagline seems like a dated strategy. Few years ago ads were highly illustrative.

Often current print ads tend to appear very minimal and this also is a trend. Some participants, however, argue that ads' creatives should find a balance between being illustrative yet simple and minimal. "I think it's a balance of everything. So in one way a few years ago people went the whole highly illustrative way. "Apple and companies like that have always been very minimal, very knock-back and I think the best is the balance of the two" (Art Director 3). Furthermore, an important trend is the predominance of the visual element in ads. The presence of strong imagery in print ads that primarily carry the responsibility of conveying the main idea is common. With regards to language there is a trend of using indirect and playful language that sometimes is also ambiguous. "I don't even know what that means. I had no idea what it meant and I sat there for ages trying to work out what the joke was" (Copywriter 1). This same trend is sometimes perceived as negative "I think they're being creative in the wrong way. They're completely ignoring the point of something to try and sound funnier" (Copywriter 1).

Other current trends in print ads include conveying commonly the idea of happiness, and optimism in general. Print ads are also commonly seen as 'inspirational'. For example, according to one of the participants "watches are seen aspirational, that not just anybody can afford to buy this kind of watches. You know, you work towards one of these watches and I think that they really get it across" (Copywriter 2).

4.2.6. Conclusion

The findings of this study regarding the different ad elements indicate that this study has managed to meet its objectives. The insight provided from the interviews conducted with advertising experts aided in formulating realistic and valid operational definitions for the different parts of the text ad elements (e.g. headline, subhead, tagline, body copy).

These definitions distinguished between these different ad elements mainly with regards to the role they play in the ad and hence the effect they have, rather than their form (e.g. position in the ad, font size, etc.). Moreover, participants were able to provide some realistic categories for the different visuals employed in these ads (e.g. product photography, lifestyle photography, etc.).

Creatives were also able to provide their views regards the rationale behind employing visual metaphor. Although they did not provide types of visual metaphor that correspond to existing theoretical typologies, they made an attempt to categorize metaphors according to other criteria. Therefore, objectives four and five were met. Indeed, the definitions formulated through the insight provided by these experts strongly contributed to the development of a detailed and comprehensive coding grid for analyzing print ads.

Considering this objective six of this study was also met. The investigation of the untapped side of the advertising process, the ads' creatives served as a foundation for proceeding to a higher-order or higher-level analysis. Finally, the insight provided for developing a more valid, and comprehensive framework for analyzing ads, contributed to our understanding not only of how advertising works but also to how it could be further researched. In the following sections the content analysis study that was fed by the insight provided from the abovementioned qualitative study with advertising experts will be presented.

4.3. Content Analysis on Print Ads

4.3.1. Aim of the study

This content analysis study mainly aims at answering the key question which is: why does visual metaphor represents such an important rhetorical figure in advertising that is so much worth further researching? It does so by providing a comprehensive assessment of the use of visual metaphor in print advertising.

This is important since the only content analysis study that had focused particularly on visual metaphor in print advertising was conducted by Kaplan (1992). Moreover, a key study that focused on the development, change and transformation of visual rhetorical figures, including visual metaphor in magazine advertisements covered the period from 1954 to 1999 (Phillips and McQuarrie, 2002). The last study conducted in (2008) focused on the change in magazine advertisements style between 1969 and 2002. In this study, however, analysis did not primarily focus on the rhetorical figures employed in ads but on other elements. This current content analysis study includes print ads covering the period from 2000 to 2014.

4.3.2. Research Objectives

More specifically the research objectives of this content analysis study are the following:

- 1- Identify the percentage and frequency of visual metaphors employed in print advertisements in the period from 2000 to 2014.
- 2- To identify existing types of visual metaphors employed in these print advertisements (e.g. Forceville, 1996 typology) as well as 'new' types of visual metaphor that extend these existing types.

- 3- To compare the frequency as well as the types of visual metaphor employed across different print advertising media categories: Magazine, Outdoor/Out of Home, Billboard, and Posters. In addition to award winning ads.
- 4- To compare trends in print advertising design over the time period covered in this study.
- 5- To provide empirical evidence for the use of visual metaphor in real world campaigns including award winning ads.

4.3.3. Method

The method employed in this study was a content analysis.

4.3.3.1. Descriptive Study

The main aim of this thesis is to investigate the effect of visual metaphor on advertising response, it is more of an explanatory piece of research. Therefore, this content analysis is considered more of a complementary study to the main explanatory research study which is discussed later on in the relevant chapter. The purpose of this descriptive study is to provide a clear picture about the phenomenon under study which is visual metaphor in advertising. It does so prior to the actual data collection (Saunders, Lewis and Thornhill, 2009).

In this study features of all the ad elements are being described accurately according to specific operational definitions provided. Despite the fact that this is primarily a descriptive study the researcher still has the chance to evaluate the data represented again in the different ad elements and synthesize ideas that result from identifying relations between the different ad elements. With regards to the visual metaphor element this accurate description and synthesis of ideas will also result in the identification of new types of visual metaphor in these print ads that are being analyzed. This synthesis however requires higher-order skills that result from the thorough understanding of the concept under study (Saunders, Lewis and Thornhill, 2009).

4.3.3.2 Why Content Analysis?

Content analysis has a number of advantages. Indeed, it entails reducing the rich material in any photograph or text to a small number of codes. It does not, however, preclude for a qualitative analysis of images (Rose, 2007). There are a number of researchers like for example

Krippnedorf who support that content analysis can include qualitative interpretation. Indeed, content analysis and qualitative methods are not mutually exclusive (Rose, 2007).

Furthermore, content analysis can produce empirical results that might otherwise be overwhelmed or hidden by the sheer bulk of material under analysis. Content analysis can also prevent a certain kind of 'bias' particularly in the case of visuals because it is methodologically explicit (Rose, 2007).

This means that following the rules and procedures of content analysis aids researchers to avoid searching through the images in order only to confirm what they think they already know about the image (Rose, 2007). This is particularly important for the purpose of this study considering the relative subjectivity of visual metaphor as a concept and the possible difficulty in some cases to identify it in the ad's visual. For this reason, the researcher planed to be methodologically as unambiguous as possible when conducting the content analysis, in order to make his way of seeing as evident as possible (Rose, 2007).

Content analysis is also "nonobtrusive, nonreactive measurement technique" (Riffe, Lacy, and Fico, 2014). The ad content is separated from the receiver. Based on sound and valid theoretical and operational definitions the researcher can make conclusions from content evidence without having to get direct feedback from the creators of the ad and who may refuse or are unable to be examined directly (Riffe, Lacy, and Fico, 2014). There are research aspects, however, which content analysis cannot address (e.g. consumers meaning-making of images) (Rose, 2007). For this reason, content analysis is complemented by subsequent method (experiment) that is able to address this side.

4.3.3.3. Steps of Content Analysis

The following steps were followed to conduct this content analysis study:

a) Finding the Sample Frame and Sampling

The researcher located an online advertising database named AdForum. The AdForum database was created as a platform for Ad Agencies to show Marketers and Brands the type of work they produce with the aim of finding new accounts, this is where the ads come from. Over 20,000 agencies worldwide showcase their work on AdForum, which includes more than 150,000 advertisements from different media outlets including print media. In the Creative Library section of this website, the actual ads are available with full details (e.g. date of publication, country of origin, brand being advertised, etc.). The researcher had to create lists for the different print media categories from the information available on AdForum.

The researcher created the following lists for each print media type:

- 1- A list for magazine ads for the period from 2000 to 2104 which included 7170 ads
- 2- A list for outdoor/out of home ads for the period from 2000 to 2014 which included 5786 ads.
- 3- A list for Billboard ads for the period from 2000 to 2014 which included 2303 ads
- 4- A list for Poster ads for the period from 2000 to 2014 which included 2428 ads

In addition to the abovementioned, a list of award winning print ads from the Cannes Lions International Festival of Creativity for the period from 2004 – 2013 was also created and included 2400 ads.

The lists mentioned above include the following information about each ad:

- Ad Title
- Brand being advertised
- Media type (e.g. magazine)
- Country
- Agency
- Campaign Title
- Date of Publication

The above-mentioned lists were used as a sampling frame for this study.

Sample size: to calculate the final sample size for this study, the GPower 3.1 Software was used. Stratified sampling was used and the sampling frame was divided into different groups or *strata* (Moi and Sartedt, 2011). These groups were represented in the four different media types (e.g. magazine, poster, etc.), in addition to the subsample of award winning ads.

The sample size was calculated per group. It was decided to have the same size for each media type in addition to the award winning ads sub-sample.

So that each group would be equally represented in the total sample of ads to be analyzed. Total of 320 ads were analyzed (64 ads per group). Please see appendix 9 for sample size calculations using GPower 3.1 Software.

b) Developing the codes and finalizing the coding grid

To codify the information contained in each advertisement, a comprehensive and detailed coding grid was designed. In this step codes for all the elements of the advertisements (brand element, visual element and textual element) were devised.

This is a very important stage because the rigor of the content analysis relies heavily on the structure of categories used in the coding process. For this reason, the categories should only describe what is actually really there in the text or visual (Rose, 2007). These coding categories should have the following characteristics. They should be exhaustive, meaning that every aspect of the ad (i.e. visual, verbal) with which the research is concerned must be covered (Rose, 2007). It also should be exclusive, meaning that categories should not overlap. Enlightening, meaning that categories should result is a list of images or text that will be analytically interesting and consistent (Rose, 2007). Constructing the coding categories that satisfy those criteria is not at all an easy task. The large number and richness in ads including both its visual and textual elements can be overwhelming. For this reason, those elements should be reduced to a number of component parts which can be labeled in a way that has some analytical importance (Rose, 2007).

As mentioned in chapter three this current content analysis study becomes more important under the light of the quick and rapid evolution and change in print advertising style and hence in the form and the use of these different ad elements (including visual metaphor). Moreover, advertising creatives and copywriters often break the rules and the agreed upon norms and present these ad elements (i.e. headline, subhead, type of visual, etc.) in very 'creative' ways and forms for the purpose of attracting more attention from audience.

This in turn calls even more for further research that can provide an update with regards to these different ad elements, including visual metaphor. This content analysis can present the current developments that have occurred as well as the emerging ones with regards to the different print advertising design elements.

With regards to previous content analysis research on the different ad elements, copy characteristics, headline/subheads have not received adequate attention (Turley and Kelley, 1997; Leonidou, Spyropoulou, Leonidou, and Reast, 2006). Moreover, most of the research on the textual ad elements has focused on body copy, and more specifically on the information content (Leonidou, Spyropoulou, Leonidou, and Reast, 2006).

These studies showed that differences exist in the information contained in print ads due to factors such as: type of newspaper/magazine (e.g. Stern et al, 1981), country of publication (e.g. Known et al, 1992), advertising format (e.g. Pollay, 1984), size of advertisement (e.g. Pasadeos et al, 1987), or product characteristics (Rice and Lu, 1988). Moreover, although these studies were conducted in different time periods, and geographic contexts, they did share common information. The most shared information cues are related to things such as performance, availability, quality, components/contents as well as price/value (Leonidou, Spyropoulou, Leonidou, and Reast, 2006).

Another stream of research focused on print advertisements depicting emotional appeals. Turley and Kelly (1997) showed that only a quarter of the magazine advertisements analyzed had emotional appeals. This was mostly present in consumers rather than business-to-business products. Research showed that using these appeals in print advertising differs from one culture to another. For example, U.S. advertisements are usually characterized by depicting less emotion (Biswas et al, 1992). Hong et al, 1987 found that French ads contained more sexual and humorous appeals in comparison to U.S. ads. Moreover, Huhmann and Brotherton's (1997) found that the type of magazine had a differentiating effect of using negative emotional appeals such as guilt and fear appeals (Leonidou, Spyropoulou, Leonidou, and Reast, 2006).

The Visual ad elements were analyzed less. Moriarty (1987) found that the majority of American magazine advertisements used visuals, with symbolic and literal visuals equally depicted. In another research study that analyzed the people depicted in visual advertisements indicated that these do differ remarkably by product type as well as the country in which the magazine is published (Cutler et al., 1992; Leonidou, Spyropoulou, Leonidou, and Reast, 2006).

Al-Olayan and Karande (2000) found that U.S. advertisements generally show more persons than Arab advertisements. There was no significant difference, however, with regards to the genders depicted in these ads (Leonidou, Spyropoulou, Leonidou, and Reast, 2006). Finally, Graham et al (1993) focused on whether advertisements contain smiling persons or metaphors. Results, showed that there were no significant differences between German and Japanese products advertised in the U.S., and Spanish, and Indonesian magazines (Leonidou, Spyropoulou, Leonidou, and Reast, 2006).

Emotional appeals are beyond the scope of the current content analysis. Instead the focus is on advertising design elements. To capture most of the advertising design elements a detailed and comprehensive coding grid was developed. Moreover, design elements that have proven to be important contributors to overall advertising effectiveness were primarily

considered for this purpose. In the following section the importance of a selected number of these key ad elements/codes is discussed based on previous research.

Rationale for Codes

Figure 9 below illustrate a typical print ad including the three key ad elements, the visual element, the textual element (headline, body copy) and the brand element.

Figure 9: Example of a Print Ad



Figure 10 below summarizes in points the importance of each of the three print ad elements, in terms of its contribution to advertising effectiveness. This is followed by the detailed discussion of this importance, which is based on previous content analysis research.

Figure 10: Importance of The Three Ad Elements



Visual Element

- Visual ads are better recalled.
- Visuals improve the effectiveness of print ads
- Visuals Enhance attitudes
- Visuals trigger both cogntive and affective response
- Visuals enhance ad attractiveness and perceived informational value.
- Visual's size affects ad effectivenss
- Clored visuals are better read
- Colored visuals enhance the effectivness of the textual element
- Black and white visuals can differetiate the ad
- Visual content (e.g. product, consumer, celebrity) conributes to ad effectivness.
- Successful position of visual in ad leads to favourable attitudes toward the

Verbal Element

- Headline is one of the most important elements in print advertising
- Award winning headlines contribute to advertising effectivenss
- Co-existance of metaphoric headline with non-metaphorical visual improve attitudes and purchse intention.
- Body copy is an important tool for conveying information.
- Long copy is more informational than short copy.
- Long copy yeilds better purchase intentions compared to short copy.



Brand Elemet

- Logotypes and brand names are like signatures and trade marks
- brand name provides individuality and imedite recognition in ad
- brand name creates and enhances brand identity
- Logo drows attention toward the ad and the product being advertised
- Attiudes toward the brand name affects brand preference and choice
- Brand name usually occupies small proportion of the ad
- Brand name is liked more when placed on the right of pictorial information

With regards to the visual element, research has showed that visual-only ads or in coordination with texts are better recalled as opposed to text only ads (Decrop, 2007; Edell and Staelin, 1983; Unnava and Burnkrant, 1991; Miniard et al, 1991; Kroeber-Reil, 1993). Moreover, visuals improve the effectiveness of industrial print advertisements (Hanssens and Weitz, 1980), they enhance attitudes more as opposed to text-only ads (Mitchell and Olson, 1981).

Visuals trigger both cognitive responses (e.g. formation of product beliefs) as well as affective responses (e.g. attitude towards the advertisement) (Mitchell;1986; Decrop, 2007). Visuals positively affect the ad attractiveness and its perceived informational value. Text, however, affects only the ad's informational value (Tscheulin and Helming, 1998; Decrop, 2007). Finally, other studies have also stressed on the effect that the size of the visual has (e.g. Rossiter and Percy 1983; Percy 1989, Tscheulin & Helming, 1998) as well as the increase in ad effectiveness that results from an interactive relationship between picture and slogan (e.g. Tscheulin & Helming, 1998). Visuals contribute to ads' success by: (1) capturing reader's attention and alerting consumers regarding other ad elements (Belch & Belch, 2007), (2) conveying a large amount of information about ad's subject; (3) clarifying the claim made by the text and stressing the benefits of the product being advertised; (4) enhancing consumer purchase intention, through filtering prospects, creating a positive impression of the product and increasing the believability of the claims made through textual parts (Wilmshurt & Mackay, 1999; Decrop, 2007).

Visual content (e.g. product, celebrity, layperson) is also an important determinant of overall advertising effectiveness. The depiction of product related information (e.g. image of product) affects consumer's attitude formation and change (Petty, Cacioppo and Schumann, 1983). More recent research has also showed that vivid product depiction increases consumer's cognitive elaboration. This enhances the accessibility of favorable product information (Petrova and Caldini, 2005), leading to persuasion. Moreover, type of endorser (e.g. celebrity, typical consumers, etc.) can affect consumer's attitude toward the ad and attitude toward the brand and purchase intention (Frieden, 1984). This effect on attitude formation can be stronger in low product involvement conditions (Petty, Cacioppo and Schumann, 1983).

Color in print ads is another important element. According to Hattwick et al (1950) "color is an important tool for shaping customer's feelings and responses (Hattwick et al,1950, pp. 3, as cited in Clarke and Honeycutt, 2000). According to Schindler (1986) color in advertising attracts attention. The same author states that colored visual seems more realistic and appealing. This in turn leads to an emotional response via color association and interpretation. Moreover, color increases the chances that an ad will be read. It is also suggested that color contributes to the effectiveness of the textual element as it captures higher readership in comparison to black and white ads (Schindler, 1986; Starch,1981). Indeed, colored ads are more attractive than black and white ads. The later, however, can still differentiate an ad. Moreover, color use differs across cultures.

A research study covering France, U.S.A. and Venezuela, showed that French and American ads used more black and brown colored ads, with American ads depicting also higher percentage of violet ads (Clarke and Honeycutt, 2000).

Position of the visual in the advertisement also forms attitudes toward the product or brand. Chae and Hoegg (2013) exposed participants to two different versions of a product image; a classical or antique version and a modern version (old versus new product). Results showed that participants in the antique condition showed more favorable attitude toward the product when the ad depicted the product image on the left rather than the right side of the ad. Results were opposite in the more modern condition. This study used as its base the *past-left*, *future-right* spatial representation of time (Chae and Hoegg, 2013). This study was informed and updated previous research which had showed contradictive findings (Janiszewski 1988; Drake 1987).

With regards to the key textual element, advertising practitioners agree that the headline is the key element in advertisements. John Caples (1975) includes the headline is the most important element in advertisements. Roman and Mass (1976) describe the headline as a short verbal descriptor which basically communicates the essence of the ad. Ogilvy (1964) further highlights that the headline represents eighty cents of every advertising dollar (Soley and Reid, 1983).

Research, however, showed that differences in headline type do not contribute to advertising effectiveness (Soley and Reid, 1983). Beltramini and Blasko (1986), however, identified six types of award-winning advertising headlines. These types are the following: 1) familiar saying, refers to "new twist on familiar phrase/play on words/unusual use of common expression/frequently recognized sequence of words. 2) Contrast: refers to the "use of opposite words, phrases, or concepts". 3) News/information, "refers to declarative statements announcing or claiming direct benefits of the product or service". 4) Shock, refers to "not that the subject matter is 'shocking' but that the manner in which it is presented is unusually attention-arousing, emotional, or surprising due to its unexpected nature. 5) Question, "Ends in a question mark/elicits a response from the reader/encourages readers to determine an answer. 6) Curiosity, refers to "how to, you should know, wait until you see this, here's how, etc., made to arouse the reader's interest (Beltramini and Blasco, 1986, pp. 50). These type were part of the award winning and effective ads. Results, showed that 32.4% of the headlines belonged to the 'familiar saying' category followed by 23.5% which belonged to the 'contrast' category (Beltramini and Blasco, 1986). Other labeled headline types include, interrogative or question headlines (Myers and Haug, 1967; Howard and Barry, 1988).

Ang and Lim (2006) found that whether a metaphorical visual in ad is anchored by a metaphorical or non-metaphorical headline does not affect the attitudes and purchase intentions. In the case of non-metaphorical visual, however, the metaphoric headline yielded more favorable attitudes and purchase intention. Another important text ad element is body copy. "body copy is where the sale is closed" (Bovee and Arens, 1989, p. 264). Body copy usually explains the benefits of the advertised product or brand to consumer (Decrop, 2007). Indeed, Decrop (2007) found that body copy is one of the most important and powerful tool in conveying information. Moreover, results of the same study showed that long text is more informational than short text. Furthermore, long text leads to more buying intention compared to short text (Decrop, 2007).

With regards to the brand element, Govoni (2004) states that logotypes or brand logos "are special designs of the advertiser's company name or product name, they are like signatures and trademarks because they 'provide individuality and immediate recognition in advertising" (Govoni 2004, pp. 117-118).

Furthermore, the brand element enhances product and brand's recognition and creates a brand identity. It also draws attention towards the ad and in turn the product being advertised (Bovee and Arens, 1989). Considering their short and very specific content (i.e. the brand or company name), however, they are limited with regards to their informational value (Decrop, 2007). Consumer attitude towards the brand name greatly effects brand preference and choice. For this reason, brand name is considered an important element of the advertisement, and consumer's attention to this element should be considered (Janiszewski, 1990). Moreover, when consumer's attention is given to other portions of an ad, in the meanwhile, the brand name or logo receives a subconscious analysis that can in turn enhance the consumer's liking for the name or logo. Research also supports that when the brand name is placed to the right of attended pictorial information, it is sent to the less activated left hemisphere where it will receive a greater degree of subconscious processing than if sent to the right hemisphere (which is occupied with processing the pictorial information) (Janiszewski, 1990).

The above mentioned provide the rationale behind coding and analyzing the specific ad elements. Moreover, to enrich the data resulting from this study, a large number of codes that encompass all the elements of the ad as well as full details about each ad (e.g. date of publication, country of origin, product category, brand being advertised, etc.) were included in the analysis. In developing these codes, the researcher followed a specific structure for the coding categories which was based on the comments of his supervisor. This structure includes the following stages:

Stage A: Composition - This stage of coding category includes codes that relate to the position or location of the different ad elements in the ad. This among others includes codes such as: position of brand logo in the ad, position of the visual in the ad, position of headline, etc.

Stage B: Description (Syntax) – This stage includes all the codes which basically describe the ad in detail. For example, it includes codes that specify whether the different parts of the textual element of the ad (i.e. headline) are of a specific type (i.e. statement, proposition of benefits, question, etc.).

It also includes whether the different parts of the textual elements (headline, tagline, etc.) includes product name and/ or band name.

Codes at this stage also will describe what exactly is the visual content, or in other words what does the visual element of the ad actually depict (e.g. product, object, celebrity, layperson/consumer, animal, etc.), the color of visual as well as the size or the proportion of ad devoted to visuals and also text. This stage includes also codes that describe whether the visual provides a potential candidate for a visual metaphor. For example, whether it depicts two objects fused together, or two objects juxtaposed next to each other.

Stages C and D: Interpretation – these two final stages will include codes that are based more on the *interpretation* rather than mere description of the ad. Stage C includes a code which specifies whether the visual in the ad is metaphorical of non-metaphorical. For this to happen, the ad should be analyzed and interpreted using the visual metaphor identification procedure proposed by Forceville (1996). If the ad cannot be coded as metaphorical then it is coded as non-metaphorical, it is then, in stage D, where the ad is further assigned to one of the codes that specify the type of the non-metaphorical visual, these types were derived from the data of the qualitative study (interviews) with advertising experts. Equally if the visual is coded as metaphorical in stage C after going through the visual metaphor identification procedures, it is then in stage D further assigned to one of the visual metaphor types proposed in this research (e.g. juxtaposition, fusion, etc.). This is always based on the description codes that describe the specific visual as being a candidate for one of the types of visual metaphor.

The operationalization of all the different ad elements (e.g. headline, sub-head, type of visual, etc.) is based on the findings of the qualitative study with advertising experts in coordination with the definitions provided in the relevant literature.

c) Coding Sheet and Coding Instructions Manual

After developing the codes in each advertisement, a special coding sheet was designed in SPSS. This coding sheet reflected the dimensions comprising the specific structure for the coding categories mentioned earlier. More, specifically this coding sheet consisted of 4 major constructs, comprising altogether of 109 codes.

The 4 major constructs are as follow a) Ad related information (e.g. ad title, brand, media, country, agency, campaign, award, year of publication, etc.) b) Brand element (e.g. position of logo, type of logo), c) Text element (e.g. headline position, headline type, subhead type, body copy type, tagline type, etc.) and d) Visual element (e.g. position, content, size, type, type of visual metaphor, etc.). Please see appendix 10 for a full list of the codes constructing the complete version of this coding sheet.

A researcher also had put together a coding instruction manual that was decided and based on the operational definitions for each code, as well as some specific characteristics of the ads under study so that the coding can take place. Please see appendix 11 for a copy of the coding instructions manual.

d) Coder Selection and Training

To carry out the coding process, two independent coders were selected. The first coder was the researcher. One PhD student in Marketing was employed as a second coder for the sample ads. Both coders went through a lot of rigorous training, which included: a) understanding of the general aim and the specific objectives of the study. b) familiarization with characteristics of the print advertisements to be coded. c) a clear explanation of the operational definitions of all the ad elements and dimensions contained in the coding grid in a coding instructions manual. d) undergoing a coding exercise which is based on the coding instructions manual. e) resolution of the different queries that possibly show-up during and after the coding exercise. Following the training each coder was independently involved in coding a small, representative group of the sample advertisements in order to check for the suitability, workability, and flow of the coding grid (Leonidou, Spyropoulou, Leonidou, and Reast, 2006).

e) Coding the ads

Each advertisement was coded independently by each coder, the researcher and the trained PhD student. Each ad was carefully examined and all the relevant codes were attached to it carefully and systematically (Rose, 2007). The two coders paid a great deal of attention to this process.

More specifically, the codification involved transferring the information contained in each advertisement onto the coding sheet by the two coders who worked independently of each other.

Inter-coder reliability

Completed coding sheets was compared and contrasted and interrater reliability was calculated for each code. Interrater agreement was calculated as a ratio of the coding agreement (r) to the total number of decisions (N), was assessed for all codes (variables) (McGinn, 2013). The interrater agreement ratios ranged from 75% to 99%, suggesting that satisfactory reliability was achieved, considering particularly the large number of codes included in this study and the subjectivity of some of the advertising variables (McGinn, 2013). Resolution, potential discrepancies between the inputs of the two coders were identified, discussed (online) and resolved (Leonidou, Spyropoulou, Leonidou, and Reast, 2006).

Kappa value was also assessed for each code. For all codes Kappa value was substantial (Kappa > 0.6), indicating again a good level of agreement (McGinn, 2013).

f) Data Analysis

The data collected was nominal in nature. Due to this the following statistical analysis was conducted. a) Total percentage frequencies. This refers to calculating the number of occurrences related to each element of the ads being analyzed. b) Partial percentage frequencies (which is breaking down the total percentage frequency by for example type of print media outlet, type of ad, type of headline, etc.). c) Chi-square test to investigate relations across the different ad characteristics (e.g. relationship between type of visual (metaphorical, non-metaphorical) and whether or not the visual depicts the product). The data was analyzed using SPSS software

4.3.4. Research Findings

Figure 11 below summarized the key research findings. Results related to each ad element are presented in detail in the sections which follow.

Figure 11: Key Finding for the Ad Elements as Percentages of Total Sample





VISUAL ELEMENT 96%

Visual Metaphor: 55%

Visual covers entire ad: 48.8%

VERBAL ELEMENT 93%

minimal Text: 58%

Headline: 89% Subhead: 23.7 Body Copy: 55.9%

Tagline: 64.7%

BRAND ELEMENT 94.4%

logo type and symbol logo: 52.8%

Logo type: 33.1

4.3.4.1 Visual Metaphor

With regards to the employment of visual metaphor in the ads, 55% of the sample contained visual metaphor. It seems also that there is an increasing trend in employing visual metaphor in print ads over the last fifteen years. A significant difference was found in the use of visual metaphor ($\chi^2 = 9.957$, p < .05), with an increase over time reaching 64% in the last five years, as shown in figure 12 below. Moreover, a significance difference was found also with regards to the use certain types of visual metaphor over time (χ^2 27.478, p < .05). Replacement metaphor and verbo-pictorial metaphor decreased slightly in the last five years (2010-2014), and juxtaposition metaphor, and verbo-pictorial indirect effect metaphor showing an increasing trend over time, as shown in figure 13 below.

Figure 12: Visual Metaphor in Print Advertising – An Increasing Trend over Time

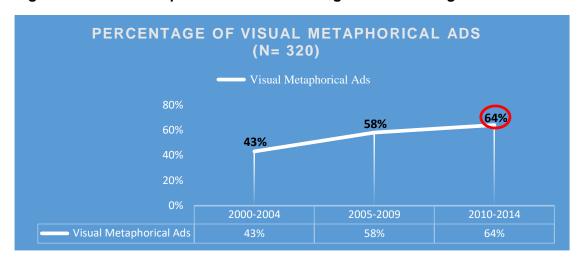
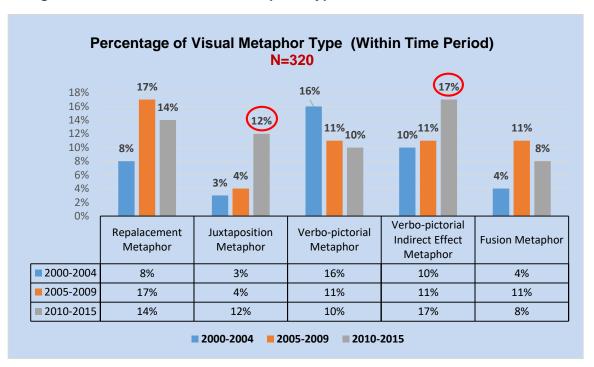
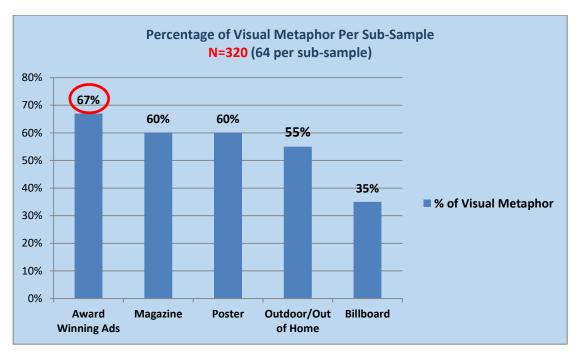


Figure 13: Presence of Visual Metaphor Types Over Time







A significant difference was also found in the use of visual metaphor in the different sub-samples. (χ^2 = 12.341, p < .05). Analysis revealed that visual metaphor was most frequently used in award winning ads (67%) and magazine ads (60%) as opposed to billboard ads (35%), as shown in figure 14 above.

Moreover, within the visual metaphorical ads (n=176) replacement metaphor and verbo-pictorial metaphor were the two types of visual metaphor with the highest presence among the types of visual metaphor depicted in these ads (25% and 22.7% respectively), followed by verbo-pictorial indirect effect metaphor and fusion metaphor (21.6% and 14.8% respectively). A significant difference was also found in the use of the types of visual metaphor in the different print media types and award winning ads ($\chi^2 = 46.344$, p<.05). For example, verbo-pictorial metaphor appeared in 20.3% of the magazine ads as opposed to only 5.2% of the billboard ads and 11.1% of award-winning ads.

Within the magazine sub-sample (n=64) verbo-pictorial metaphor and replacement metaphor are the two types of visual metaphor with the highest presence (20.3% and 17.2%) followed by verbo-pictorial indirect effect metaphor (12.5%). For award winning ads, replacement metaphor and verbo-pictorial indirect effect metaphor are the two types most strongly present (14.1%, and 14.1%).

New Types of Visual Metaphor

a) Verbo-pictorial indirect effect metaphor

A 'new' type of visual metaphor was identified in this content analysis. This type has been labeled by the researcher as 'verbo-pictorial indirect effect metaphor'.

To better define and explain this 'new' type of visual metaphor, an illustrative example will be used. In Figure 15 below we see an ad for Harvey Nichols. In this ad the Harvey Nichols' Dress is compared to a Shocking/exciting object. This shocking/exciting object, however, is not depicted in the ad. Instead, another object (the Defibrillator) is shown. This object is used as a teaser and which acts as a 'visual metaphor' for the 'effect' that the product (the dress) can have rather than as a metaphor for the product itself (therefore, it is an indirect rather than a direct comparison).

Figure 15: Verbo-Pictorial Indirect Effect Metaphor - Harvey Nichols Ad (Source: AdForum Database)



Illustration removed for copyright restrictions

In this ad the Harvey Nichols dress is juxtaposed next to a Defibrillator. The Defibrillator is used as a visual metaphor of the critical heart condition (rapid and fast heartbeats) that the person who will witness or see the consumer (the woman) wearing this dress will experience and hence will need the support of the Defibrillator. Therefore, the Defibrillator again is a 'visual metaphor' for the 'effect' that the dress and hence the consumer wearing it will have on the other people who will see this consumer rather than for the dress or consumer herself.

The verbal/text element of the ad (which reads: people who bought this item also bought) here does not merely anchor the visual metaphor but rather complements it and is vital for its existence as it actually links the two objects or visuals. It is considered part of the metaphor. Therefore, it is in a way a verbo-pictorial metaphor. however, in this case the text does not necessarily describe the visual (the product) metaphorically as it is typically the case in a verbo-pictorial metaphor but it is rather a straightforward statement, that is yet vital and necessary for the construction of the metaphor and also for the comprehension of the visual metaphor intended and depicted in the ad.

b) Total Replacement Metaphor

A second 'new' type of visual metaphor that was identified in this content analysis study by the researcher was labeled as 'Total Replacement Metaphor'. In Figure 16. We can see the Terrain ad, in this ad parts of the bicycle (which is the product being advertised) is 'totally' replacing a terrain (or a sketch of land).

Figure 16: Total Replacement Metaphor - Terrain Ad - (Source: AdForum Database)



The 'terrain' is actually constructed or formed out of these parts of the bicycle. It can be seen that this type of visual metaphor is strongly related and could be considered an extension to the replacement metaphor type.

However, here the metaphor is not necessarily inferred from the context of the visual or ad, but rather it is more 'explicit' as it completely replaces and forms the object that it is supposed to be representing metaphorically.

4.3.4.2 Visual Element

With regards visuals in ads in general results showed that visuals had a very strong presence in the sample (96.3%). Moreover, (48.8%) of the ads, the visual size occupied 100% of the ad. Followed by the visual occupying 50%-75% of the ad (21.3%).

The lowest percentage was related to ads which contained no visual (3.8%). These results confirmed that print ads are predominantly visual. A significant difference was found in the proportion of ad occupied by visuals in the different sub-samples (χ^2 = 21.296, p < .05), with the highest percentage of the ads in which the visual covers the entire ad appearing in the award winning ads (63%) followed by magazine ads (56.3%) and lowest percentage appearing in the billboard ads (34.5%).

Visual Content

Figure 17: Key Findings for Visual Content



Illustration removed for copyright restrictions



Illustration removed for copyright restrictions

a) Product Depiction

47.2% of the total samples of ads analyzed include a visual, which depicts the product being advertised. This is a high percentage indicating that the depiction of product in print ads in is still a common strategy for advertisers. Moreover, differences were found in the use of product visuals between the print media outlets (χ^2 = 13.593, p < .05), with magazine being the print media category which comes at the top of the list with regards to depicting product visuals in ads (65.6%). Followed by billboard ads (46.9%). Poster ads was the category with lowest percentage of ads depicting the product (34.4%). A significant difference was also found in the use of product visuals between visual metaphorical, and non-metaphorical ad (χ^2 = 98.161, p<.05), with the non-metaphorical visual ads scoring higher with regards to product depiction (56.1%). Another chi-square analysis, showed that no relationship also exists between type of visual metaphor and (Juxtaposition metaphor, fusion metaphor, etc.) and whether or not the visual depicts a product. Yet, the ads employing fusion metaphor scored the highest with regards to product depiction (61.5%).

b) Object Depiction

55.3% of the total samples of ads analyzed include a visual, which depicts an object. A chi-square analysis showed that there is significant difference in the use of object visuals in the different visual metaphorical ads (χ^2 = 16.490, p<.05). Replacement metaphor ads scored the highest (79.5%), followed by juxtaposition metaphor (66.7%). Verb-pictorial metaphor ads being the type showing the lowest percentage of object (42.5%).

c) Human/Consumer and Celebrity Depiction

40.3% of the total sample of analyzed ads depicts human/consumer. This indicates that the human factor in print ads is still a key element. Poster was the print media type with the highest percentage of ads depicting humans/consumers. 49.2% of poster ads included images of humans/consumers. Billboard was the print media category with the lowest percentage (36.2%). Visuals of humans/consumers were also depicted relatively more in non-metaphorical visuals (47%) compared to metaphorical visuals (38.1%). Moreover, the type of visual metaphorical ads with the highest percentage of ads depicting human/consumer are the replacement metaphorical ads (50%). Followed by the juxtaposition metaphorical ads with 44.4%. Surprisingly, however, only 5.3% of the total sample of ads depict a visual of a celebrity. This indicates that advertisers more and more prefer to use laypeople/consumers as key 'protagonists' for their ads, making these ads still inspirational yet more realistic as opposed to the use of celebrities.

d) Animal(s) depiction

Only 10.6% of the samples of total sample depict animal(s) which is quite a small percentage in general. A chi-square test that was performed showed, however, that there is a significant difference in the use of these visuals between the print media types as well as the award winning ads (χ^2 = 11.920, p<.05). Magazine ads showed highest percentage of 18.8% of animal(s) depiction (18.8%). It was followed by the award winning ads (14.3%). 0% of the billboard ads depict animals making it the only print media category that do not employ visuals of animals at all.

e) Nature depiction

19.7% of the total samples depict nature. A chi-square analysis showed that there is a significant difference in the use of nature visuals between the different visual metaphorical ads, (χ^2 = 14.314, p<.05), with verbo-pictorial metaphor ads showing the highest percentage (32.5%) in nature depictions, followed by replacement metaphor ads (29.5%). Total replacement metaphorical ads did not employ nature visuals at all. Yet, this is not surprising given that the percentage of this type of metaphorical ads is very small. No significant differences were found between in the different sub-samples (e.g. magazine ads). Yet, however, the highest percentage of nature visuals was present in the award winning ads (28.6%).

f) Drawing/Illustration Depiction

21.3% of the total sample depicts an illustration/drawing. No relation was found, however, between the media type, nor the type of visual or type of visual metaphor and the depiction of a drawing/Illustration in the ad. More illustrations, however, were found in outdoor/out of home ads (30%) followed by the award-winning ads of which (27%).

a) Color in Ad

Color was an obvious characteristic of the sample ads, 83.1% of the total sample. Only 5.6% of the sample, however, was black and white and 7.5% of ads were both colored and black and white.



Conclusion for Visual Element

From the above mentioned results the following can be concluded. The visual is a key element in the print ads in terms of its overall presence in the sample ads but also with regards to the space it occupies in the ad (e.g. its size).

Visual metaphor is also an important element that is often employed in ads across the different print media categories. Replacement metaphor and verbo-pictorial metaphor are the two types with the strongest presence. Moreover, visual metaphorical ads are showing an increasing trend over the years with the highest presence scored in the last five years. Two new types of visual metaphor were also identified as part of this content analysis study. These types are: verbo-pictorial indirect effect metaphor and total replacement metaphor. With regards to visual content, object depiction and product depiction scored the highest.

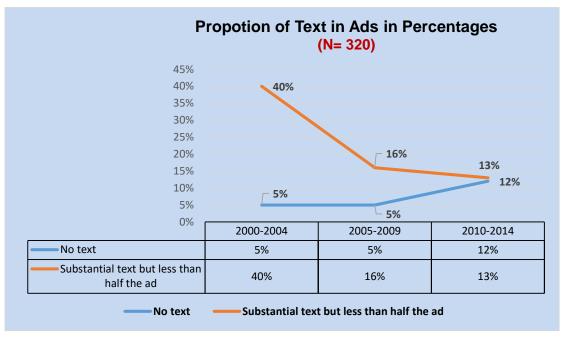
Other visual content (e.g. animals, nature, illustrations) appear with far less percentages in the sample ads. Finally, color is also an important characteristic of print ads, with the large majority of the samples ads being colored.

4.2.4.3. Textual Element

As mentioned earlier Ads have become predominantly visual. The proportion of the ad devoted to text has definitely decreased, yet text has not completely disappeared from the print ads. 58.4% of the total sample ads contained minimal text, and the 'proportion' here refers more to the 'size' of text rather than the 'amount' of text (e.g. number or words).

A significant difference was found in the proportion of ad devoted to text over time (χ^2 = 28.137, p < .05), with the percentage of the purely visual ads which include no text doubling in appearance in the last five years (11.7%). Moreover, the ads in which text fills less than half of the ads decreased with, the lowest percentage for these ads recorded in the last 5 years (13%), as shown in figure 19 below.

Figure 19: Proportion of Text in Ads over Time



Headline

The Headline continues to be a vital part of any print ad. Most of the total sample of ads analyzed did include a headline (89.1%).

30% of the total sample of ads contains a headline which is labeled as tagline with regards to its type, and hence also represents a tagline in the meanwhile. The second most present type is the 'statement' (22.5% of the sample ads) followed by declarative/proposition of benefits type which accounted for 11.9% of the ads. The question type headline on the other hand appeared only in 4.4% of the total sample of ads. A significant difference was found in the use of the different types of headline over time ($\chi^2 = 49.356$, p < .05). Figure 20 below illustrates this differences.

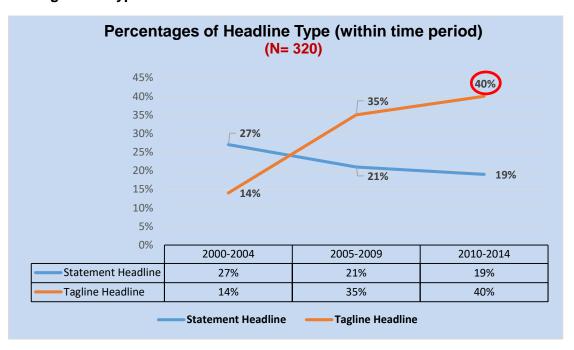


Figure 20:Types of Headline Trends over Time

Statement headline slightly decreasing in appearance between the periods 2000-2004, 2005-2009, and 2010-2014 from 27% to 21% to 19%. And the tagline type on the other hand more than doubling in appearance between the periods 2000-2004 and 2005-2009 from 14% to 35%, and increasing in appearance even more in the last five years 2010-2014, reaching the higher score across the three-time periods with 40% of the ads published in this period including a tagline type of headline.

Another interesting result from the same chi-square test is represented in the decrease in the employment of the headline as such in print ads over time. with the ads including no headline more than doubling in size between the periods 2000-2004 and 2005-

2009 from 5% to 12%. Reaching the highest percentage in the last five years 2010-2014 (16.9%), as shown in figure 21 below.

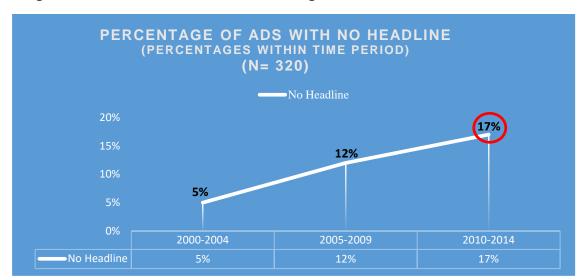


Figure 21: No Headline in Ads - Increasing Trend over Time

Furthermore, the most common headline position in the total sample is the lower right position (17.8%). In this position the headline in many cases is also considered a 'tagline' in the meanwhile. When a headline is repeated in more than one ad for the same brand or when it captures the 'qualities' of a tagline while still being the main verbal element that draws or 'grabs' attention to the ad, this same headline is also considered or coded as a tagline/slogan, and which represents one of the different types of headline as defined in this study. This position is followed by the positions of upper center (13.8%) and center of the ad (13.8%).

A significant difference was also found between the type of headline in the different sub-samples (χ^2 = 88.277, p < .05). A noticeable difference was found particularly for the statement headline between magazine ads (29.7%) and award winning ads (15.6%). Results were different for the tagline type of headline which was present in the award winning ads much more (58%) compared to the four print media categories. Please see figure 22 below for illustrative examples of ads.

Figure 22: Types of Headline in Ads



Illustration removed for copyright restrictions

A Significant difference was also found in the position of the headline (χ^2 = 70.357, p < .05), with headline positioned lower right of the ad in (37.5%) of award winning ads as opposed only 15.6% of magazine ads.

Significant differences were also found in non-metaphorical visual ads (e.g. lifestyle, product/brand photography, etc.) (χ^2 = 94.520, p < .05). For example, 16.4% of the statement headlines appeared in product/brand photography or visuals as opposed to 6% that appeared in lifestyle photography or visuals.

Similarly, 28.6% of the declarative/proposition of benefits headlines appears in crossover visuals as opposed to product/brand and lifestyle visuals in which 17.1% and 0%

of these type of headline appears respectively. No significant relationship, however, was found between the type of visual metaphor and type of headline.

Subhead

76.3% of the total sample of ads did not contain a subhead. This indicates the decrease of its importance in the last 15 years. One reason for this might be the predominance and the increasing importance of the visual element in the ads, leading to the use of less and less 'merely' supporting verbal elements (e.g. subhead). This in turn is also a result of the overall transformation and change that took place in print advertising design over time.

Each possible position for the subhead was coded separately in this study, due to the possibility of an ad containing more than one subhead. The lower center position was the most frequent (5%) followed by center of the ad (4.4%). Moreover, a significant difference in the use of this position between the different types of visual metaphorical ads was found (χ^2 = 32.529, p < .05), with 18.8% of the sub-heads positioned lower center of the ad appearing in the fusion ads as opposed to (0%) in the verbo-pictorial metaphor. Moreover, the 'statement' type for the subhead was the one with the highest presence in the total sample (7.2%), followed by the 'declarative proposition of benefits' type (5.9%).

The Tagline/Slogan

64.7 % of the total sample of ads contains a tagline/slogan. Most commonly positioned at the lower right part of the ad (32.8 %). As mentioned earlier in many cases this tagline is also considered a 'headline' or a type of a headline. A tagline, however, can also exist separately from the headline. Meaning that in many of the sample ads there are two different pieces of text, one is a headline and one is a tagline/slogan. A significant difference was found in the use of tagline between the different sub-samples, ($\chi^2 = 70.927$, p < .05) with the most common position (lower right) in 51.6% of the award winning ads category as opposed to 28.1% of the outdoor/out of home ads and 9.4% of the billboard ads.

A tagline strongly relates to how the brand or company wants to be seen. Whether by possessing or owning a unique strength or offering a particular benefit or consumer experience.

Therefore, it is not surprising that the type of tagline that is mostly present in the sample ads is the type referred to as declarative/proposition of benefits (25.9 % of the total

sample ads). A significant difference in the use of different tagline types across the different sub-samples was found (χ^2 = 70.927, p < .05), with the declarative/proposition of benefits tagline appearing in 40.6% of the award winning ads as opposed to only 12.5% of the outdoor/out of home ads. The next two most common types are the command/motivational (14.7%) and statement (14.4%). No significant difference was found in the use of these different types, however, over time.

Finally, with regards to the identity of the tagline, the company/product related was the one with the highest presence, whether it appeared in single ads or part of a campaign (17%). Please see figure 23 below for illustrative examples.

Figure 23: Tagline Identity - Examples



Illustration removed for copyright restrictions



Illustration removed for copyright restrictions

The Body Copy

55.9% of the sample ads contain body copy. Print ads have reduced the amount of text, and are depending more on the visual element. Certain information, however, can only be provided in written text (e.g. companies' address, website etc.). This explains also this high frequency in ads including body copy.

Each possible position for the body copy was coded separately in this study, due to the possibility of an ad containing more than one body copy.

The lower parts of the ad remain the predominant position for body copy. Moreover, the lower right part of the ad (commonly closer to the brand name/logo) is where the body copy is usually placed. Body copy was found to be positioned there in 21.3% of the sample, followed by the lower center position in (15.9%.). A significant difference in the use of this position across the difference sub-samples was found ($\chi^2 = 26.065$, p < .05), with billboard ads and poster ads scoring highest with regards to this position (29.7% of each of the two print media types) as opposed to 12.5% of the award winning ads. Furthermore, verbo-pictorial metaphor is the type of visual metaphor with the highest percentage of ads (27.5%) in which body copy is located lower in the ad. A significant difference was found in the use of body copy over time (2000-2014) ($\chi^2 = 16.797$, p < .05). Most notably, the percentage of ads including no body copy have doubled in appearance between the period 2000-2004 and 2010-2014 from 32% to 62%, as shown in figure 24 below.

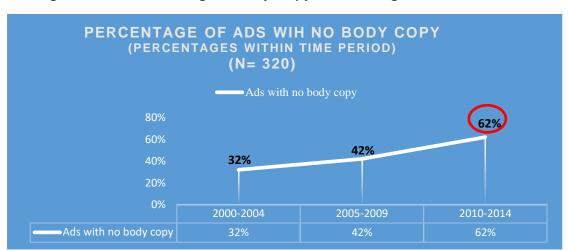


Figure 24: Ads Including No Body Copy - Increasing Trend Over Time

40.3% of the total sample ads contain factual/informational body copy (e.g. companies' address, features of product, etc.) A significant difference in the use of this type across the five sub-samples was found (χ^2 = 32.415, p < .05) with the highest percentage found in billboard ads (59.4%) as opposed 21.9% of award winning ads representing the lowest percentage. This presence differed significantly also across the types of visual metaphorical ads (χ^2 = 39.902, p < .05), with the strongest presence found in verbo-pictorial metaphor (52.5%) as opposed to 15.4% in fusion metaphor ads. Moreover, the next most used type was the motivational/direct response type (15.3%) (e.g. call this number, buy this brand, donate, etc.).

Conclusion for Textual Element

Considering the above-mentioned the following can be concluded regarding the textual element in print ads. Text is occupying less and less space in print ads, and this trend seems to be an increasing over time. The most important part of the textual element remains the headline, with the tagline types of headline being the most prominent across the headline types. Subhead seems to appear like a dated ad element with the majority of ads not containing subheads. Tagline on the other hand is another part of the textual element with a strong presence. Tagline can also serve as the ad's headline, as it represents one of its types and it is also in many cases the key text element that attracts readers' attention. Finally, body copy is still an important part of the textual element in print ads. This importance seems to be decreasing, however, over time as the percentage of ads including no body copy seem to be significantly increasing.

4.2.4.4. Brand Element

94.4 % of the total sample contain a logo/brand name. Moreover, in 48.8% of the sample ads the logo is positioned in the lower right in the ad.

A significant difference was found in the use of this position across the different five different sample groups (χ^2 = 54.245, p < .05). For examples, this position was used in 67.2% of magazine ads as opposed to 39.1% of billboard ads. Moreover, still in the majority of sample ads the brand element occupied the lower parts of the ad.

52.8% of the total sample include a combination of both logo type (brand name) and symbol Logo, followed by the brand name only (33.1%). Chi-square analysis also showed that the uses of these types differed significantly between the type of visual (χ^2 = 12.595, p < .05), with the highest percentage of brand elements included both logo type and symbol logo recorded in visual metaphorical ads (50.6%). Moreover, this differences were also found across the types of visual metaphorical ad (χ^2 = 56.776, p < .05). 60% of verbo-pictorial metaphor ads depicting both logo type and symbol logo as opposed to only 27.8% only in juxtaposition metaphor ads.

No significant changes neither in the type of logo nor in the position of the brand element in print ads over time were noticed.

4.4. Discussion

Designing a print ad requires an integrated approach to the copy, art and layout elements. For this reason, a comprehensive coding grid was developed for the purpose of this study to capture all elements. More specifically, certain advertising elements (e.g. headline versus body copy) are used more often than others. There are significant variations in most of these advertising elements across the different print media categories as well as the different types of ads. While the use of some of these elements show an increasing trend over time (e.g. visual metaphor), other seem to diminish in importance (e.g. text elements). Overall, a typical print ad across the different sub-samples (e.g. magazine, award winning, etc) includes the different ad elements as follows: visual (90%-100%), visual metaphor (67%-35%), headline (87%-90%), tagline (67%-82%), body-copy (32% -64%), sub-head (12.5%-28%).

Results revealed that visual metaphor is widely used in print advertising. Moreover, this use is continuously increasing. Visual metaphor in advertising as a phenomenon is also evolving. This is signified by the identification of new, novel types like verbo-pictorial indirect effect metaphor and total replacement metaphor that extend the existing types proposed by Forceville (1996). This further contributes to the development of this creative advertising strategy. Moreover, this proves that advertising practitioner are also developing with regards to how they employ creativity in advertising. In this way the importance of visual metaphor as a creative strategy in print advertising is further strengthened.

It is not surprising that the strongest presence of visual metaphorical ads was found in the award winning ads sub-sample. Creativity is a key ingredient in these ads. Visual metaphor being a key form and vehicle for creativity predominates these highly artistic and aesthetic ads. Replacement metaphor and verbo-pictorial metaphor are the two types of visual metaphor mostly present in the total sample. These two types of visual metaphor mostly present in the sample are also theoretically established through the Forceville (1996) typology. This further validates the importance and also relevance of the specific typology.

The new type, verbo-pictorial indirect effect metaphor was the third most frequent type in appearance. This is another proof that advertisers do indeed innovate all the time and develop the existing types of visual metaphor. Advertisers themselves, however, are not always conscious of this. It is usually a natural, subconscious result of their creative process. It is not unexpected that the strongest presence of the novel verbo-pictorial indirect effect metaphor and total replacement metaphor was in the highly innovative award winning ads.

With regard to the visual element in general, this research confirmed previous research showing that ads are predominantly visual. Visuals are used more frequently in print ads. The proportion of the ad occupied by the visual has also increased. In nearly half of the sample the visual takes over the entire ad. This is mostly the case in the award winning ads and magazine ads. The aforementioned, indicates the ongoing key role played by the visual in print advertising over time.

Visual ads are in general seen as more demanding to grasp and hence consumers would need more time to go properly through these ads. This might be a reason why these purely visual ads are predominantly found in award winning ads.

Designers tend to use more creative and enigmatic visuals that contribute to the artistic and aesthetic value of these ads. Therefore, consumers would need more time to comprehend them. Magazine is another suitable outlet for these highly visual ads.

Consumers have more time to spend looking at the visuals in magazine ads when needed.

Therefore, more time and better chance to comprehend these ads. However, this is not the case in outdoor ads. Consumer usually glance through outdoor ads. This is usually due to the location of these ads (e.g. street, highways, etc.) and hence, the very limited time consumer can devote to viewing them.

With regards to the visual content, object and product depictions were the two with the highest presence in visual content. As expected non-metaphorical visual ads scored higher with regards to depicting a product. This is because the visual of the product is a vital element and pre-determinant for the two of the three main types of non-metaphorical visuals (product/brand photography type, crossover type). Moreover, the non-metaphorical visual tend to relay more on traditional depictions of the product/brand.

Object depiction which scores the highest in visual content was strongly present across all print media types and also in award winning ads. Object depiction was mostly present in the replacement metaphor and juxtaposition metaphor in which an 'object' is usually a vital element in the creation of the metaphorical relation. Moreover, the percentage of laypeople and typical consumers depicted in ads is far higher as opposed to celebrities. We live in an era in which we lack icons. Cultural production systems do not iconize legendary celebrities. This was more the case in the past. Instead, currently the 'real', actual and common consumer matters more as he or she is the one who possess the purchasing power. Therefore, he/she becomes more important for the product's/brand's commercial success. For this reason, the consumer himself actually became the 'celebrity' and the key protagonist in the advertisements. It seems that advertisers became aware that modern consumers are more likely to be inspired by fellow 'consumers' as shown in these ads, to whom they can 'realistically' and 'practically' relate. Consumers might still admire a celebrity, yet they also might share very little with when it comes to their actual 'needs' as consumers. Therefore, a celebrity might not adequately represent them in an ad. Moreover, other less traditional types of visuals like those of animals, nature, and drawings/illustrations were present with much lower percentages in the sample. This presence was relatively stronger, however, in the award winning ads (e.g. for nature, drawings). A possible reason for this might be that employing these less common visuals can enhance the creativity needed in these highly creative ads. Color in ads was a predominant characteristic in the sample. This further confirms previous research on the importance of color in print ads.

With regards to the textual element, results show that the size of the textual element is continuously decreasing over time leaving more space for the visual. The headline continues to be a key component in print ads. This, however, is changing as ads including no headline are increasing over time.

This means that the importance of this key ad element may change in the future as designers could find other more innovative ways to use and employ text elements in print ads. Moreover, possibly the textual element overall could diminish completely leaving the key role of capturing consumers' attention to the visual element. This is currently also the case in many print ads.

The tagline and statement types of headline are the one with the highest percentage among all types. Over time, this presence is decreasing, however, for the statement type and significantly increasing for the tagline type.

This indicates, that advertisers prefer using taglines as opposed to traditional statements for a headline to describes the benefits of the brand. One reason for this could be that taglines leaves more room for creativity for the designer. The tagline as a type of headline is predominantly used in the award winning ads. This finding is consistent with the highly visual nature of these ads and the minimal text they employ. Therefore, a creative tagline that can sum-up the ad with minimal text would be most suitable in these ads.

The most important finding regarding the sub-head is its very weak presence in the sample of ads. This indicates that this ad element belongs more to the typical and traditional advertising design in which text was a key element for communicating meaning but also for organizing the ad's layout. This tradition, however, seems to be fading away and traditional supportive elements like sub-heads are used much less

This is not the case for taglines, a key element in print advertising, with the lower right position being its most common position for the ad. A tagline is mostly placed next to the brand name/logo, which is also usually located lower right of the ad. This is expected given that the tagline usually sums up the brand using few catchy words. This further confirms that a tagline is traditionally the brand's 'child' and hence the closer to the brand name/logo. Therefore, the most frequent tagline identity in the sample was the product/company related, whether used in a single ad, or part of a campaign.

82.8% of the award-winning ads include a tagline, scoring the highest across all the five sub-samples analyzed. In most cases this tagline represents also the headline in the same ad. A short tagline with minimal text is needed to support these highly creative visuals predominating this types of ads. Moreover, 40% of the taglines employed in these ads are declarative in type. This type primarily states the benefits of the product. This is important considering that consumers in many cases cannot perceive these benefits from the highly creative visuals often employed in these ads. This declarative nature of the text is only present however as a type of a tagline.

Indeed, results showed that the award-winning sub-sample does not include a headline that is declarative in type. This is the case whether the ad includes both a headline and a tagline or a headline only (which is not a tagline in the same time). This interesting and kind of contradictive finding confirms that creatives when designing these award winning ads prefer to use these more 'tangible' and 'benefits' brand expressions in taglines.

A possible reason for this might be that a tagline most commonly occupies a very small space, usually in the lower right part of the ad. It briefly explains to consumers the indirect, creative visual in the same ad, yet maintaining and not interrupting the predominant visual ad. Although the tagline's size as such was not measured as part of this study, its small size is inferred from being usually a very short expression, and also because minimal text is a key characteristic particularly of the award winning ads. This is also supported by the results of a chi-square analysis that showed that indeed there is a relationship between type of headline in ads and the proportion of ad devoted to text ($\chi^2 = 50.659$, p < .05). The highest percentage of ads in which the text is minimal are the ones in which a headline type is a tagline (49.7%). Only 13.9% of the same ads employ a statement headline. Figure 25 illustrates the above mentioned. This figure shows an award winning print ad. The UK ad for Fiat racing car. The type of headline in this ad is tagline, as it is repeated in more than one ad, as part of a campaign. The type of this tagline, is declarative proposition of benefits, which reads: 'Everything get closer'. The tagline communicates that all destinations become closer when driving the specific car. The tagline also occupies a very small proportion of this ad, representing minimal text.

Figure 25: Example of an award-winning ad with a declarative tagline



With regards to body copy, results show that body copy is present in print ads. This presence, however seem to be changing over time with more and more ads including no body copy particularly in the last five years. This in turn indicates that this text element might be less employed in the future in print ads. This can be seen as part of the overall diminishing role of text in print ads. A role that seems to be decreasing in importance even more in the future. As far as the body copy types are concerned the factual/informational type was the most common type in the sample. This type was least present, however, in the award winning ads. This is not surprising given that this direct and informational text is not consistent the highly creative character of these ads. The brand name/logo continues to be a key element in print advertising for brand identification purposes. Lower right position is the most common position where the brand name/logo is located in the ad. This is the case particularly in magazine ads. This position scored lower in different print media types like billboards, yet still being the most frequent position for the brand element. This indicates the importance of this position which is also supported by previous research (e.g. Janiszewski, 1990). Results also showed that there are no apparent changes or obvious trends for the brand element over time. Considering the above mentioned this research contributes to both theory and practice. Firstly, it provides a detailed and comprehensive coding grid for analyzing print ads that could also be used in future content analysis research. Secondly, it extends the existing types of visual metaphor proposed by Forceville (1996) and identifies new additional types. These theoretical contributions in turn lead to some practical applications represented mainly in the insight provided to practitioners with regards to current and emerging trends in print ad design. These insights can also provide food for thought with regards to the encoding strategies these practitioners employ in ads, and he use of visual metaphors for this purpose.

Chapter 5

Literature Review (Part 2)

A review of literature on the effect of visual metaphor on consumer response to advertising

5.1. Introduction

This chapter will focus on identifying the reviewing literature on the effect of visual metaphor on consumer response to advertising. It will start by arraying the types of visual metaphor proposed by Forceville (1996) according to the difficulty associated with their comprehension (or their complexity). Following that, a number of consumer response outcomes will be discussed in the light of previous research. This will lead to the hypothesis related to each of the response variables and which are proposed in this thesis. These response variables are elaboration, comprehension (both objective and subjective), attitude toward the ad, attitude toward the brand, ad credibility, attitude toward the brand, purchase intention, perceived quality of advertised product, effectiveness of the ad and ad recall. Following that, the limited research represented in five papers, on the effect of the Forceville (1996) typology on consumer response to advertising will be critically discussed and evaluated. Finally, the chapter will be concluded with the research gap and the derived conceptual model.

5.2. Effects of Visual Metaphor Type on Comprehension

This section will shed light at the different types of visual metaphor proposed by Forceville (1996). Moreover, it will try to preliminary explain how and why they 'actually' differ with regards to their effect in terms of their comprehension. As mentioned in chapter three the different types of visual metaphor proposed by Forceville (1996) are represented and reflected in different visual structures. According to Phillips and McQuarrie (2004) these different types vary with regards to the degree to which they can be easily identified and comprehended. This same degree of difficulty or easiness is referred to as metaphor's visual structure complexity (Phillips and McQuarrie 2004). Complexity might not be the best term to use here, however, because the degree of difficulty here refers more to the difficultly of comprehending the metaphor. Therefore, these supposedly different levels of complexity are actually levels of 'comprehension difficulty' as they are perceived by the consumers. This can further affect other consumers' responses to different types of visual structures (or visual metaphor). Moreover, for the purpose of categorizing the four types of visual metaphor proposed by Forceville (1996) according to their visual structure the term complexity will be used here as it is stated in the recommendations made by Phillips and McQuarrie (2004). For the purpose of this thesis, however, this 'complexity' is understood and refers to the degree of the difficulty experienced in comprehending the visual metaphor.

In the recommendations made by Phillips and McQuarrie (2004) in their own typology of visual metaphor in advertising which was also based on Forceville's (1996) typology, it is argued that 'complexity' of visual structure increases as one moves from Juxtaposition to fusion to replacement. The reason for this is that the demands placed on consumer processing the ad also increase along these different types of metaphors. This means that replacement metaphor imposes more processing demands on consumers than fusion metaphor, which in turn imposes more processing demands than juxtaposition metaphor. The rationale for this categorization according to Phillips and McQuarrie (2004) is that when the two terms of the metaphor are juxtaposed next to each other it is easier for the consumers to realize and identify those two elements, and hence the 'identity' of those two elements could be clearly defined. In the case of fusion metaphor, consumers must put more effort as they need to distinguish or 'disentangle' the two terms of the metaphor. Moreover, a level of uncertainty could still exist regarding whether the two terms have been correctly identified in the visual.

Finally, according to Phillips and McQuarrie (2004) replacement metaphor is the most complex type and hence even more demanding to process compared to fusion metaphor. The reasoning given for this is that in this case consumers have to infer from the context that there is a second term that is not shown in the visual, but somehow linked to the concept that is present. Identifying the missing concept and figuring out how it relates to the present one is still a more difficult task than distinguishing and identifying the two terms that are both present and fused together in the case of the fusion metaphor.

The above-mentioned predictions were also somehow supported empirically by a more recent research study conducted by van Mulken, Pair and Forceville (2010). Part of this study examined the perceived level of complexity with regards to advertisements containing no metaphor, juxtaposition metaphor, fusion metaphor as well as replacement metaphor. Results of this study showed that advertisements that contain no metaphor are perceived as less complex compared to advertisements that contain juxtaposition, fusion or replacement metaphor. Moreover, respondents perceived replacement metaphor as the most complex type as predicted.

In the following section, a more detailed discussion of the different consumer responses to visual metaphor in advertising will take place.

5.3 Effects of Visual Metaphor on Consumer Responses

Since Scott (1994) proposed the visual rhetoric approach to advertising there have been around forty-two academic papers that have investigated the nature, types and effect of visual rhetoric generally in print advertising. Please see the appendix 1 of this thesis for the list of the forty-two papers representing the previous research related the nature as well as the effect of visual metaphor on the consumer responses. These studies are listed according to the date of publication starting from the most recent study. From these forty-two papers, only twenty-seven research studies have empirically tested the effect of visual metaphor on consumer response. This research, however, is underdeveloped and partial. The studies that have investigated this effect usually focus on two or maximum three types of visual metaphor and test the effect on one or two types of consumer responses. Furthermore, since McQuarrie and Mick's (1999) study on the effect of visual rhetoric in advertising on consumer response only eight studies have compared either the effect of visual metaphorical ads to visual non-metaphorical or to verbal metaphorical ads.

Again, the comparisons in these studies were incomplete and did not always focus only on visual metaphor but included other rhetorical figures as well. This section discusses previous research on the effect of visual metaphor on the different consumer responses to advertising. Each response variable is discussed separately leading to the hypothesis related to this response to be tested in the context of this thesis.

5.3.1 Cognitive Elaboration

Table 4: Previous Research on Elaboration

	Citation	Effect(s) tested	Results
1	Kim, Baek and Choi (2012)	Elaboration	.Elaboration effects attitude toward the ad
2	Gkiouzepas and Hogg (2011)	Elaboration, ad attitude,	. Elaboration
		comprehension	Fusion>juxtaposition
			. Comprehension
			Fusion <juxtaposition< td=""></juxtaposition<>
			.Ad attitude
	Janes (2000)	A d and dibility	Fusion>juxtaposition Elaboration:
3	Jeong (2008)	Ad credibility, brand attitude,	
		purchase intention	visual metaphor ads>non-metaphorical ads
4	Sopory and Dillard (2002)	Elaboration,	. Elaboration:
			metaphorical message > non-metaphorical
			message
5	McQuarrie and Mick (1999)	Elaboration, ad attitude, cultural	. Elaboration:
	,	competence	(Visual metaphorical > visual non metaphorical)

Cognitive Elaboration indicates the amount, of complexity or range of cognitive activity occasioned by a stimulus (McQuarrie and Mick, 1999; Price, 1987; Gkiouzepas and Hogg, 2011). Cognitive elaboration is measured by an established scale (McQuarrie and Mick, 1999). Measurement items used are such as "I had many/few thoughts," "the ad has multiple/one meaning(s)" and "the ad has complex/simple meaning(s)" (Gkiouzepas and Hogg, 2011; McQuarrie and Mick, 1999; Unnava and Burnkrant, 1991). The basic property by which all rhetorical figures (including visual metaphor) stimulate elaboration is their artful deviation (McQuarrie and Mick, 1999).

Moreover, research had demonstrated experimentally that an ad containing a visual rhetorical figure (e.g. visual metaphor) produce a greater degree of elaboration relative to baseline ad. Jeong (2008) measured elaboration for both visual metaphorical ads and visual non-metaphorical ads. Results showed that there was a significant difference between these two types of ads.

The visual metaphorical advertisements were rated much higher compared to the visual non-metaphorical advertisements (Jeong, 2008). Moreover, McQuarrie and Mick (1999) tested the impact of visual advertisements which include tropes (i.e. visual metaphor) on consumer elaboration in comparison with visual literal ads (ads that do not include tropes). Results showed that elaboration for visual ads containing tropes (i.e. visual metaphor) was higher compared to literal ads (McQuarrie and Mick, 1999). This view regarding stimulated elaboration is also supported by two different metaphorprocessing theories. Whaley (1991) used structure-mapping theory (Gentner, 1982, 1989) and proposed that in the process of understanding a metaphor, individuals focus on a similar relational structure (rather than simple features) between the two terms of the metaphor (target and source). This in turn stimulates thought and evokes a richer set of associations in semantic memory when compared to literal messages (Sopory and Dillard, 2002). According to structure-mapping theory again, this greater number of semantic associations lead to greater elaboration of message content, and this increases persuasion (Sopory and Dillard, 2002). On the other hands, Hitchon (1991) used concepts of salience-imbalance theory and proposed that when the common features of the two terms of the metaphor are assembled together to comprehend the metaphor, this assembly is called the 'ground' (Ortony, 1979). Furthermore, he suggests that the formation of this ground requires elaboration of the ground-relevant attributes. This leads to a greater number of thoughts, which (when in the appropriate direction) lead to greater persuasion (Sopory and Dillard, 2002). In contrast, when extracting the meaning of a literal (non-metaphoric) message, there is no need to find the ground and hence no need to further elaborate the message content (Sopory and Dillard, 2002). Both the structure-mapping theory and the salience-imbalance theory provide support to the relative advantage of visual metaphorical ads with regards to elaboration.

As discussed in chapter three, Gkiouzepas and Hogg (2011) developed a framework for visual metaphor in advertising. In their attempt to validate, their conceptual framework Gkiouzepas and Hogg (2011) focused more on object's mode of representation dimension (i.e. Juxtaposition visuals versus fusion visuals) rather than the visual scenario dimension (i.e. realistic symbiosis, replacement, artificial symbiosis).

In their work Gkiouzepas and Hogg (2011) refer to fusion visuals as synthesis visuals. For the purpose of this discussion, the term fusion will be used instead of synthesis to avoid confusion. To test the meaningfulness of their conceptual framework, Gkiouzepas and Hogg (2011) investigated whether fusion visuals provoke greater elaboration compared to juxtaposition visuals. In their first study in which they used mock ads, they predicted that fusion visuals could cause higher level of elaboration compared to juxtaposition visuals. Their expectations were based on the following reasoning: the first reason is based on the theorization of Phillips and McQuarrie (2004) discussed above which explains why a fusion visual might demand more cognitive effort from consumers of as opposed to when the objects are fully depicted (i.e. juxtaposition visual). The second reason was that in the fusion visuals it is more likely that the audience will detect a representational violation. They based this reasoning based on previous research, which is represented in a study that was conducted by Paracchio and Meyers-Levy (1994). This study investigated how ambiguous cropped objects in ad photos can affect product evaluations. The relatedness between the fusion visuals and visuals that include cropped objects can be seen as in both cases the objects are only partially depicted in the visual. In the meanwhile, however, there are also some overseen differences. The main difference is that in the case of cropped objects there is no fusion. For example, a woman's face in the ad could be severely cropped so that only the portion below the nose is shown. This half face becomes ambiguous as it can be completed by consumers in different ways. In this case this interpretation is translated in a guess that consumers make in order to find out and complete the missing part of the visual to identify it. This may entail that consumers employ what is referred to as item processing which "implies encoding distinctive and specific information pertaining to individual items" (Einstain and Hunt, 1980, as cited in Mohanty and Ratneshwar, 2015, pp.2).

In the case of fusion metaphor, however, the visual shows an object that is again partially depicted but that is also fused with another cropped object creating in this way a hybrid. Therefore, the processing required here by consumers is of different nature. Here the processing the consumers go through is more of *relational processing*. Relational processing "implies encoding the shared properties among discrete pieces of information" (Einstain and Hunt, 1980, as cited in Mohanty and Ratneshwar, 2015, pp.2). In other words, figuring out the shared characteristics between the two fused objects of the visual metaphor. There are clear differences between item processing and relational processing. Therefore, the conclusions derived from this one study conducted by Paracchio and Meyers-Levy (1994) are not strong enough to be used as a base for the predictions related to elaboration levels for fusions versus juxtaposition metaphor.

Although Gkiouzepas and Hogg (2011) do refer to the theorization proposed by Phillips and McQuarrie (2004) regarding the complexity of the metaphor visual structure.

The same authors, however, also agree that this theorization remains in the form of tentative propositions. Results from the first study conducted by Gkiouzepas and Hogg (2011) supported their hypothesis which stated that "fusion visuals will provoke greater elaboration than juxtaposition visuals in low (versus high) conceptual tension conditions" (Gkiouzepas and Hogg, 2011, pp.107). Based on the above-mentioned discussion of previous research (Gkiouzepas and Hogg, 2011) as well as predictions proposed by Phillips and McQaurrie (2004), this current research will follow the same reasoning. The current predictions regarding the effect of juxtaposition metaphor, fusion metaphor and replacement metaphor on elaboration are informed by previous theorization and empirical research. The two additional types of visual metaphor that are also tested in this experiment for their effect are verbo-pictorial metaphor and verbo-pictorial indirect effect metaphor. It is believed that the typical verbo-pictorial metaphor is the least difficult to comprehend and least demanding among all the four types proposed by Forceville (1996). The reasoning for this is that one of the two terms of the metaphor is a verbal copy that complements the visual term. Therefore, it is much easier for the consumers to identify and further process the metaphor by simply reading the verbal text rather than having to understand the metaphor only from the visual terms. It is also argued that the 'new' type of visual metaphor explained in the previous chapter and referred to as the 'verbo-pictorial indirect effect metaphor' is the second least difficult to comprehend type of metaphor after verbo-pictorial metaphor. The reason for this is that the comparison in this type of metaphor is indirect rather than direct, and hence it is more complex than the typical verbo-pictorial metaphor. However, the existence of the verbal text part also in this metaphor make it yet less complex than the other three (purely) visual metaphors (e.g. juxtaposition, metaphor and fusion metaphor, etc.).

Based on the above-mention the following hypotheses are put forward relating to the impact of the five different types of visual metaphor on consumer elaboration:

H1: The level of elaboration will increase gradually starting from verbo-pictorial, and moving through verbo-pictorial indirect effect, juxtaposition, fusion, and replacement metaphor.

It is important to note here that according to Gkiouzepas and Hogg's (2011) study and the hypothesis that was tested in their study it can be seen that the authors included yet another factor that could cause the differences in the effect. This factor is conceptual tension or conceptual similarity. Gkiouzepas and Hogg (2011), suggested that the different categories of visual structures representing also the different types of visual metaphor (e.g. Forceville's typology) can include objects that can vary greatly in terms of 'content'. This

variation or similarity between the two metaphorical objects is what they call conceptual similarity or conceptual tension (dissimilarity).

Gkiouzepas and Hogg (2011) define conceptual similarity "as the degree of relatedness between the two metaphorical objects (i.e. concepts)" (Gkiouzepas and Hogg, 2011, p.106). For example, there might be more conceptual similarity or conceptual proximity between a car and an aircraft compared to a car and a sunbed (Gkiouzepas and Hogg, 2011). The same authors state, however, that this conceptual similarity is broad enough that it could be divided into a plethora of dimensions (e.g. based on similarities in appearance, material, or function). Furthermore, in this study mock ads were used. The results supported the aforementioned hypothesis regarding elaboration. The measures used to measure conceptual similarity/tension were not specific enough to capture the different dimensions of this construct (e.g. appearance, material, function, etc.). More specifically, in this study participants were asked to rate the extent to which the pair of objects depicted in the visual are 'similar', 'related', 'connected', and 'compatible' on a seven-point, four item scale. The measure did not, however, specify in terms of what were these two objects similar or dissimilar (e.g. in terms of appearance, in terms of function, etc.). This is also further acknowledged by the authors who state that their operationalization of conceptual similarity only "scratched the surface of this multifaceted construct" (Gkiouzepas and Hogg, 2011, p.114).

Mediating Role of Elaboration

The proposition that elaboration plays a mediating role in persuasion is supported by persuasion theories. For example, a theory titled the Cognitive Response Model. This model holds that persuasion stems from and is based on consumers' reflections as well as the cognitive responses about the message content. These cognitive responses are defined as "thoughts that arise during the process of elaboration when people relate message material to other message content or to their pre-existing knowledge and views stored in memory" (Meyers-Levy and Malaviya, 1999, pp.47). Therefore, this model suggests that persuasion represents the net positiveness of the cognitive effort that people evoke as they elaborate on a message (Meyers-Levy and Malaviya, 1999).

Moreover, Dual-Process theories such as the Elaboration Likelihood Model (ELM) also provides support for the effect of or the role of elaboration on attitude formation and which have been widely accepted (Petty, Cacioppo and Schumann, 1983). This model suggests that persuasion is achieved through the existence of a central route to persuasion, as well as the peripheral route. The central route produces more effective judgements that are based on extensive and critical elaboration of message content.

Considering that visuals are no more considered peripheral elements in ads but rather central, implies that the central route and critical elaboration mediate the effect of these visuals (e.g. metaphorical visuals) on consumer's further evaluations. Moreover, seeking the comprehension of the metaphorical meaning can elicit negative tension. Pleasure can occur when this tension is relieved (McQuarrie and Mick, 1999; Sopory and Dillard, 2002; Kim, Baek, and Choi, 2012).

Hahmann (2007) in his model related to the cognitive and emotional processing of rhetorical works in advertising refers to this tension as conflict (Hahmann, 2007). Conflict occurs when one has two or more competing responses to a rhetorical work (e.g. visual metaphor) or experiences ambivalence (Hahmann, 2007). Hahmann further states that tropes (e.g. visual metaphor) create or generate cognitive tension or conflict between literal and non-literal meanings as well as a desire to reduce this conflict (Huhmann, 2007). "If one can self –generate a nonliteral meaning to interpret the trope, conflicts dissipates" (Hahmann, 2007, pp 11). Moreover, tension/conflict causes this cognitive elaboration, which aims to relieve this tension/conflict, by producing thoughts /interpretations that contribute to comprehending the metaphor. Once this comprehension is achieved, tension is relieved and pleasure occurs. This pleasure is also referred to as hedonic value (Hahmann, 2007). Hedonic value "is the degree of intrinsic pleasure elicited by a rhetorical work" (Hahmann, 2007, pp 18). Successful resolution of conflict increases hedonic value. This hedonic value is also an important component of attitude toward the ad (Hahmann, 2007). Moreover, Kim, Baek and Choi (2012) also consider elaboration to be 'in-process' output and only the 'initial reaction' in advertising processing that influence subsequent responses such as attitude toward the ad and attitude toward the brand. Considering the above-mentioned it can be seen that elaboration could play an important role as a mediator for consumers' attitudinal responses to visual metaphor in advertising and hence overall advertising effectiveness. Moreover, mentions about this mediating role are also found in the wider advertising literature. According also to Kim, Baek and Choi (2012) elaboration also positively influences attitude toward the ad. Moreover, Keller and Block (1996) who investigated the effect of elaboration on increasing persuasiveness of fear appeals found that elaboration indeed is a significant mediator of the relationship between fear, arousal, and persuasion.

Jones, Shultz and Chapman (2006) who investigated the effect of cognitive elaboration on the effectiveness of job advertisements, found that the higher the level of elaboration the more participants will choose ads that contain high quality arguments compared to participants who elaborate less. Results of the same study also showed that when elaboration is lower participants will choose ads that contain peripheral cues. Finally, another study conducted by Trampe, staple and Mulder (2010) investigated the effect of model attractiveness, product relevance, and elaboration likelihood on advertising effectiveness. Results from this study showed that when elaboration likelihood is high attitude toward the ad and also attitude toward the advertised product would be more positive. This is more the case when the model's attractiveness was relevant to the product (e.g. when a diet product is advertised) as opposed to when it was less relevant to the product (e.g. when a deodorant is advertised).

Based on the above-mention the following hypotheses are put forward relating to the role of elaboration as a mediator for the effect of the different types of visual metaphor under study on the different consumers' responses:

H2: Elaboration will mediate the effect of visual metaphor on

- 2.1. Attitude toward the ad
- 2.2. Attitude toward the brand
- 2.3. Ad effectiveness
- 2.4. Purchase intention
- 2.5. Ad credibility
- 2.6. Perceived product quality

5.3.2. Comprehension

Table 5: Previous Research on Comprehension

	Citation	Effect(s) tested	Results
1	Chang (2013)	Comprehension	.Comprehension fluency affect ad attitudes
2	Van Mulken, Pair, and Forceville (2010)	.comprehension, complexity, ad liking,	. comprehension Understood visual metaphors > non- understood
3	Chang (2009)	Comprehension	.Comprehension mediates ad and brand attitude
4	Ma (2008)	Interpretation	visual metaphorical ads lead to multiple individual interpretations. familiarity of participants with western culture and product category influences the nature and quality of their interpretations
5	McQaurrie and Philips (2005)	Interpretation	Consumers derive multiple meaning from metaphorical ads. visual metaphor elicit multiple inference spontaneously
6	Lee and Aaker (2004)	Comprehension, brand attitudes	. Ease of comprehension leads to more positive brand attitudes
7	Sopory and Dillard (2002)	Elaboration,	. Elaboration: metaphorical message > non-metaphorical message
8	Roehm and Strental (2001)	Comprehension	.Comprehension of analogy mediates/leads to more positive attitudes
9	Phillips (2000)	Comprehension, ad attitude	Metaphor Comprehension: more complex < less complex .Metaphor comprehension mediates ad liking
10	McQuarrie and Mick (1999)	Elaboration, ad attitude, cultural competence	Elaboration: (Visual metaphorical > visual non metaphorical)
11	Phillips (1997)	Ad Interpretation	. Visual metaphor generates both strong and weak implicaturs.
12	Mick and Politi (1989)	Ad Interpretation	.visual ads induce multiple interpretations

In visual metaphor research, comprehension and interpretation are two terms that are used interchangeably in different studies. They refer to the extent consumers recognize, understand and are able to solve but also derive meaning(s) from visual metaphors in advertising. This phase of consumer response is very important, because it is at this stage where the participant actually 'makes sense' of the visual metaphor and derives meaning(s) from the advertisement and comprehends the accurate 'intended' meaning of the metaphor. Moreover, there are not many studies that have focused specifically on the comprehension and interpretation aspect of visual metaphor in advertising (Ma, 2008; McQuarrie and Mick, 1999; Morgan and Reichert, 1999; Philips, 1997; van Mulken, Pair, and Forceville, 2010).

Research has shown that consumers usually derive more than one interpretation of visual metaphor in ads (McQuarrie and Phillips, 2005; Phillips, 1997; Mick and Politi, 1989). Consumer usually derive strong as well as weak implicatures from visual metaphors in ads. Strong implicatures refer to the main or obvious meaning in a message. Weak implicatures are less obvious. They are based more on consumer's idiosyncratic readings (interpretations) of the visual metaphor (Phillips, 1997).

This is also supported by the Sperber and Wilson's Relevance Theory. According to this theory in most acts of communication, two subparts are distinguished. The first part is referred to as 'set of assumptions' or 'informative intention' which is basically the message that the communicator wishes to communicate. The second part refers to intention of the communicator to make the audience aware of his/her wish to communicate this set of assumptions (messages). This wish is termed 'communicative intention' (Forceville, 1996). The combination of these two intentions forms what is referred to as 'ostensive-inferential communication' (Forceville, 1996). In their theory Sperber and Wilson also distinguish between strong and weak communication. Also referred to as 'strong' or 'weak' implicatures. Implicatures are defined as information that is implicitly communicated to an audience. Hence, they are inferred by the hearer, reader to provide meaning for a message (Sperber and Wilson, 1986; Phillips, 1997). This theory is very relevant to this thesis because it is through this implicature process that the consumers of the visual ads create meaning and are hence able to interpret the pictorial metaphor employed in the visuals.

Research has also shown that these self-generated meanings or weak implicatures are very important and powerful as far as persuasion is concerned. The reason for this is that consumers tend to argue less and assert more the meanings that they themselves have derived from the ad (Kardes, 1988; McQuarrie and Phillips, 2005; Phillips, 1997). This is also somehow supported by the reduced counterargument view or theory (Guthrie, 1972). According to this view the process of comprehending a metaphor generates a greater number of inferred meanings. This means that high proportions of the cognitive resources of a comprehender are used up when he/she encounters a metaphorical persuasive message and as a result, fewer resources are left to exclude the message content. The end result of this, in turn, is greater agreement with what is advocated by the message (Sopory and Dillard, 2002). In summary, the key concept of this view is that more cognitive resources are consumed when processing metaphorical messages than when processing nonmetaphorical ones, which in turn disrupts counterarguaing, leading to increased persuasion (Sopory and Dillard, 2002).

In line with the aforementioned, a study conducted by McQuarrie and Phillips, (2005) showed in general that the use of metaphorical claims in ads appears to make consumers more receptive. Moreover, it enables them to derive multiple, distinct and positive inferences about the advertised brand (i.e. weak implicatures) while still conveying the main message of the ad (i.e. the strong implicature). Furthermore, this same study showed that visual metaphorical ads are more able to elicit these multiple inferences spontaneously at the time of ad exposure, while verbal metaphorical ads appear to elicit additional inferences only on reflection when prompted. These results hence suggest that visual metaphor emphasizes the effect of constructing multiple inferences from the ads. These results are also more consistent with the view of semioticians, which suggests that visual metaphors are more 'open' to multiple interpretations. This is due to the fact that they are more 'implicit' and hence less 'constrained' as far as their interpretations are concerned (McQuarrie and Phillips, 2005). Until recently, these two terms: interpretation and comprehension were used interchangeably, and without being clearly defined or disentangled. These two variables are operationalized as scales that measure the extent to which consumers personally 'think' they comprehend the ad and not the actual 'accurate' or 'objective' comprehension. Alternatively, they are also operationalized in the form of open-ended questions in which consumers state the meaning(s) they interpret from the ads. In the wider advertising research, objective comprehension is defined as "the grasping or extracting of pre-specifiable meanings from the message" (Mick, 1992, p. 411). Furthermore, the principle criterion of it being the amount of meaning accurately drawn from the message. These meanings are intrinsic to the message and of course intended by the creator of the message who in this case is the advertiser. In this context the receiver of the advertising message will be seen as to have 'comprehended' the message only if his/her decoding of this message matches the sender's or the advertiser's intended message. In the context of this thesis objective comprehension will be used to refer to the extent to which the consumer accurately derived the actual. 'intended' message of the ad.

On the other hand, Mick (1992) also refers to 'subjective comprehension'. Subjective comprehension is conceptualized as "the generation of meanings by a particular individual through the activation of mental concepts related to the message and the processing context" (Mick, 1992, pp.412). Under this subjective orientation, comprehension is more open-ended (Mick, 1992). Therefore, the inferred meanings are not necessarily message-based meanings but rather receiver-based meanings.

This in turn means that the meanings inferred are not necessary intended by the sender, but rather interpreted as such by the receiver based on the message context but also on receiver's background information (e.g. product knowledge, self-knowledge, selfexperience). For the purpose of this thesis the term 'subjective comprehension' refers to the extent to which the consumers personally believe they have understood or did not understand the ad, even if they have not necessarily accurately drawn the meaning from the message. In other words, it refers to their own subjective perception regarding the extent they 'think' they have understood the ad. Interpretation on the other hand in the context of this thesis will be used to refer to the different 'interpretations' that the consumer generates from the print ads overall and also from the visual metaphor employed in these print ads. What should also be mentioned at this point is that consumer's ability to comprehend and interpret the visual metaphor would vary in relation to the metaphor's type and hence its form. The results from previous research that was conducted on with regards to the effect of the different types of visual metaphor on comprehension were contradictive. Two studies showed that fusion metaphor was more difficult to comprehend than juxtaposition metaphor (Van Mulken, Le Pair and Forceville, 2010; Mohanty and Ratneshawar, 2015). Results from another study on the other hand showed that fusion metaphor led to higher comprehension compared to juxtaposition metaphor (Gkiouzepas and Hogg, 2011).

Two studies that compared the effect of replacement metaphor to fusion metaphor and juxtaposition metaphor showed that replacement metaphor was the hardest of the three metaphors to comprehend (or most complex) (Van Mulken, Le Pair and Forceville, 2010; Van Mulken, Hooft and Nederstigt, 2014). Moreover, the predictions proposed by Phillips and McQuarrie (2004) juxtaposition metaphor is the easiest to comprehend and replacement metaphor as the most difficult one. For the purpose of this experiment the two levels of comprehension will be investigated. These levels are subjective comprehension and objective comprehension. Based on the above-mention the following hypotheses are put forward relating to the impact of the five different types of visual metaphor on consumer subjective comprehension and objective comprehension:

H3: The level of subjective comprehension experienced by consumers will increase gradually starting from replacement, moving through fusion, juxtaposition, verbo-pictorial indirect effect and verbo-pictorial.

H4: The level of objective comprehension experienced by consumers will increase gradually starting from replacement, moving through fusion, juxtaposition, verbo-pictorial indirect effect and verbo-pictorial.

The Mediating Role of Comprehension

The old standing proposition that comprehension mediates persuasion links initially to Hovland, Janis, and Kelley's (1953) research in which they argued that persuasion is mediated by prior processes of attention to and comprehension of message content (Hovland, Janis and Kelley's, 1953; McGuire 1972; Ratneshwar and Chaiken, 1991). Moreover, advertising research has showed that comprehension mediates affect or attitudes (Chang, 2009; Roehm and Strental, 2001; Lee and Aaker, 2004; Chang, 2013). For example, Chang (2013) showed that ease of comprehension indirectly affected ad attitudes through its influence on imagery. Furthermore, it also directly affected ad attitudes in the case of print narrative advertising. Moreover, Chang (2009) showed that ease of comprehension mediates the effect of repetition strategy in print narrative ads on both ad and brand attitudes. Lee and Aaker (2004) (as cited in Chang 2009) also found that the ease of ad comprehension results in more favourable brand attitudes. Roehm and Sternthal (2001) further found that comprehension of product appeal analogy led to more favourable attitudes. More specifically this study supported the idea that differences in comprehension mediates the differences in evaluations of analogy messages.

The above mentioned is also supported by the traditional Hierarchy of Effects models (HOE) in advertising. These models take the consumer through a series of Cognitive, Affective and Conative Stages (Smith, Chen and Yang 2008). HOE models can be seen as always depicting a sequence of cognition (e.g. attention, learning, yielding), Affect (e.g. attitude) and intentions (e.g. to recommends or purchases a brand) (Smith, Chen and Yang, 2008). Furthermore, HOE models normally include a major step that involves comprehending the ad claims (Smith, Chen and Yang, 2008). Comprehension is an integral element of cognition. It is an important step in the learning stage of the cognitive process (Smith, Chen and Yang, 2008). Therefore, based also on the HOE models ad comprehension should affect or mediate attitudes (Attitude toward the ad, attitude toward the brand, etc.) and hence persuasion. As far as visual metaphor research is concerned, Phillips (2000) in her study also demonstrated that comprehension mediates attitude toward the ad. More specifically results from this study showed that comprehension of visual metaphor in advertising has a significant positive effect on attitude towards the ad. Moreover, results from the limited research conducted comparing the mediation effect across different types of visual metaphor are contradictive. The study conducted by van Mulken, Le Pair and Forcevile (2010) showed that understood metaphors were preferred to non- understood ones.

This did not vary by visual metaphor type. van Mulken, Hooft and Nederstigt (2014) on the other hand demonstrated that comprehension mediates the effect of visual metaphor on appreciation. This effect differed by metaphor type. Fusion metaphor was appreciated more than juxtaposition metaphor when comprehended. Replacement metaphor was appreciated less than juxtaposition metaphor when comprehended. Considering this together with the theorization of Phillips and McQuarrie (2004), the following hypotheses are put forward relating to the role of elaboration as a mediator for effect of the different types of visual metaphor under study on the different consumer responses:

H5: Subjective comprehension will mediate the effect of visual metaphor on

- 5.1. Attitude toward the ad
- 5.2. Attitude toward the brand
- 5.3. Ad effectiveness
- 5.4. Purchase intention
- 5.5. Ad credibility
- 5.6. Perceived product quality

H6: Objective comprehension will mediate the effect of visual metaphor on:

- 6.1. Attitude toward the ad
- 6.2. Attitude toward the brand
- 6.3. Ad effectiveness
- 6.4. Purchase intention
- 6.5. Ad credibility
- 6.6. Perceived product quality

5.3.3 Attitude Toward the Ad

Table 6: Previous Research on Attitude Toward the Ad

	Citation	Effect(s) tested	Results
1	Jeong (2008)	Ad attitude	Ad attitude:
			visual metaphor ads > non-metaphorical ads
2	Ang and Lim (2006)	Ad attitude,	.Ad attitude
		Brand attitude,	visual metaphorical ad > non-metaphorical ads
		Purchase	
		intention	
4	McQuarrie and Mick	Elaboration, Ad	. Ad attitude:
	(1999)	attitude, Cultural	visual metaphor ads > non-metaphorical ads
		competence	

Attitude toward the ad is one of the most measured forms of consumer response to advertising in general but also to visual metaphor in advertising in particular. Visual rhetorical figures, like visual metaphor appear to be capable of producing a more positive attitude toward the ad (McQuarrie and Mick, 1999). Indeed, research has also showed that visual metaphorical ads are more liked compared to visual non-metaphorical ads (Ang and Lim, 2006; Jeong, 2008).

The above mentioned is somehow also supported by the two stands of the pleasure or relief view (Sopory and Dillard, 2002). According to these stands, the recognition of metaphorical messages leads to negative tension. When metaphorical meaning, however, is finally understood the negative tension is relieved. Three stages are involved, perception of error, conflict, and resolution. According to the first stand, resolving the metaphorical meaning and thus finding the 'unexpected similarities' between the two terms of the metaphor leads to pleasure, one of the measures of attitude toward the ad. The second stand on the other hand suggests that finding the metaphorical meaning ends the negative tension leading to relief (Sopory and Dillard, 2002). Pleasure or relief further reinforces the meaning of the metaphor and its positive evaluation (Sopory and Dillard, 2002). Accordingly, this also increases persuasion (Sopory and Dillard, 2002). Based on the two stands of the pleasure or relief view (Sopory and Dillard, 2002), it would be expected that the levels of negative tension resulting from the recognition of metaphorical messages would vary across the types or levels of metaphor's visual structure. This means that the more the complex the metaphor (starting from verbo-pictorial metaphor and moving through juxtaposition, fusion and replacement metaphors) the more the negative tension and the effort exerted by the consumer to resolve it, and hence the more the feeling of pleasure or relief that consumer will experience once the metaphor is resolved. This, in turn, will lead to more positive evaluation of the ad (i.e. ad liking) by this same consumer.

Research on visual rhetorical figures (e.g. visual metaphor) also has showed that they are advantageous in producing positive attitude toward the ad (McQuarrie and Mick, 1999). The wider visual metaphor literature has also showed that visual metaphorical ads are more liked compared to visual non-metaphorical ads (Ang and Lim, 2006; Jeong, 2008). Research has also showed, however, that this is the case up to a certain point or level of comprehension difficulty. After this point consumers tend to opt out and the pleasure or relief experienced decreases. Therefore, subsequently the ad is less appreciated (Van Mulken, Le Pair and Forceville, 2010; Van Mulken, Hooft and Nederstigt (2014).

The following hypotheses are put forward relating to the impact of the five different types of visual metaphor on attitude toward the ad:

H7: Attitude toward the ad will increase gradually starting from verbo-pictorial, moving through, verbo-pictorial indirect effect, replacement, juxtaposition and fusion metaphor.

5.3.4 Ad Credibility

Table 7: Previous Research on Ad Credibility

	Citation	Effect(s) tested	Results
1	Jeong (2008)	Ad credibility	Ad credibility:
			visual metaphor ads>non-metaphorical ads
2	Sopory and Dillard (2002)	Communication	. Credibility:
		credibility	Metaphor>literal language
3	Lohse and Rosen (2001)	Ad credibility	. Credibility:
			Photographic-quality graphics>line art
			graphics
4	MacKenzie and Lutz	Ad credibility	. Positive relation between ad credibility, ad
	(1989)		attitude, and brand attitude.
			.Visual ads lead to higher ad credibility and
			higher ad attitude

Ad credibility is defined as "the extent to which consumer perceives claims made about the brand in the ad to be truthful and believable" (MacKenzie and Lutz, 1989, pp.51). It is one of the important determinants of advertising effectiveness. According to MacKenzie and Lutz (1989), the ad credibility consists of three underlying constructs: perceived ad claim discrepancy, advertiser credibility, and advertising credibility. Advertising credibility refers to consumers' perceptions of the usefulness and believability of advertising in general.

Advertiser credibility is the perceived honesty or truthfulness of the advertiser as such or in other words the sponsor of the ad (MacKenzie and Lutz, 1989). The research conducted by the same authors showed that indeed there is a positive relationship between ad credibility and attitude toward the ad and which in turn has a positive relation with attitude toward the brand (MacKenzie and Lutz, 1989). Moreover, research conducted by Lohse and Rosen (2001) also showed that the use of photographic images in ads led to higher levels of ad credibility compared to other ad formats (e.g. line art) and which in turn led to higher attitude toward the ad. In the wider metaphor literature and according to Sopory and Dillard (2002) many writers and thinkers (e.g. Aristotle, Bowers and Osborne, and others) have supported that communicators who use metaphors are seen as more credible and judged more positively compared to those who use literal language. The Communicator Credibility View further supports that metaphor usage adds to the credibility of the communicator who uses it. Therefore, he or she are judged as more credible (Sopory and Dillard, 2002). This perceived credibility of the communicator is due to two main reasons. The first reason is that the use of metaphor is a guanine capability possessed by the communicator, and as Aristotle states "it cannot be learnt from others". Therefore, this communicator should be judged positively by receivers (Sopory and Dillard, 2002).

The second reason is based on the literal-primacy view. This view supports that metaphors highlights unknown similarities between entities causing interest and pleasure to the receiver. This interest and pleasure stems out of the ability of the receiver to comprehend the metaphor and appreciate these previously unknown to him or her similarities between objects. Finally, impressed by the metaphorical message, the receiver judges on the communicator as credible (Sopory and Dillard, 2002). There is only one study that has investigated the effect that visual metaphor has on ad credibility and more specifically on source credibility. This study was conducted by Jeong (2008). Results of this study showed that the advertisement containing visual metaphor were rated more credible compared to literal visual ads (Jeong, 2008). No research so far has compared this effect across different visual metaphor types. Furthermore, there is also a suggestion that indeed comprehension mediates persuasion. This stemmed initially from Hovland, Janis, and Kelley's (1953) assumption that source expertise can affect persuasion through comprehension of message content (McGuire 1972).

Research have also showed that ad credibility and attitude towards the ad are correlated (Lutz, MacKenzie, and Belch, 1983). For this reason, it could be expected that the effect of visual metaphor types on ad credibility will follow the same pattern as attitude toward the ad. Based on the above mentioned, the following hypotheses are put forward related to the impact of the five different types of visual metaphor on ad credibility.

H8: Ad credibility will increase gradually starting from verbo-pictorial, moving through, verbo-pictorial indirect effect, replacement, juxtaposition and fusion.

5.3.5 Attitude Toward the Brand

Table 8: Previous Research on Attitude Toward the Brand

	Citation	Effect(s) tested	Results
1	Chang and Yen (2013)	Brand attitude,	.Brand attitude
		Purchase	visual metaphorical ad > non-metaphorical ads
		intention	
2	Ang and Lim (2006)	Brand attitude,	.Brand attitude
		Purchase	visual metaphorical ad > non-metaphorical ads
		intention	
3	Jeong (2008)	Ad credibility,	.Brand attitude
		Brand attitude,	visual metaphorical ad > non-metaphorical ads
		Purchase	
		intention	
4	Miniard, Bhala and Rose	Ad attitude, brand	. Ad attitude predicts brand attitude
	(1990)	attitude	
5	Gardner (1985)	Ad attitude, brand	. Ad attitude predicts brand attitude
		attitude	
6	Lutz, MacKenzie and	Ad attitude, brand	. Ad attitude predicts brand attitude
	Belch (1983)	attitude	

Attitude toward the brand is again one of the most measured consumer responses to advertising. A number of studies have showed that in terms of this response, visual metaphorical advertisements were rated higher than visual non-metaphorical ads (Ang and Lim, 2006; Chang and Yen, 2013; Jeong, 2008). MacInnis and Jaworski's (1989) in their integrative framework for information processing from advertisements, proposed that attitude toward the ad and attitude toward the brand are highly correlated due to the following reasons: 1) consumers do not pay enough attention to the ad to distinguish it from the brand. 2) the mood that results from the exposure context is expected to be generalized to all consumer's evaluations. Moreover, there are a number of studies that had indicated that attitude toward the ad is a predictor of attitude toward the brand (Lutz, MacKenzie, and Belch, 1983; Gardner, 1985; Gresham, and Shimp, 1985; Miniard, Bhatla and Rose, 1990). Based on this line of reasoning it could be expected that the effect of visual metaphor on attitude toward the brand will follow the same pattern as attitude toward the ad. Gkiouzepas and Hogg (2011) was the only study that compared the effect of different types of visual metaphor on attitude toward the brand.

More specifically, results from this study showed that attitude toward the brand was higher under fusions conditions than under juxtaposition conditions in low conceptual tension condition. This interaction, however, was only marginally significant, F(1, 245) = 3.23, p < .07.

The following hypotheses are put forward relating to the impact of the five different types of visual metaphor on attitude toward the brand:

H9: Attitude toward the brand will increase gradually starting from verbo-pictorial, moving through, verbo-pictorial indirect effect, replacement, juxtaposition and fusion metaphor.

5.3.6. Purchase Intention

Table 9: Previous Research on Purchase Intention

	Citation	Effect(s) tested	Results
1	Chang and Yen (2013)	Brand attitude,	. Purchase intention
		Purchase	visual metaphor ads > non-metaphorical ads
		intention	
2	Ang and Lim (2006)	Brand attitude,	. Purchase intention
		Purchase	visual metaphorical ad > non-metaphorical
		intention	ads
3	Jeong (2008)	Ad credibility,	. Purchase intention
		Brand attitude,	visual metaphorical ad > non-metaphorical
		Purchase	
		intention	

Purchase intention is not one of the most measured consumer responses to advertising compared to attitude toward the ad and attitude toward the brand. Research have showed that visual metaphorical advertisements cause higher purchase intention than visual non-metaphorical ads (Ang and Lim, 2006; Chang and Yen, 2013; Jeong, 2008). According to Yang and Smith (2009), creative (e.g. visual metaphorical ads) which aid consumers to take a more open approach and hence produce more positive reactions, ultimately should result in more favorable purchase intentions toward the brand. The same authors state that when resolving ambiguity related to the creative ad this results in positive affect which in turn is transferred into more favorable brand evaluations and higher purchase intentions.

The theory of cognitive dissonance by Festinger (1962) supports that the consistency between attitude toward the ad and attitude toward the brand mentioned earlier would increase favourable beliefs towards the brand.

This in turn will result in an increase in purchase intention due to the consonant relation between attitude toward the ad and attitude toward the brand. There is no previous research that has been conducted to compare the effect of the different types of visual metaphor on this response variable. Based on the above-mentioned discussion, the effect of different types of visual metaphor on purchase intention is expected to follow the similar pattern as attitude toward the ad and attitude toward the brand. The following hypotheses are put forward relating to the impact of the five different types of visual metaphor on purchase intention:

H10: Purchase intention will increase gradually starting from verbo-pictorial, moving through, verbo-pictorial indirect effect, replacement, juxtaposition and fusion metaphor.

5.3.7. Perceived Quality of Advertised Product

Promoting product quality is a key determinant of a product's market success (Castleberry and Resurreccion, 1989). Most of the research, however, on the relation between advertising and perceived product quality is related to the effect of the stated product price on perceived quality of the advertised product (e.g. Kardes, Cronley, Kellaris and Posavac, 2004). Research also have been conducted on the relationship between advertising expenditure and the perceived product quality (e.g. Marquardt and McGann, 1975). So far, here there is no study that has investigated the effect of visual metaphor on perceived quality of the advertised product.

According to Lohse and Rosen (2001), however, quality of the product, is an important message that ads usually communicates. Consequently, attitudes about product quality should increase with a better ad presentation. Moreover, the same authors argue that the more creative and complex visuals contribute to this better presentation and hence to the 'perceived' quality of the advertised product. For example, rather than depicting a simple visual of a product (e.g. air conditioner), the advertiser may choose to show a lifestyle visual (e.g. a family watching television comfortably while the sun beats down on the house from the outside) (Lohse and Rosen (2001). Results of the experiment conducted by (Lohse and Rosen, 2001) showed that use of photographic-quality graphics led to higher and better perceptions of quality for the product being advertised. This in turn implies that visually creative ads (e.g. metaphorical) could improve perceptions regarding the quality of product being advertised.

Moreover, it could be expected that a strong relation between perceived quality of the advertised product and attitude toward the advertised brand could exist.

The reasoning behind this is that the perceived quality of advertised product is more of an ingredient of attitude toward the brand of this same product. Considering this it would be expected that the effect of visual metaphor on perceived quality of advertised product should follow the same pattern as attitude toward the brand. Moreover, the following hypotheses are put forward relating to the impact of the five types of visual metaphor on perceived quality of the advertised product:

H11: Perceived quality of advertised product will increase gradually starting from verbo-pictorial, moving through, verbo-pictorial indirect effect, replacement, juxtaposition and fusion metaphor.

5.3.8. Effectiveness of the ad

Effectiveness of the ad is a measure of consumer response to advertising that intends to measure a person's evaluation of an advertisement that he/she has been exposed to. It places emphasis on how informative the ad is and how influential it could be (Bruner, Hensel and James, 2005). There is no research that has previously used this measure in the advertising creativity literature. Moreover, this measure can be seen as an 'overarching' measure that subsumes in it some other measures/responses (e.g. purchase intention). For this reason, it could be expected that consumers' responses to visual metaphor in advertising in terms of this response will follow the same pattern as other responses such as attitude toward the ad, and attitude toward the brand. Moreover, the following hypotheses are put forward relating to the impact of the five different types of visual metaphor on effectiveness of the ad:

H12: Ad effectiveness will increase gradually starting from verbo-pictorial, moving through, verbo-pictorial indirect effect, replacement, juxtaposition and fusion.

5.3.9. Ad Recall

Table 10: Previous Research on Ad Recall

	Citation	Effect(s) tested	Results
1	Till and Back (2005)	Ad recall	. Ad recall
			creative ads > non-creative/control ads
2	McQuarrie and Mick	Ad recall	. Ad recall
	(2003)		Rhetorical ads > non-rhetorical/control ads
3	Hafer, Reynolds and	Message recall	.comprehension mediates recall
	Obertynski (1996)		
4	Strach (1966)	Ad recall	. Ad recall
			visual ad>non-visual ads

Understanding ad recall in relation to persuasion provides both theoretical and applied implications for persuasion research. Advertising practitioners need to know whether it is more important for them to focus on ad comprehension or memorability. Hafer, Reynolds, and Obertynski (1996) investigated the relation between comprehensibility and persuasion in a language context. In this study they found that when the arguments presented where harder to comprehend they were, also less recalled compared to easier to understand arguments and hence these arguments were less persuasive or 'effective' (Hafer, Reynolds, and Obertynski, 1996. This was also suggested by McGuire (1968), who believed when members of the audience understand the message they are more likely to recall a greater proportion of the message compared to other audience members who did not understand it.

Previous research supports that visuals in ads enhance ad recall. Strach (1966) found that print advertising containing visuals led to more ad recall compared to when it did not contain visuals (Edell and Staelin, 1983). Furthermore, advertising creativity (e.g. visual metaphor) is a very important component of advertising and indeed, it is strongly related to advertising effectiveness. In the advertising creativity literature, the relation between ad comprehension and ad recall is also stated. A study conducted by Till and Back (2005) in the context of TV ads showed that ad recall was significantly better for creative ads compared to control ads with regards to brand name, and commercial features. Moreover, only one study conducted by McQuarrie and Mick (2003) tested the ad recall for a visual metaphorical ad together with other visual and verbal rhetorical ads as well as literal ads. Results from this study showed that recall was about twice as likely for ads with figures compared to non-figurative ads. Furthermore, results from this study indicated that tropes (e.g. visual metaphor) led to higher level of recall compared to schemes.

5.4. Previous research on the effect of Forceville's (1996) typology on consumer response.

Table 11: Summary of Previous Research on the Effect of Forceville (1996) Typology

Study	Effects Tested	Main Results
Van Mulken, Le Pair	. Perceived complexity	. Complexity
and Forceville (2010)	.Comprehension	No metaphor < juxtaposition metaphor < fusion
	.Appreciation	metaphor< replacement metaphor.
		. Appreciation

Gkiouzepas and Hogg	. Comprehension	Replacement metaphor <juxtaposition (subjective)<="" .="" <="" comprehension="" fusion="" metaphor="" metaphor.="" metaphors<="" non="" th="" understood="" visual=""></juxtaposition>
(2011) – Study one	. Elaboration . Ad liking . Brand liking	juxtaposition metaphor = fusion metaphor . Elaboration, ad liking Juxtaposition metaphor < fusion metaphor (in low conceptual tension condition)
Gkiouzepas and Hogg (2011) – Study two	Comprehension Elaboration Ad liking Brand liking	. Elaboration, comprehension (subjective) Juxtaposition metaphor < fusion metaphor (in low conceptual tension condition) . Scores for ad liking for fusion versus juxtaposition metaphor varied between the different ads.
Madupu, Sen, and Ranganathan, (2013). Van Mulken, Hooft and	Comprehension Elaboration Ad liking (objective) metaphor	Elaboration fusion metaphor and replacement < juxtaposition metaphor Comprehension, ad liking fusion metaphor < juxtaposition metaphor and replacement metaphor. Ad appreciation
Nederstigt, (2014).	comprehension . Ad appreciation	no metaphor < visual metaphor . Comprehension mediated the effect of visual metaphor on appreciation. . Ad appreciation when metaphor is comprehended. replacement metaphor < juxtaposition metaphor < fusion metaphor
Mohanty and Ratneshawar (2015) – Study one	. Subjective comprehension . Moderators: need for cognition (NFC), information processing type	Subjective comprehension The higher incongruity visual metaphor < lower incongruity visual metaphor NFC was positively related to subjective ad comprehension. There was a significant two-way interaction between NFC and incongruity.

		. NFC had a significant positive relationship
		with subjective ad comprehension for fusion
Mohanty and	. Subjective	. Subjective comprehension
Ratneshawar, (2015) -	comprehension	The higher incongruity visual metaphor < lower
Study two	. Moderators: need for	incongruity visual metaphor
	cognition, information	. Item type of processing < relational type of
	processing type.	processing

Previous research conducted on the effect of Forceville (1996) typology on consumer response is very limited. More specifically there are only five academic papers that have investigated and compared the effect of some of the types of visual metaphor proposed by Forceville (1996) on consumer response to advertising. A critical discussion of the studies described in these five papers will be presented in the following paragraphs.

Paper one: van Mulken, Le Pair, and Forceville (2010)

van Mulken, Le Pair, and Forceville (2010) investigated the impact of perceived complexity and comprehension on the appreciation (i.e. liking) of visual metaphor in advertising across three European countries. In this study the authors used mock ads depicting three different types of visual metaphor proposed by Forceville (1996). These types are juxtaposition metaphor, fusion metaphor and replacement metaphor. The hypothesis developed in this study regarding the expected differences with regards to the effect of three types of visual metaphor were mainly based on the theorization of Phillips and McQuarrie (2004) regarding the perceived complexity of the metaphor visual structure as well as the relevance theory (Sperber and Wilson, 1995). Van Mulken, Le Pair, and Forceville (2010) predicted that less complex visual metaphors (e.g. juxtaposition) will be liked less than relatively more complex metaphors (e.g. fusion). More complex metaphors require more cognitive effort to be comprehended by consumers. The more the effort exerted the more the pleasure derived and felt by consumers once the same visual metaphor is comprehended. According to the same authors, however, this effort is possible up to a certain extent. In the case of highly complex (or difficult to comprehend) visual metaphors (e.g. replacement metaphor) consumers will most probably opt out and fail to formulate a meaningful interpretation.

This in turn will negatively affect their appreciation of this highly demanding visual metaphor. This means that replacement metaphor will be liked less than fusion metaphor. This study was conducted across three different cultures, French, Dutch and Spanish.

Results from this study showed that participants clearly differentiated between the complexity of No Metaphor – perceived as the least complex type, compared on the one hand to juxtaposition metaphor and fusion metaphor and replacement metaphor on the other hand. Indeed, replacement metaphor was perceived as the most complex type. Pairwise comparisons showed that Dutch and French participant perceived fusion metaphor and juxtaposition metaphor to be equal with regards to their complexity. While only the Spanish participants considered Juxtaposition metaphor to be less complex than fusion metaphor. As predicted results showed that No metaphor was least appreciated, followed by replacement metaphor. Juxtaposition metaphor was appreciated more than replacement metaphor and fusion metaphor scored the highest with regards to appreciation. Contrary to what was hypothesized perceived complexity was negatively correlated with appreciation of fully understood metaphors. Also, although understood metaphors were preferred to the ones which were not understood. Contrary to what was predicted this did not differ in terms of the type of visual metaphor.

The ads used in this study were for the same product category which is cars. In these ads, logos, slogans, and brand names were removed. This was done to avoid for the influence of place, size, and font type on the evaluation of the ads. Control ads were also added to represent visual non-metaphorical ads. The measure used in this experiment to operationalize complexity was a semantic differential 7-point scale anchored with the following items 'straightforward-unclear', 'easy to understand- difficult to understand'. From a closer look to the aforementioned items, it could be seen that this scale is actually measuring subjective comprehension of the ad and not complexity as such. In other words, complexity as defined in this specific study is referring to the degree of difficulty in understanding or comprehending the ad.

In fact, the first item used for this scale (easy to understand/difficult to understand) as well as the word 'straightforward' in the second item of the same scale, were identical to the items used to measure comprehension in the study conducted by McQuarrie and Mick (1999), and which was again related to the effect of visual rhetorical figures in advertising (including visual metaphor) on consumer response. Comprehension in this study conducted by van Mulken, Le Pair and Forceville (2010) was operationalized by providing a short explanation of a metaphorical comparison which was referring to a replacement metaphor. Participants were then asked whether or not they could recognize a comparison in the ad and if the answer was yes they were prompted to a gap filling question that asked them to complete the comparison. If participants were not able to guess the visualized comparison, they were then being prodded with commentary that would identify the specific metaphorical comparison.

Participants would then be asked whether they could see this prodded comparison and they would have the choice to state whether they could see it or not based on this commentary. From the aforementioned it could be said that comprehension as defined in this study is basically referring to metaphor comprehension. The way the question is formulated, however, is firstly time consuming and it is not really tapping into neither subjective nor objective metaphor comprehension. For this reason, it is believed that it is not the best way to measure comprehension and more specifically metaphor comprehension. Appreciation or in other words ad liking was measured with a 7 point Likert scale (My overall opinion of this advertisement is positive – negative).

Paper two: Gkiouzepas and Hogg (2011)

Gkiouzepas and Hogg (2011) conducted two studies. In their first study, they compared juxtaposition visual to fusion visuals (or as referred to by the authors synthesis visuals) on a different consumer response outcomes such comprehension, elaboration, ad liking and brand liking. Results showed that elaboration under fusion condition was greater than under juxtaposition conditions but only when conceptual tension was low. With regards to comprehension, subjective comprehension was measured for both juxtaposition visuals and fusion visuals and no significant interaction was found neither in low conceptual tension condition nor in high conceptual tension condition. Neither of the two types of visual metaphor was seen as more difficult to comprehend (subjectively). With regards to attitude toward the ad, the same authors predicted that fusion visuals were more deviant as visual structures and hence more inviting. Therefore, would be better liked once interpreted by consumers. The reasoning given for this was that consumers would have a greater sense of mastery. Therefore, will be more able to relate to the creative product embedded in the ad once interpreted. Results confirmed this prediction.

These results were somehow consistent with previous research that was conducted by Paracchio and Meyers-Levy (1994). This study showed that ambiguity induced by single cropped visual objects (which were seen to resemble and relate more to fusion visuals) increased affect (or liking) even if consumers had no intention to interpret a metaphor. Considering the well-established relationship between attitude toward the ad and attitude toward the brand, it was hypothesized that fusion visuals will provoke more favorable attitude toward the brand compared to juxtaposition visuals in low (versus high) conceptual tension condition. Results fully supported the hypothesis regarding attitude toward the ad, and only partially supported the same prediction regarding attitude the brand.

In their second study, Gkiouzepas and Hogg (2011) were concerned to explore whether or not the results of their first study can be extended when using real ads.

It is worth noting at this point that the ads in both the first and the second study conducted by Gkiouzepas and Hogg (2011) included a headline that identified the advertised brand's key attribute. Results of this second study in which real ads were used showed that fusion visuals had a more positive effect with regards to elaboration as opposed to juxtaposition visuals in the low conceptual tension condition. Moreover, subjective comprehension seemed to be higher for juxtaposition visuals compared to fusion visuals in the low conceptual tension condition but not in the high conceptual tension condition (Gkiouzepas and Hogg, 2011).

With regards to attitude toward the ad a closer look at the means for some of the ads under study revealed that the juxtaposition visuals were liked more than the fusion visuals for one ad. While for other two low conceptual tension ads, fusion visuals were liked more compared to the juxtaposition counterparts. It is important to note, here, however, that although in this study the authors focused more object's mode of representation dimension (i.e. Juxtaposition visuals versus fusion visuals) rather than the visual scenario dimension (i.e. realistic symbiosis, replacement, artificial symbiosis) the later dimension was still manipulated in the stimuli used. Therefore, the results of this study might have been affected by the inclusion of this dimension. Moreover, replacement visual structure which is seen as a visual scenario dimension in the case of this study was amalgamated with fusion and juxtaposition visual structures (modes of representation) in the stimuli used. This again might have affected the results of this study as well as the comparability of these results to the other studies that investigated the effect of the same types of visual metaphor.

Paper Three: Madupu, Sen, and Ranganthan (2013)

Madupu, Sen and Ranganathan (2013), investigated and compared the impact of the three types of visual metaphor on ad liking, elaboration and comprehension, using real ads which were slightly altered. The hypothesis proposed in this study were again based on the Phillips and McQuarrie (2004) theorization.

The first hypothesis predicted that ad liking will increase from juxtaposition metaphor to fusion metaphor to replacement metaphor. This hypothesis was partially supported. Juxtaposition metaphor was significantly more liked compared to fusion metaphor. Liking for juxtaposition metaphor was not significantly different, however, than replacement metaphor. Moreover, replacement metaphor led to greater ad liking as opposed to fusion metaphor, as predicted. The second hypothesis predicted that cognitive elaboration will also increase from juxtaposition to fusion to replacement metaphor. This hypothesis was not supported as juxtaposition metaphor elicited the highest cognitive elaboration compared to fusion metaphor and replacement metaphor which elicited the same amount of elaboration.

The third hypothesis predicted that comprehension will decrease from juxtaposition metaphor to fusion metaphor to replacement metaphor. Results partially supported this hypothesis because indeed juxtaposition metaphor was better comprehended than fusion metaphor. Difference in comprehension were not significant, however, between juxtaposition metaphor and replacement metaphor. Moreover, subjective comprehension level here again in this study was measured as in McQuarrie and Mick (1999).

Paper Four: van Mulken, van Hooft, and Nederstigt (2014)

In a more recent study conducted by van Mulken, van Hooft, and Nederstigt (2014. Based again on the predictions made by Phillips and McQuarrie (2004), the authors in this study presupposed that this difficulty in comprehending the visual metaphor increases while moving from no metaphor to juxtaposition metaphor to fusion metaphor to replacement metaphor.

The stimuli used in this study were mock ads in which the same product was depicted in different forms corresponding to the different types of visual metaphor (juxtaposition metaphor, fusion metaphor and replacement metaphor). The replacement metaphor version of the ad did not include a visual representation of the target product. Moreover, a fictitious cliché brand name was used to make clear that the depicted element is a deviant pictorial element and not a simple product representation.

Comprehension as operationalized in this study, measured objective metaphor comprehension through a multiple choice question in which only one answer was considered correct. Moreover, Results confirmed the predictions made regarding the positive effect that visual metaphor has on ad comprehension and appreciation. As expected advertisements containing a visual metaphor led to higher appreciation compared to visual non-metaphorical advertisements. Results in this study also supported the mediating effect of comprehension on visual metaphor appreciation (or liking). Furthermore, opposite to the results of the previous study conducted by van Mulken, Le Pair, and Forceville (2010), in this study the visual metaphor type seemed to have an effect. More specifically, fusion metaphor was appreciated more than juxtaposition metaphor when comprehended. Replacement metaphor on the other hand was appreciated less than juxtaposition when comprehended.

Paper Five: Mohanty and Ratneshwar (2015)

The most recent study concerned with the difference of the effect of visual metaphor particularly on subjective comprehension was conducted by Mohanty and Ratneshwar (2015).

This research examined across three studies how the degree of incongruity of a metaphor, need for cognition (NFC) and type of processing affect the subjective comprehension of visual metaphor ads. This study was the first study to acknowledge the notion of subjective comprehension and specify it as opposed to referring to it more generically as comprehension. Since Mick's (1992) study that differentiated between objective comprehension and subjective comprehension as related to advertising, researchers had not fully acknowledged this differentiation. In most cases the generic term comprehension was used but what was actually measured in these studies was subjective comprehension (e.g. McQuarrie and Mick, 1999).

Moreover, as far as the visual metaphor research is concerned this study conducted by Mohanty and Ratneshwar (2015) was the first to adequately specify the level of comprehension actually measured. Subjective comprehension in this study was conceptualized as "the degree to which an individual feels he or she understood and grasped the meaning of an ad" (Mohanty and Ratneshwar, 2014, pp.2). The authors acknowledged the importance of subjective comprehension and its relation to attitude formation. Indeed, it was expected that subjective comprehension can have a strong impact on attitude formation. The reason for this is that this level of comprehension reflects what is 'subjectively' comprehended according to consumer's perceptions. In other words, the extent to which consumers 'think' that they have understood the ad and which might not reflect their actual understanding of the intended meaning of the ad.

What is important here, however, is the fact that in this case consumers' the level of comprehension is the one formed by consumers themselves. Therefore, it is the one that is mostly going to influence their attitudes and how they will eventually feel about the ad based on what they 'think' they have understood. From the aforementioned it could be seen that this rather 'subjective' level of comprehension is the one that is most 'objectively' going to affect consumers' attitudes toward the ad and eventually their behaviors. The reason for this is that what consumers 'think' they know in this case is more important than what they 'actually' objectively know. This is vital particularly in the case of advertising. No one is going to 'correct' or reveal to consumers at the time of their natural exposure to the ad what was the intended ad message (that they might not have actually understood accurately). This in turn implies that consumer's attitudes will be *primarily* driven according to what they 'think' they have understood. In other words, it will be driven primarily by their *subjective comprehension* of the ad.

This study aimed to answer two important questions. These questions are the following: 1) "What is the relationship between incongruity in a visual metaphor and subjective comprehension?" 2) "How this relationship is influenced by the message recipient's motivation to process information and the type of information processing?" (Mohanty and Ratneshwar, 2014, pp.2). It is important to note here that incongruity in this research was operationalized in two different ways. In the first study it was operationalized in terms of the visual structure (i.e. juxtaposition visual versus fusion visual).

The first hypothesis related to his study predicted that "subjective comprehension will be lower for higher (versus lower) incongruity VM ads" (Mohanty and Ratneshwar, 2014, pp.3). The second hypothesis predicted that "Subjective ad comprehension will be higher for high NFC (versus low-NFC) individuals" (Mohanty and Ratneshwar, 2014, pp.3). Hypothesis three predicted that "There will be a two-way interaction between NFC and incongruity such that the increase in subjective ad comprehension for high-NFC (versus low-NFC) individuals will be greater for higher incongruity VM ads than lower incongruity VM ads" (Mohanty and Ratneshwar, 2014, pp.3).

All three aforementioned hypotheses were supported. Finally, the fourth hypothesis predicted that "There will be a two-way interaction between type of processing and incongruity such that the increase in subjective ad comprehension for relational (versus item) processing will be greater for higher incongruity VM ads than lower incongruity VM ads" (Mohanty and Ratneshwar, 2015, pp.4). This hypothesis was not supported.

The second study in this same paper was identical to the first one with the only difference that incongruity was operationalized differently in the stimuli used. In this study it was operationalized in terms of semantic distance between the two metaphorical objects.

The semantic distance here refers to the conceptual tension or dissimilarity between the source and the target of the visual metaphor and which were discussed above in Gkiouzepas and Hogg's (2011) study. Incongruity manipulation here complied with the principles of Tourangeau and Sternberg (1981), who suggested incongruity is determined by the semantic distance between the domains of the source and target terms of the metaphor. More specifically these authors argued that the more the semantic distance, the greater the perceived incongruity of the same visual metaphor (Mohanty and Ratneshwar, 2015). Please see figure 26 for the stimuli that were used in this study. In this figure we can see that, the level of incongruity was manipulated and varied depending on the semantic distance between two alternative source terms, either by spring of water (in the low incongruity ad) or a loaf of bread on a long-handled wooden baking paddle (in high incongruity ad) and the constant target domain (bottled water).

In this way the idea of 'freshness' was metaphorically transferred from the source (spring water or fresh bread on the wooden baking paddle) to the brand of bottled water being advertised. There was a verbal claim accompanying the visual in both ads stating "the freshest bottled water in the store!".

Figure 26: Advertising Stimuli used by Mohanty and Ratneshwar (2015)



Results supported the first aforementioned hypothesis, but did not support the second and third hypothesis mentioned above. A possible explanation for the lack of support as related these hypothesis was the insufficient variance in NFG among the supposedly and expected homogeneous student sample (Mohanty and Ratneshwar, 2015). Finally, the fourth hypothesis was supported in this study.

The two different ways by which incongruity is defined in these aforementioned studies captures two sources. The perceptual source and the schematic source of incongruity. Example of the perceptual source of incongruity as related to visual metaphor is the metaphor's visual structure. Based on previous work (i.e. Gkiouzepas and Hogg, 2011), Mohanty and Ratneshwar (2015), state that fusion metaphor is perceived to be more incongruous than juxtaposition metaphor. In other words, fusing the objects together or placing them side by side can increase the perceived level of incongruity. The schematic source of incongruity on the other hand according to the same authors has to do with the 'semantic distance' between the source and target or the two metaphorical objects (e.g. fresh loaf of bread and fresh bottled water).

In the following section the relation between the aforementioned concepts (e.g. conceptual tension, incongruity, complexity, etc.) as related to visual metaphor and its effect on consumer response will be explained. The discussion will shed light on what is not clear with regards to all these concepts and how they relate to each other in the context of the previous research studies presented above.

Based on the Previous Research, The Five Papers - What do we still need to know?

As mentioned above concepts that are embodied in the construction of the different visual metaphors like for example semantic distance essentially also represent the conceptual tension between the two metaphorical objects. Furthermore, also the two sources of incongruity (perceptual and schematic) working individually or in unison are the same concepts that cause the 'deviation' that consumers experience with regards to their expectations when exposed to these different visual metaphors.

This same deviation is what is also referred to as 'artful deviation' which represents also an essential ingredient in the definition of visual metaphor. According to McQuarrie and Mick (1996) visual metaphors fundamentally represent artful deviations from expectations (Mohanty and Ratneshwar, 2015, pp. 3). Moreover, it can be seen that all the aforementioned concepts (e.g. artful deviation, incongruity, visual structure, semantic distance) contribute and feed what is often referred to as the 'complexity' of the visual metaphor (Phillips and McQaurrie, 2004; Van Mulken, Le Pair, and Forceville, 2010).

As mentioned earlier, 'complexity' is operationalized as 'difficulty experienced' by consumers in disentangling the two terms of the visual metaphor for the purpose of firstly identifying it and also comprehending it. Moreover, this same comprehension refers to the comprehension of the visual metaphor as 'perceived' by the consumers themselves and not necessarily as intended by the advertiser. Therefore, this comprehension represents essentially the subjective comprehension of the visual metaphor.

From the aforementioned discussion it can be said that all the concepts that 'tailor' a visual metaphor and are vital for its 'differentiation' (e.g. metaphor visual structure) are also in the meanwhile drivers for the difficulty experienced by consumers in comprehending this same visual metaphor primarily on the subjective level and subsequently on the objective level. Furthermore, there are some assumed differences between all these above mentioned concepts.

These differences are not clear on a theoretical level and also as related to how these concepts are operationalized or measured. This lack of differentiation makes them appear overlapping in terms of their role and effect. This 'role' can be summarized in their contribution to the 'complexity' of the visual metaphor which is essentially the difficulty of comprehending the visual metaphor. Indeed, there is a clear lack of differentiation between the definitions given to these supposedly different concepts.

In addition, the five above-mentioned papers represent very limited research. Moreover, each study has taken a different approach in defining and investigating these concepts. The results of these few studies are also contradictive to a certain extend. This in turn creates a very vague picture with regards to the difference between these different 'types' of visual metaphor. This vagueness is mostly apparent in the 'effect' these different types have on the different consumer responses to advertising. It is also important to note here that the operationalization of these different concepts only 'scratches the surface' of these constructs, but it does not really 'tell' anything about 'how' consumers and in terms of 'what' do they understand and also express their understanding of these concepts. In other words, 'how' do consumers actually 'see' these differences between the visual metaphors? For example: in terms of how they are 'constructed' (e.g. visual structure)? In terms of the specific 'characteristics' of the two metaphorical objects? (and how these characteristics are 'defined' and categorized by consumers).

The answers to these questions can aid in the better understanding of the following:

1) the different types of visual metaphor 2) the key dimensions of the factors that affect the difficulty experienced in comprehending these different types (e.g. what it actually meant with the semantic distance between the two objects of the metaphor? the two objects are different or related in terms of what?).

This in turn can contribute to the better understanding of the more essential differences between the different types of visual metaphor proposed by Forceville (1996) and the elements that determine these differences (apart from or in coordination with their visual structure). Moreover, it will also aid in understanding how these differences as encoded by advertising creatives are actually understood by consumers. Moreover, how this understanding is translated in the actual effect that these different types of visual metaphor have on consumer responses and overall advertising effectiveness. Last but not least, this better understanding will in turn contribute in providing more valid and effective operational definitions for these different concepts seen as influencing consumer response to the different types of visual metaphor.

The measures previously used (e.g. scales for measuring visual metaphor's conceptual tension) do not really capture the 'essence' and the dimensions of these constructs. More importantly they do not reflect the consumers' point of view. In other words, the dimensions that consumers themselves actually 'see' in their process of differentiating between the different visual metaphors. This differentiation can be different from that proposed by the creators of the metaphors both theorists and practitioners.

5.5. Moderating Factors

There is only around six studies that have recognized the existence of possible moderating factors that could moderate the effect of visual metaphor in advertising on consumer response (McQuarrie and Mick, 1999; Phillips and McQuarrie, 2004; Jeong, 2008; Ma, 2008; Myers, Faber, Duff and Lutchyn 2011; Chang and Yen; 2013).

From these six studies only three studies have empirically tested the effect of these moderating factors. It is important to study these moderating factors in order to identify how and to what extent these factors could indeed influence the effect of visual metaphor in advertising on consumer response. Examples of these moderating factors are such as: style of processing (SOP), cultural competency, familiarity with product category or benefits and need for cognition (NFC).

McQuarrie and Mick (1999) defined, operationalized and empirically tested the impact of consumer competence on consumer response to visual rhetorical figures (including visual metaphor) in advertising. Visual metaphor was represented by only one advertisement. The specific type of visual metaphor depicted in this advertisement was a replacement metaphor. Moreover, in this study consumer competence was defined in terms of three dimensions: consumer style of processing (SOP) which refers to consumer propensity to engage in the processing of visual (or verbal) information.

The second dimension of consumer competence defined was the familiarity with product category being advertised (McQuarrie and Mick, 1999). Greater product familiarity here as suggested by the authors implies more developed knowledge related to issues mentioned in the ads. This also implies increased comprehension of the meanings implied by the visual figures and hence increased pleasure. The third and most important dimension of consumer competence mentioned was the cultural competency which broadly refers to the cultural knowledge consumer use in processing the advertisements (McQuarrie and Mick, 1999). Scott (1994) referred to this cultural knowledge as shared knowledge of various vocabularies and conventions as well as common experience.

Phillips and McQuarrie (2004) suggest that cultural knowledge and familiarity with the particular genre of advertising (i.e. heavy magazine readers) contribute to consumer competence. Results from McQuarrie and Mick's (1999) study showed that propensity to process visual information (SOP) had no effect on consumer response to visual figures. The authors suggested that reasons for this result could be the saliency of the figures used or the simplicity of the stimuli. Therefore, no special propensity was necessary to comprehend and respond to the visual figures.

Results might have been different if much more complex visual stimuli were used. Moreover, results also showed that product/benefit familiarity had no impact on consumer response. This according again to the authors implies that one does not have to be a product user or a prospective purchaser in order to understand the visual figures that were used to advertise the products in this study. The authors argue that the use of an alternative technical product category and the application of a visual figure that was more intimately entwined with the specialized meanings associated with that product category might have showed an impact for product/benefit familiarity on consumer response (McQuarrie and Mick, 1999). This dimension of product/benefit familiarity is not well defined in the first place, meaning that it could be seen more as an element of cultural competence rather than a separate dimension in itself.

Indeed, the only dimension of consumer competence that emerged as an important moderating factor in this study was cultural competence. Cultural competence in this study was operationalized on the basis of whether participant's original culture was American or foreign (McQuarrie and Mick, 1999).

American participants both male and female were more active and capable readers of these visual figures especially visual tropes (e.g. visual metaphor). One important finding is that it is necessary for consumers to be acculturated within the rhetorical systems within which the advertising text (in this case visual text) is situated. This is particularly correct for tropes (e.g. visual metaphors) that are strongly dependent on sociocultural semantic knowledge (McQuarrie and Mick, 1999).

Myers, Faber, Duff and Lutchyn (2011) examined the interplay of the creative visual and verbal elements within an ad as well as the interaction of visual metaphor techniques and consumer processing styles. In this study the authors built on previous research related to individual's preference toward visual and verbal formats. Moreover, they based this differentiation and measured using the style of processing scale (SOP) that was constructed by Childers et al (1985). Style of processing is defined as "the propensity to engage in verbal/ or visual modality of processing" (Myers, Faber, Duff and Lutchyn (2011).

More specifically these authors predicted that the verbal style consumers will have a more positive response to ads which include body copy when they do not contain a headline (versus ads with headline), while the same response as related to visual style processors will not be as positive. The reasoning behind this was that verbal style individuals are more likely to read product related information provided in the body copy of the ad and used this information to comprehend the visual metaphor. Considering this then these same individuals will be more likely to be turned off since they would have already obtained sufficient clue to the meaning of the visual from the body copy.

This means that the headline may appear as an extra additional verbal element that would prevent them from the pleasure of solving and interpreting the meaning of the visual metaphor in the ad. Results from this study showed a significant interaction effect for the use of a supporting headline and individual's style of processing, indicating by this, that indeed style of processing (SOP) moderates the effect of a supporting headline on the number of positive thoughts consumers make about the ad.

Chang and Yen (2013) differentiated between what they referred to as explicit and implicit metaphor. They based this differentiation on whether or not the product's likeness is incorporated into the metaphoric picture. According to the same authors an explicit metaphor is clear about its subject. This in turn means that the viewer can clearly see the product as part of the metaphoric display. An implicit metaphor on the other hand is the one in which the product is not part of the metaphoric illustration and maybe depicted in a less prominent place in the ad (Chang and Yen, 2013). In this same study Need for Cognition (NFC) was tested for its moderating effect with regards to consumers' response to visual metaphor in advertising. Need for cognition (NFC) is defined as "an individual tendency to engage in and enjoy effortful thinking" (Cacioppo and Petty, 1982, as cited in Chang and Yen, 2013, pp.81). More specifically, in this study the authors made a number of predictions related to this moderating effect. They made the following predictions: 1) Purchase intentions and positive attitude toward the advertised brand will both be higher for individuals with high NFC when exposed to an ad for a hedonic product employing an implicit metaphor rather than an explicit metaphor. 2) Purchase intentions and positive attitude toward the ad will be higher for consumers with high NFC when exposed to explicit metaphor, rather than an implicit metaphor in an ad for a utilitarian product.

3) There will be no influence on attitude toward the advertised brand as well as the purchase intentions for low NFC individuals when exposed to either implicit or explicit type of metaphor in an ad for either a hedonic or a utilitarian product. Results supported all the

aforementioned predictions confirming the moderating effect that NFC plays in interaction with other factors such as product type. A new potential moderating factor that could moderate the effect of visual metaphor on consumer response is ad viewing time. It will be presented in the following section.

Ad Viewing Time

There are a number of studies that have investigated the effect of looking time on how consumers evaluate visuals (i.e. landscape photographs) (e.g. Lackrat and Bakan, 1965; Watman, 1967; Morrison and Dainoff, 1972). Lackrat and Bakan (1965) investigated the time spent looking at visuals which vary from high, low, and middle complexity (Leckart and Bakan, 1965). Participants were asked to look at the picture and when finishing with looking they were asked to rate the picture on 3-point complexity scale (High, medium, low). Results from this study showed that the mean looking time was 13.3, 11.0, 7.0 sec. respectively. This indicated that complexity of the visual was judged positively based on the looking time. This study generalized results from a previous research which also investigated the relationship between complexity and looking time but for designs and line drawings (Leckart and Bakan, 1965). Watman (1967) replicated this study. Results showed that the mean looking time was 8.3, 7.4, 6.5 sec., respectively, indicating that complexity as judged by participants was positively related to looking times and confirming the main findings of the Leckart and Bakan (1965) study. Morrison and Dainoff (1972) further supported these results by showing that more complex ads were looked at for a longer time. Finally, Houston, Childers and Heckler (1987), stated that reduction of ad exposure time affects message recall negatively. The reason for this is that consumers under reduced ad exposure time elaborate less. Therefore, message information is held in working memory for a shorter time.

In the visual metaphor literature, there is still no research that has investigated the effect of ad viewing time on consumer response to advertising. In this thesis ad viewing time will be introduced as a possible moderating factor that could moderate consumer's elaboration, and comprehension of visual metaphor in advertising.

Considering the above mentioned this thesis aims to answer the following research question:

 What is the moderating effect of ad viewing time on consumer response to visual metaphor in advertising? Considering the above-mentioned the following hypotheses are also put forward relating to this moderating effect that ad viewing time will have on consumer' responses to visual metaphor in advertising.

H1: Ad viewing time will moderate the effect of visual metaphor on elaboration.

H2: Ad viewing time will moderate the effect of visual metaphor on subjective comprehension.

H3: Ad viewing time will moderate the effect of visual metaphor on objective comprehension.

5.6. The Gap in the Literature

Forceville (1996) typology is a basic yet a very important typology of visual metaphor in advertising for several reasons. Firstly, the differences between the different types are clear and explicit. Secondly, these different visual structures proposed by Forceville have been used by other researchers as a base to develop their own typologies later on. Thirdly, it is the only typology that has been empirically tested by researchers other than Forceville himelf. Other typologies were either not tested or tested mainly by their authors. Fourthly, the types proposed by Forceville (1996) are easier to manipulate and operationalize compared to other categorizations.

Fifthly, results from empirical research have proved that indeed there are difference in the effects on consumer response between these different types. However, not all the four types proposed by Forceville have been included in this comparison. One reason for this could be the difficulty related to the operationalization of certain types (e.g. verbo-pictorial metaphor).

Only five academic papers have compared the effect of the different types proposed by Forceville (1996), as follows: two studies compared juxtaposition metaphor to fusion metaphor to replacement metaphor to visual non-metaphorical using mock ads (van Mulken, Le Pair, and Forceville, 2010; van Mulken, van Hooft, and Nederstigt, 2014). One study compared juxtaposition metaphor to fusion metaphor to replacement metaphor using real ads (Madupu, Sen and Rangathan, 2013). Two studies compared juxtaposition metaphor to fusion metaphor using mock ads (Gkiouzepas and Hogg, 2011; Mohanty and Ratenshwar, 2015). One study compared juxtaposition metaphor to fusion metaphor using real ads (Gkiouzepas and Hogg, 2011). Parts of some of these aforementioned studies have been briefly discussed above.

Moreover, these five papers will be critically reviewed in detail in chapter five of this thesis related to the experimental research. The main gap in the literature is related to three main reasons representing also the rationale behind conducting this research project. Firstly, the scarcity of research studies conducted to compare the effect of the different types of visual metaphors proposed by Forceville (1996). As mentioned earlier, only five papers have compared the effect of these different types of visual metaphor on consumer response to advertising. In addition to the limited number of studies results of these studies were also contradictive and hence cannot lead to definite and generalizable conclusions. Secondly, no research has tested the effect of the verbo-pictorial metaphor type proposed by Forceville (1996) in comparison to the other types. Thirdly, no research study has tested the moderating effect of ad viewing time on consumer response to visual metaphor in advertising. The aforementioned three reasons represent the main pillars of the research gap to be covered in this thesis. In addition, this research also includes a number of consumer responses to visual metaphor in advertising that have not been tested before (e.g. ad recall, perceived effectiveness of the ad). Last but not least this research also provides an update regarding the importance of visual metaphor as a rhetorical figure commonly used in print advertising.

5.7. The Derived Conceptual Model

A stated earlier previous research showed that visual metaphor has an effect on different consumer responses such as elaboration, comprehension, attitude toward the ad, ad credibility, attitude toward the brand, and purchase intention (McQuarrie and Mick, 1999; Gkiouzepas and Hogg, 2011; Jeong, 2008; Sopory and Dillard, 2002; Ma 2008; Phillips, 1997; Mick and Politi, 1989; Morgan and Reichert, 1999; van Mulken, Pair, and Forceville, 2010; McQaurrie and Phillips, 2005).

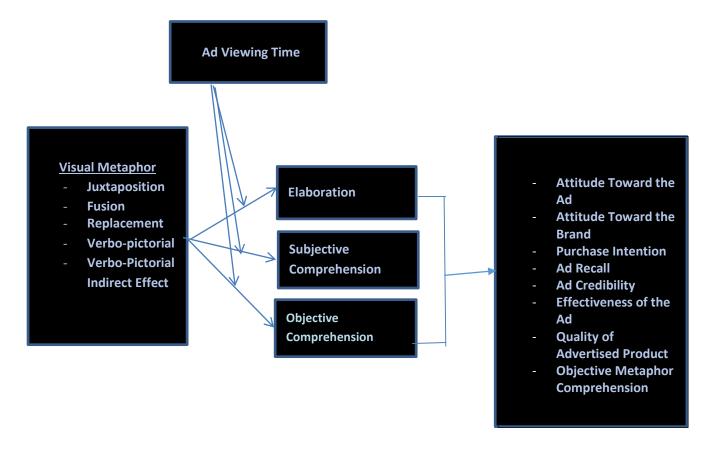
The mediating effect of elaboration and comprehension on consumer response to advertising in general and visual metaphor more specifically has also been supported by previous research (Meyers-levy and Malaviya, 1999; Petty and Cacioppo and Schumann, 1983; McQuarrie and Mick, 1999; Sopory and Dillard, 2002; Kim, Baek and Choi; 2012; Huhamann, 2007; Jenis and Kelley, 1953; McGuarrie, 1972; Ratneshwar and Chaiken, 1991; Chang, 2009; Roehm and Strental, 2001; Lee and Aaker, 2004; Chang, 2013; Smith, Chen and Yang, 2008).

In the conceptual model proposed in this thesis elaboration and comprehension are presented as variables that mediate the effect of the different types of visual metaphor proposed by Forceville (1996) on consumer response. Moreover, the model also

distinguishes between the two levels of comprehension, subjective comprehension and objective comprehension (Mick, 1992), and presents each as a mediating variable.

These mediation effects are tested on a number of final response outcomes such as attitude toward the ad, ad credibility, attitude toward the brand, and purchase intention. In addition to some outcomes that have not been tested before in previous research on the effect of visual metaphor such as: effectiveness of the ad, and perceived quality of advertised product. In addition, objective metaphor comprehension and ad recall are also measured as response outcomes. Finally, based on previous research on the effect of ad viewing time (e.g., Lackrat and Bakan, 1965; Watman, 1967; Morrison and Dainoff, 1972), this variable is introduced as a factor that moderates the effect of the different types of visual metaphor on the three mediating variables, elaboration, subjective comprehension and objective comprehension. Based on the aforementioned, the following conceptual model is derived and proposed for the purpose of this thesis, as shown in figure 27 below.

Figure 27: The Conceptual Model



Chapter 6

Experimental Research

The Effect of Visual Metaphor on Advertising Response

6.1. Introduction

This chapter aims to answer the second overall research question which is: How do visual metaphor engage the consumer and elicits favourable responses to different print advertisements? This overall research question is divided into the following sub-questions:

a) which type of visual metaphor is the most effective with regards to consumer responses (i.e. juxtaposition metaphor, fusion metaphor, replacement metaphor, verbo-pictorial metaphor, verbo-pictorial indirect effect metaphor)? b) What is the mediating effect of elaboration, subjective ad comprehension and objective ad comprehension? c) What is the moderating effect of ad viewing time?

Two experiments are conducted. The first experiment aims to answer research questions a and b. It uses real ads to compare the effect of the four types of visual metaphor proposed by Forceville (1996) in addition to verbo-pictorial indirect effect metaphor on consumer response. This experiment also tests the mediating effect of elaboration, subjective ad comprehension, and objective ad comprehension, on the following final response outcomes to visual metaphor in advertising: attitude toward the ad, ad credibility, effectiveness of the ad, attitude toward the brand, perceived quality of the advertised product as well as purchase intention. Moreover, it tests the effect of the five different types of visual metaphor on objective metaphor comprehension.

Replacement metaphor and verbo-pictorial metaphor which show the most significant difference with regards to their effect on consumer response, and more specifically consumer's subjective ad comprehension in experiment one, are chosen to be tested again for their effect in the second experiment. The second experiment answers research question c, and tests the moderating effect of ad viewing time on elaboration, subjective ad comprehension, and objective ad comprehension. In this experiment consumers' ad recall is also measured. This chapter starts with justifying the choice of experimental methodology for the purpose of answering the aforementioned research questions. Following that the details of experiment one will be presented. This presentation will include the purpose of the experiment, the rationale for it, its objectives, the hypothesis tested, the sample and advertising stimuli used, the method of administration, the data analysis, the results as well as the discussion. The same presentation will follow for experiment two. Finally, the chapter ends with a general discussion section.

6.2. Methodology

6.2.1. Why Experimental Research?

The overall research question that this chapter aims to answer is: How do visual metaphor engage the consumer and elicits favourable responses to different print advertisements? This overall research question is divided into the following three subquestions a) which type of visual metaphor is the most effective with regards to consumer responses (i.e. juxtaposition metaphor, fusion metaphor, replacement metaphor, verbopictorial metaphor, verbo-pictorial indirect effect metaphor)? b) What is the mediating effect of elaboration, subjective ad comprehension and objective ad comprehension? c) What is the moderating effect of ad viewing time? The rationale behind the methodological choice stems from the nature of these key aforementioned research questions. The experimental approach is used in this research study as it is the most adequate to identify causation. The reason for this is because cause-and-effect relationships can be isolated, as this approach permits one to observe the effects of systematically varying one or more variables (Christensen, 1980). Because of the ability of this approach to identify causation, it has become the prototype of scientific method used in the context of advertising and consumer research. Another reason for the adequacy of this approach is that experiments enable one to exercise the greatest degree of control over irrelevant variables. This is done by either eliminating the influence of these variables or holding their influence constant (Christensen, 1980). Experimental approach is also appropriate due to its ability to manipulate precisely one or more variables. Furthermore, this approach has in the past produced results that have lasted over time and also have stimulated further and new research (Christensen, 1980).

6.2.2. Why More Than One Experiment?

Instead of conducting one big experiment, it was decided to conduct two separate experiments with simpler experimental designs for the following reasons:

• Considering that participants will be assigned to each of the treatment condition at random, this means that the researcher will need as many groups of participants as the treatment conditions.

In this case it would be challenging for the researcher to find enough participants to ensure that each group has an appropriate sample size (Myers and Hansen 2012).

More treatments conditions will also demand more time to do the statistical analysis.

• The data resulting from complex designs cannot be easily interpreted (Myers and Hansen, 2012).

6.3. Experiment One

6.3.1. Introduction

In the previous chapter the limited research on the effect of Forceville (1996) of visual metaphor on consumer response to advertising was highlighted. Moreover, these five papers were critically discussed. Based on this discussion the following key points can be noted with regards to these five studies:

- Limited research: 5 papers represent very limited number of studies from which sound conclusions can be derived with regards to the differences in the effect of the specific types of visual metaphor. What adds to this is the differences in the focus of these studies which also contributes to these contradictive results.
- Focus on monomodal visual metaphors: previous research has neglected the fourth type of visual metaphor proposed by Forceville (1996) which is the verbo-pictorial metaphor type. This type is constructed out of the verbal part and a visual part. For this reason, it is a multimodal metaphor. Previous research has rather focused only on monomodal visual metaphors represented in the juxtaposition metaphor, fusion metaphor, and replacement metaphor.

In these visual metaphors the target and source constructing the metaphor are signaled by visual means only. The advertising stimuli, however, used in the studies mentioned above used verbal copy to anchor the visual metaphor tested in order to facilitate the comprehension of those metaphors. This verbal copy in this case, however, does not contribute to the construction of the visual metaphors as such.

- 2 Limited response variables investigated: the response variables measured in the previous studies are limited considering the large number of variables that could contribute to the effect of visual metaphor and hence to overall advertising effectiveness.
- 4 Weak operational definitions of constructs: As mentioned above many of the definitions provided with regards to concepts/factors that can influence the effect of visual metaphor on consumer response (e.g. conceptual tension) are not clear and do not grasp the essence of these concepts. This is mostly obvious with regards to how consumers themselves see and perceive these factors when comprehending and differentiating between the types of visual metaphor. Therefore, many of these current

definitions are not realistic and hence less valid. On other hand there is a lack of accurate differentiation between different response variables (e.g. objective comprehension versus subjective comprehension, ad comprehension versus metaphor comprehension).

- Absence of real ads: with the exception of the two studies in which real ads were used, all other studies described above used mock ads. Moreover, even these two studies used modified real ads as well as mock ads in combination with the real ads, making the external validity of the studies questionable. Therefore, visual metaphors as manipulated in previous research did not essentially consider how these different types are actually encoded in the real print ads and away from the very controlled layouts created specifically for research purposes.
- 6 **Verbal anchoring of visual metaphor**: in most of the advertising stimuli used in previous research, strong use of verbal copy accompanying and supporting the visual metaphors is noticed. This in turn might have influenced the results of these studies with regards to the effect of the different types of visual metaphor. The presence of these verbal elements might have affected particularly the results related to the visual metaphors' comprehension, as it can strongly facilitate it.
- Subjective Comprehension a key mediator: Previous research indicates that comprehension is a key mediating variable for the effect of visual metaphor on many other final response variables (e.g. attitude toward the ad, attitude toward the brand). In many cases, subjective comprehension, is mistakenly represented as comprehension in general. There is also often an overlap between metaphor comprehension and visual metaphor complexity. Metaphor complexity as defined and operationalized in all the studies discussed above is essentially measured in terms of consumers' subjective comprehension of the visual metaphor. Therefore, the term is actually misused in this context and its measure does not reflect the actual construct of complexity but rather that of subjective comprehension.

In the light of the above mentioned, the results from these aforementioned studies should be viewed with cautions both regarding the differences in the effect of the different types of visual metaphor. Moreover, also with regards to the different factors (e.g. conceptual tension) influencing this effect. This required cautiousness is not only related to the details of conducting these studies (e.g. stimuli used, conceptual definitions, measures, etc.) and hence their results.

It also relates to the present limited theorization (e.g. Phillips and McQuarrie, 2004) that backs up the hypothesis of these studies as well as the equally limited previous empirical research (e.g. Paracchio et al, 1994) on which these studies are based. Therefore, it could be said that previous theorization provides the theoretical background (Franklin, 2007) for the current experiment. Moreover, previous empirical research discussed above has also informed this current experiment. This experiment, however, will try to shed light and "scratch a bit deeper than the surface" with regards to the understanding of certain concepts and how they are actually perceived by consumers and hence affect them. How this is achieved will be explained in the following section.

How Experiment One Will Help Us Know What We Still Need to Know?

The questionnaire related to the current experiment will have two main purposes and hence parts. One main part will consist of questions that will relate to the different responses to visual metaphor in advertising. Some of which will be responses that previous research has also investigated (e.g. attitude toward the ad, attitude toward the brand, etc.). Other will be responses that have not been measured in previous studies and which are measured for the first time in the context of this project (e.g. perceived quality of advertised product, effectiveness of the ad). The hypothesis developed and which are going to be tested are informed by existing theorization (Philips and McQuarrie, 2004) and also the previous research discussed above.

Another smaller part of the questionnaire, however, will include open ended questions. These questions tap more into how participants interpret meanings from the different visual metaphorical ads. Similar questions have been used in previous research studies that investigate consumers' interpretations of advertising imagery in general (e.g. Mick and Politi, 1989) and also visual metaphorical ads more specifically (e.g. Phillips, 1997). These questions represent an open ended approach and are used in part of the current questionnaire.

The character and purpose of this open ended approach as used in this questionnaire is exploratory in nature. This approach will help participants more feely express their understanding of the visual ads as well as the visual metaphors employed in these ads. Through their answers it will be possible to understand what participants/consumers really 'see' in these ads. Moreover, it will uncover the specific 'clues' in these ads through which participants understand/interpret the ad's message as well as the visual metaphor meaning more specifically. From participants' answers it will be possible to identify the shared characteristics between the two metaphorical objects.

Moreover, it will also be possible to understand which of these shared characteristics are the most important. In other words, which of these shared characteristics do participants primarily 'see' and focus on when comprehending the visual metaphor. In terms of what do participants define and perceive this conceptual similarity between the two metaphorical objects (e.g. in terms of appearance, function, material, etc.). These open ended questions are stated later on in the measures section of this experiment.

In this way this experiment will grasp a bit deeper into the 'essence' of concepts such as conceptual similarity or as alternatively stated incongruity. It will uncover how these concepts are actually 'defined' and 'understood' from the consumers' perspective. The deeper understanding of these concepts, will better explain how these same concepts contribute to the difficulty experienced by consumers themselves in comprehending the visual metaphor and subsequently the ad's overall message.

Considering the above mentioned, this experiment will also address the ambiguities related to these concepts/measures in the previous studies, as discussed earlier.

Ambiguities that have also possibly contributed to the contradictive results of these studies. Moreover, including the multimodal type (e.g. verbo-pictorial metaphor) among the types tested in this experiment enriches the insight derived from it.

Objectives

More specifically this experiment has the following objectives:

- 1- Compare the effect of five different types of visual metaphor on consumer responses to advertising. These types are juxtaposition metaphor, fusion metaphor, replacement metaphor, verbo-pictorial metaphor and verbo-pictorial indirect effect metaphor.
- 2- Investigate the mediating effect of elaboration, subjective ad comprehension and objective ad comprehension on the final response outcomes.
- 3- Explore what consumers primarily focus on when comprehending the metaphorical relation between the two objects of the visual metaphor.

6.3.2 Proposed Hypotheses

The hypotheses developed and proposed in chapter five for each of the consumer response variables are re-stated below.

These proposed hypotheses as well as the design of this experiment is informed by theory and previous research (e.g. Phillips and McQuarrie, 2004). The following are the hypotheses to be tested in this experiment.

a) Elaboration

H1: The level of elaboration will increase gradually starting from verbo-pictorial, and moving through verbo-pictorial indirect effect, juxtaposition, fusion, and replacement metaphor.

H2: Elaboration will mediate the effect of visual metaphor on

- 2.1. Attitude toward the ad
- 2.2. Attitude toward the brand
- 2.3. Ad effectiveness
- 2.4. Purchase intention
- 2.5. Ad credibility
- 2.6. Perceived product quality
- b) Comprehension

H3: The level of subjective comprehension experienced by consumers will increase gradually starting from replacement, moving through fusion, juxtaposition, verbo-pictorial indirect effect and verbo-pictorial.

H4: The level of objective comprehension experienced by consumers will increase gradually starting from replacement, moving through fusion, juxtaposition, verbo-pictorial indirect effect and verbo-pictorial.

H5: Subjective comprehension will mediate the effect of visual metaphor on

- 5.1. Attitude toward the ad
- 5.2. Attitude toward the brand
- 5.3. Ad effectiveness
- 5.4. Purchase intention

- 5.5. Ad credibility
- 5.6. Perceived product quality

H6: Objective comprehension will mediate the effect of visual metaphor on:

- 6.1. Attitude toward the ad
- 6.2. Attitude toward the brand
- 6.3. Ad effectiveness
- 6.4. Purchase intention
- 6.5. Ad credibility
- 6.6. Perceived product quality
- c) Attitude toward the ad

H7: Attitude toward the ad will increase gradually starting from verbo-pictorial, moving through, verbo-pictorial indirect effect, replacement, juxtaposition and fusion metaphor.

d) Ad credibility

H8: Ad credibility will increase gradually starting from verbo-pictorial, moving through, verbo-pictorial indirect effect, replacement, juxtaposition and fusion.

e) Attitude toward the brand

H9: Attitude toward the brand will increase gradually starting from verbo-pictorial, moving through, verbo-pictorial indirect effect, replacement, juxtaposition and fusion metaphor.

f) Purchase Intention

H10: Purchase intention will increase gradually starting from verbo-pictorial, moving through, verbo-pictorial indirect effect, replacement, juxtaposition and fusion metaphor.

g) Perceived quality of advertised product

H11: Perceived quality of advertised product will increase gradually starting from verbopictorial, moving through, verbo-pictorial indirect effect, replacement, juxtaposition and fusion metaphor.

h) Effectiveness of the ad

H12: Ad effectiveness will increase gradually starting from verbo-pictorial, moving through, verbo-pictorial indirect effect, replacement, juxtaposition and fusion.

6.3.3. Methodology

Experimental Design

The design of this experiment was a between-subjects design which took the form of a multiple-independent-groups-design (5 groups) – Each group is exposed to one of the five types of visual metaphor. The specific experimental design is selected because it best fits with the goal of this study i.e. to investigate the effect of visual metaphor across the five different types (Myers and Hansen, 2012). Moreover, a between-subjects design is used because it involves clarity of design and analysis and requires the least amount of statistical assumptions.

An alternative design is the within-subjects design. This design does not involve exposing the different groups of participants to each of the experimental conditions (one of the five types of visual metaphor under study). Instead the same sample of participants is exposed and responds to each of the experimental conditions. In this types of design, it becomes challenging, however, to disentangle the effects of the different types of metaphor. Moreover, this design can also eventually lead to respondent's fatigue (Keppel and Wickens, 2004 as cited in McGinn, 2013, p.151, Myers and Hansen, 2012).

Sample

A total of 200 participants participated in this experiment (40 participants per group). Participants' age varied from 18-21 years old (55% female). Participants were students from Aston Business School. This age group was chosen as it is the one mostly familiar with the brands related to the print magazine ads under study. The total number of participants were randomly assigned to one of the five experimental conditions.

This relatively large sample is more suitable for the particular type of design used as it is much easier to show that the differences between treatment groups are significant when we use a large number of subjects in this experiment and it is also more likely to reflect the actual state of the population (Myers and Hansen, 2012). The assignment of participants to

the 5 conditions was random. In this way the selection threat to the experiment's internal validity will be avoided. Randomization of participant's assignment will balance any differences between subjects with regards to any of their characteristics.

This means that subjects in one condition will not differ from the subjects in another condition in any standardized or systematized way (Myers and Hansen, 2012).

In this way it will be relatively guaranteed that confounding will not occur and hence the internal validity of the experiment will also be enhanced.

Advertising Stimuli/Visual Metaphor Manipulation

The researcher together with the supervising team chose 5 real ads to be included in this experiment which represent the five different types of visual metaphor. These types are juxtaposition metaphor, fusion metaphor, replacement metaphor, verbo-pictorial metaphor, and verbo-pictorial indirect effect metaphor. Each of the five types investigated were defined and discussed in chapters two and four. The actual stimuli or magazine ads were gathered and provided mainly from a content analysis study on print ads.

The specific 5 ads were chosen by the researcher and the supervisory team based on the results of the coding conducted by the researcher and the second trained coder who was involved in the content analysis study. The following steps were followed in this process:

- Step 1: The ad had to be predominantly visual with minimal text (except when text is necessary for the construction of the visual metaphor, e.g. verbo-pictorial metaphor).
- Step 2: The visual in the ad was coded on a descriptive level. At this stage both coders have to agree that the visual depicted a specific visual structure (e.g. visual depicts two objects fused together). This makes the visual a candidate for a specific type of visual metaphor (e.g. fusion metaphor).
- Step 3: At this stage the visual in the ad goes through a metaphor identification procedure. To be labelled as a visual metaphor the two coders independently had to answer three main questions on the visual. Then they had to agree on their answers to these questions. These three questions are: a) which are the two terms of the metaphor? b) which object is the metaphor source and which object is the metaphor target? 6) what feature(s) are transferred from the source to the target.

Step 4: Coders had to agree that the visual metaphor was clearly depicted in the ad (i.e. easy to comprehend).

The judgements of the two coders who are considered the experts in identifying the different types of visual metaphor in the ads, was the key determinant in choosing the specific ads for the purpose of this experiment. This expertise was particularly important considering the subjectivity of the visual metaphor element. Please see table 12 below, for the five ads that were used for the purpose of this experiment, each of which depicts one of the five types of visual metaphor under study.

Table 12: Advertising Stimuli used in Experiment one



Illustration removed for copyright restrictions



Illustration removed for copyright restrictions

Method of administration – Procedures

The experiment was a paper-and pencil experiment administered in class at Aston Business School in the March 2015. More specifically the procedures in this study were as follow: participants were randomly assigned to the five types of visual metaphor under study (or the five different conditions). Each participant received a booklet. This booklet consisted of two parts.

The first part represented demographic questions and questions related to the covariates measured in this questionnaire.

The second part contained the ad (corresponding to one type of visual metaphor under study). After viewing the first ad, the participants answered a few questions related to this ad which formed the second part of the questionnaire. Please see appendix 11 for part 1 and part 2 of this questionnaire (full version of the questionnaire). The questionnaire in appendix one is related to the replacement metaphor ad. Questionnaires related to the remaining four types of visual metaphorical ads are similar. The only difference between the versions of these questionnaires are the items/statements used in the objective ad comprehension question (Question 3.8) and objective metaphor comprehension question (Question 3.9). These items differ according to the content of the different ads/visual metaphors.

Measures

Independent variable

The independent variables are represented in the five types of visual metaphor, which are: juxtaposition metaphor, fusion metaphor, replacement metaphor, verbo-pictorial metaphor, verbo-pictorial indirect effect metaphor. The 5 types are represented in the five ads shown above.

Mediating Variables

Cognitive elaboration "indicates the range of cognitive activity occasioned by a stimulus" (McQuarrie and Mick, 1999). It was measured with a seven-point scale as in Jeong (2008). Reliability of the scale was deemed satisfactory (Cronbach's α = .815).

Participants were asked for their agreement or disagreement with the following statements: "I had many thoughts in response to the advertisement" and "the advertisement elicited a lot of thinking".

Subjective comprehension is defined as "the degree to which an individual feels he or she has understood and grasped the meaning of an ad" (Mohanty and Ratneshwar, 2015, pp.2). It was measured as in Mohanty and Ratneshwar (2015) by a two item, 9-point bipolar scale. The two items were: "Did not understand at all/ completely understood it" and "Not at all certain/ completely certain". Reliability of the scale was deemed appropriate (Cronbach's $\alpha = .952$).

Objective comprehension: "is the grasping or extracting of pre-specifiable (intended) meanings from the message. Typically, these meanings are directly implied by the message and intended by the advertiser" (Mick, 1992, pp. 411). Hence, the principle criterion of objective comprehension is the amount of meaning accurately drawn from the message (Mick, 1992). Objective comprehension was measured using multiple choice question in which a score was calculated. Please see the attached questionnaire in appendix 11 for the measure (question 3.8) that was used to measure objective ad comprehension.

Dependent Variables

Attitude toward the ad is defined as "a predisposition to respond in a favorable or unfavorable manner to a particular advertising stimulus during a particular exposure occasion" (MacKenzie, Lutz and Belch, 1986, pp. 130). It was measured as in Gkiouzepas and Hogg (2011), by the sum of three items anchored by "liked/disliked", "good/bad", and "pleasant/unpleasant". Reliability of the scale was deemed appropriate (Cronbach's α = .881).

Attitude toward the brand is defined as "'an individual's internal evaluation of the brand (Mitchell and Olson, 1981, pp. 318, as cited in Spears and Singh, 2004). It was measured as in Gkiouzepas and Hogg (2011), based on three 9-point items anchored by "favorable/unfavorable", "like/dislike" and "positive/negative" (Cronbach's α was = .952).

Purchase intention is defined as "an individual's conscious plan to make an effort to purchase a brand (Spears and Singh, 2004, pp. 56). It was measured with a seven-point scale as in Coyle and Thorson (2001); Bruner, Hensel and James (2005).

Reliability of the scale was deemed satisfactory (Cronbach's α w= .904). Participants were asked for their agreement or disagreement with the following statements: "It is likely that I will buy...", "I will purchase....the next time I need a...." and "I will definitely try...."

Ad credibility is defined as "as the extent to which the consumer perceives claims made about the brand in the ad to be truthful and believable" (MacKenzie and Lutz, 1989, pp.51).

It was measured as in Lohse and Rosen (2001), based on three 7-point items anchored by "convincing /unconvincing", "biased/unbiased" and "unbelievable/believable" (Cronbach's α = .653)

Effectiveness of the ad is defined as "is a person's evaluation of an advertisement he/she has been exposed to with emphasis on how informative it is and how influential it could be" (Bruner, Hensel and James, 2005, pp.777). It was measured with a 7-point items scale anchored by items such as "not at all effective/very effective", "bad/good" (Bruner, Hensel and James, 2005) (please see appendix 11 for a full version of the scale) (Cronbach's α was .782).

Perceived quality of advertised product is defined as "the degree of quality a consumer believes that a specific good or service has based upon advertising of the product he/she has been exposed to (Bruner, Hensel and James, 2005, pp. 810). It was measured as in Lohse and Rosen (2001). Based on a 7-point items scale anchored by items such as "low quality/high quality", "inexperienced/experienced" (please see appendix 11 for a full version of the scale) (Cronbach's $\alpha = .904$).

Objective metaphor comprehension is defined similarly to objective ad comprehension (Mick, 1992), mentioned-above, however here it refers to the extraction of pre-specifiable (intended) meaning of the visual metaphor as such more specifically rather than the ad message overall. Objective metaphor comprehension was operationalized as in (van Mulken, van Hooft, and Nederstigt, 2014) using a multiple choice question. The participant had to check of one correct characteristic that is mapped from the source domain of the metaphor to the target domain. Or in other words the shared attribute between the two terms of the metaphor.

For example, in the replacement metaphor ad the Samsonite bag was compared to the sand bag, the question was stated as follows: In this advertisement, a comparison is proposed.

To my mind, the advertiser tried to express that: a) Both elements have beauty in common, b) Both elements have protection in common, c) both elements have uniqueness in common, d) No comparison was intended by the advertiser. Only one answer was considered as correct. The same question was used for all ads with the only difference that common element (the answers) that correspond to what is depicted in each ad and to the specific intended metaphorical meaning that each of the five ads/types of visual metaphor is intended to communicate.

Ad interpretation, in addition to the above mentioned response variables and in order to identify the different meanings/interpretations participants inferred from the ad. For this purpose, the participants answered the following open-ended (exploratory) questions which were based on and adopted from Phillips (1997) study to elicit the meanings of visual metaphorical advertisements:

- 1. In your own words, please describe this ad.
- 2. What do you think the advertiser was trying to communicate with this ad?
- 3. Please describe this ad according to your own personal opinion not the advertiser's?
- 4. How do you know what the advertiser was trying to communicate with this ad? What makes you think so?

Covariates

The following variables will act and be measured as covariates in this experiment.

Attitude towards advertising in general is "a learned predisposition to respond in the consistently favorable or unfavorable manner to advertising in general" (Lutz, 1985; as cited in Metha, 2000, pp.68). It was measured with a five-point scale as in Bruner, Hensel and James, (2005), Baumgartner and Steenkamp (2001); Gaski and Etzel (1986). (Cronbach's α = .649). Participants were asked for their agreement or disagreement with seven statements, examples of which are such as: "Most advertising provides consumer with essential information", "I enjoy most ads" (please see appendix 11 for the full version of this scale).

Brand familiarity reflects the extent of consumer's direct and indirect experience with the brand (Alba and Hutchinson, 1987; Kent and Allen, 1994; as cited in Campbell and Keller 2003, pp. 293). It was measured as in Bruner, Hensel and James, (2005) and Simonin and Ruth (1998) by the sum of three items anchored by "Not at all familiar/ extremely familiar", "Definitely do not recognize / definitely recognize", and "Definitely have not heard of it before / definitely have heard of it before" (Cronbach's α = .939).

Mood refers to the recipient's general affective state at the time of exposure to the commercial message (Lutz, MacKenzie, and Belch, 1983, pp. 538). It was measured as in Bruner, Hensel and James, (2005), and Swinyard (1993) by the sum of four items anchored by "sad/ happy", "irritable / pleased", and "depressed / cheerful", and "bad mood/good mood (Cronbach's α = .924).

Attitude towards the brand was also measured as a covariate before participants were exposed to the ad.

The three above mentioned covariates have been chosen based on previous research studies. Previous research had showed that all four variables have an effect and contribute to overall advertising effectiveness (Metha, 2000; Kampbell and Keller, 2003; Batra and Stayman, 1990). General attitudes toward advertising have shown to have an impact on how consumers respond to advertising. For example, results of one study which focused on billboard advertising showed that participants with more positive attitude towards advertising scored higher with regards to ad recall compared to those who had a more negative attitude toward advertising (Donthu, Cherian, and Bhargava, 1993).

In another study conducted by James and Kover (1992) evaluated the impact of advertising in general on advertising "involvement" measured as the amount of time spent looking at print advertisements. Results showed that those who had a positive attitude toward advertising in general and felt that it is not manipulative overall spent more time looking at the advertisements. Metha (2000) also conducted a study which again showed that participants who have a more positive attitude towards advertising and consider that advertising provide useful information also recall more advertisements than those who don't feel that way. The same study also showed that whether participants generally like advertising and their perceptions are that advertising is truthful or manipulative indeed impact how persuasive participants found the ads (Metha, 2000).

Batra and Stayman (1990) investigated the effect of mood on different response variables which contribute to advertising effectiveness. Results, from this study showed that indeed positive moods reduced the amount of cognitive elaboration. Furthermore, counterarguments were lower in positive moods than in neutral moods. This mean that participants we less willing to counter argue with message arguments when they were in good mood. Moreover, results also showed that attitudinal effect of mood should be greater for Low-Need for Cognition participants than High-Need for Cognition participants. Moreover, attitudinal superiority with regards to strong arguments over weak ones in neutral mood is reduced in positive-mood conditions. Also in the case of strong arguments attitudes toward the brand are also unchanged across mood conditions. They are, however, higher, under positive moods for weak arguments (Batra and Stayman, 1990). An older study conducted by Petty, Schumann, Richman and Strathman (1993) showed that induced either positive or neutral moods in subjects effected how participants responded to persuasive messages in terms of attitudes at different levels of elaboration.

Furthermore, results showed that positive moods produced more positive attitudes in the case of both high and low elaboration conditions. Participants' thoughts were, however, more favorable in high elaborations conditions (Wegner, Petty, Klein, 1993). In the wider psychology literature also Wegener, Petty and Klein (1993) conducted a study in which they investigated the effect of mood on high elaboration attitude change and the mediating role of likelihood judgments. Results from this study showed that mood had no direct effect on attitudes. Positive mood, however, led to an increase in the perceived likelihood of the positive consequences. Moreover, the more participants considered these positive consequences, the more appreciative participants were toward an issue. With regards to brand familiarity, Campbell and Keller (2003) conducted a study that investigated the effect of ad repetition on message effectiveness by exploring both attitude toward the ad and attitude toward the brand. This study showed that ads for unfamiliar brands led to a decrease in attitude toward the ad. However, ads for familiar brands did not. Results of the same study also showed that attitude toward the ad had a stronger effect on attitude toward the brand when the participants were unfamiliar with the brand as opposed to when they were familiar (Campbell and Keller, 2003).

Extraneous Variables and Confounding

To control for extraneous variables and confounding and to guarantee that the experiment is well controlled the researcher considered the following:

- 1- The assignment of participants to the different conditions was random. In this way the selection threat to the experiment's internal validity was avoided. Randomization balanced any differences between participants with regards to any of their characteristics. This means that participants in one condition did not differ from the participants in another condition in any standardized way (Myers and Hansen, 2012). In this way it will be relatively guaranteed that confounding did not occur and hence the internal validity of the experiment was enhanced.
- 2- The experiment was paper and pencil. For this reason, the experimenters' personality variables or bias due for example to his behavior was avoided.
- 3- All the ads under study were predominantly visual, with minimal text, except for the verbo-pictorial metaphor ad and verbo-pictorial indirect effect metaphor ad, in which text is needed as it is an integral part of the metaphor. These specific five ads were chosen to control for the effects that could have occurred due to for example the difference in the size of text compared to the size of the visual in the ad.

Moreover, the effect that supporting text (e.g. headline, body copy) could have in facilitating the comprehension of the ad meaning as well as the visual metaphor meaning more specifically.

- 4- All the ads under study were colored to control for any effect that could occur due to the difference in color between the ads.
- 5- To control for any extraneous factors related to participants' familiarity with the products advertised, the researcher avoided choosing ads for very unique, specialized or sophisticated product categories (e.g. technology products).
- 6- All the five ads chosen were for well-known brands with which all participants are familiar. This was done to avoid big differences among participants with regards to brand familiarity.

6.3.4. Data Analysis and Results

Data was analyzed using statistical analysis via SPSS software. ANOVAs (analysis of variance) to test main effects of visual metaphor on each of the mediating and dependent variables. The *Process* tool in SPSS was also used for the mediation analysis. Using this tool, the mediating effect for each of the three mediating variables (Elaboration, subjective-comprehension, and objective-comprehension) was tested (Field, 2013).

Table 13: Mean and Standard Deviations For Dependent Variables (N=200)

(The table includes the variables for which there was a significant effect for the visual metaphor type (P<.05)

	Verbo-pictorial Metaphor		Verbo-pictorial indirect effect Metaphor		Juxtaposition Metaphor		Fusion Metaphor		Replacement Metaphor	
	М	SD	М	SD	М	SD	М	SD	М	SD
Elaboration	3.2875	1.21364	3.5375	1.35584	3.7750	1.40489	3.9750	1.43201	4.1875	1.33823
Subjective	3.3500	2.14297	4.3250	2.41138	4.2625	2.43897	3.9875	2.61771	5.6125	2.59063
Comprehension										
Objective	.4750	.67889	.4750	.64001	1.2500	.54302	1.0250	.57679	1.3500	6.2224
Comprehension										
Attitude toward	3.6833	1.68613	4.4250	1.20773	4.2417	1.47145	4.5333	1.5995	4.6667	1.06752
the brand										

Purchase	2.5167	1.47138	3.2500	1.44362	3.5167	1.42014	3.7833	1.66675	3.5833	1.73246
Intention										
Ad	2.9571	1.09382	3.3643	.86863	3.4714	1.08999	3.5214	1.20680	3.8821	1.09463
effectiveness										

Direct Effects

ANOVAs (analysis of variance) were performed to compare the main effect of five different types of visual metaphor (juxtaposition metaphor, fusion metaphor, verbo-pictorial metaphor, verbo-pictorial indirect effect metaphor, replacement metaphor) on each of the following responses: Attitude toward the ad, attitude toward the brand, ad credibility, effectiveness of the ad, purchase intention, perceived quality of the product. Results from ANOVA's showed no significant effect for the visual metaphor type on each of the following responses, attitude toward the ad, ad credibility, and perceived quality of advertised product. Results showed that there was no significant effect for visual metaphor types (juxtaposition metaphor, fusion metaphor, verbo-pictorial metaphor, verbo-pictorial indirect effect metaphor, and replacement metaphor) on attitude toward the ad. Therefore, hypothesis 7 was refuted. Results also showed that there was no significant effect of visual metaphor type neither on ad credibility nor on the perceived quality of advertised product. Therefore, hypothesis 8 and 11 were refuted.

With regards to attitude toward the brand, results from ANOVA were performed comparing the five different types of visual metaphor (juxtaposition metaphor, fusion metaphor, verbo-pictorial metaphor, verbo-pictorial indirect effect metaphor, replacement metaphor). These results showed that there was a significant effect for the visual metaphor type, F (4, 195) = 2.956, p < .05. Post Hoc tests (Benferroni), however, showed that the difference was only between the verbo-pictorial metaphor (M= 3.6833, SD= 1.68613) and each of the fusion metaphor (M= 4.5333, SD = 1.52995), and replacement metaphor (M= 4.6667, SD= 1.06752). Therefore, hypothesis 9 was accepted. With regards to purchase intention results from ANOVA showed that there was a significant effect between the visual metaphor F (4, 195) = 4.037, p < .05. Post Hoc tests (Benferroni), however, showed that the difference was only between the verbo-pictorial metaphor (M= 2.5167, SD= 1.47138) and each of the fusion metaphor (M= 3.7833, SD = 1.66675), juxtaposition metaphor (M=3.5167, SD=1.42014) and replacement metaphor (M= 3.5833, SD= 1.73246). Therefore, hypothesis 10 was accepted.

With regards to effectiveness of the ad results from ANOVA showed that there was a significant effect for the visual metaphor type, F(4, 195) = 3.814, p < .05. Post Hoc tests (Benferroni), however, showed that the difference was only between the verbo-pictorial metaphor (M= 2.9175, SD= 1.09382) and replacement metaphor (M= 3.8821, SD= 1.09463). Therefore, hypothesis 12 was accepted.

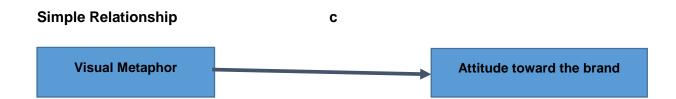
Elaboration

With regards to elaboration, Hypothesis 1 predicted that the level of elaboration provoked will increase gradually starting from verbo-pictorial metaphor and moving through verbo-pictorial indirect effect metaphor, juxtaposition metaphor, fusion metaphor, and replacement metaphor.

Results from ANOVAs (analysis of variance) indeed showed that there was a significant effect for the visual metaphor type on elaboration, F(4, 195) = 2.749, p < .05. Post Hoc tests (Benferroni), however, showed that the significant differences were only between verbo-pictorial metaphor and replacement metaphor. The scores of the different visual metaphorical ads with regards to elaboration are showed in table 13 above. Replacement metaphor scored the highest (M=4.1875, SD=1.33823) among all types of visual metaphor and verbo-pictorial metaphor the lowest (M=3.2875, SD=1.21364). Thus, hypothesis 1 was accepted.

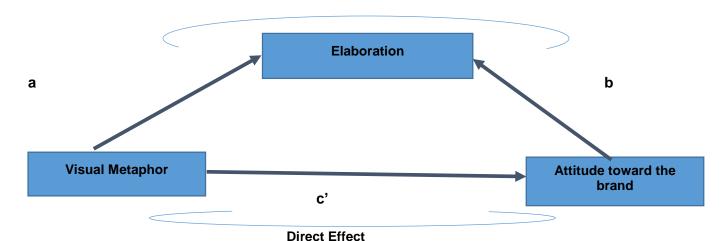
Mediation Analysis: The Conceptual Model

According of Field (2013) mediation "refers to a situation when the relationship between a predictor and outcomes variables can be explained by their relationship to a third variable which is the mediator" (Field, 2013, pp.408). The figure below illustrates the mediation effect as predicted and tested in the context of this experiment.



Mediated Relationship

Indirect Effect



At the top figure a basic relationship between a visual metaphor and one of the final response outcomes which is (i.e. attitude toward the brand) is shown. At the figure below it, however, it is shown that these variables are also related to a third variable which is elaboration in specific ways. 1) the visual metaphor also predicts elaboration (the mediator) through the path denoted a 2) the mediator predicts the outcome through the path denoted by b. The relationship between the visual metaphor (the predictor) and the attitude toward the brand (the final outcome) will different when elaboration (the mediator) is also included in the model and so is denoted c'. These letters (a, b c') also represent the unstandardized regression coefficient between the different variables that are connected by arrows symbolizing by this the strength of relationship between the variables (Field, 2013). Mediation occurs when the relationship between the visual metaphor and the final response outcome of attitude toward the ad becomes less strong by including the mediator (elaboration). In this case the regression parameter for c' should be smaller than for c. Moreover, prefect mediation occurs when c' is equal to zero. This means that the relationship between visual metaphor and attitude toward the ad is completely eliminated by including the elaboration (the mediator) in the model (Field, 2013).

The statistical model: The statistical model for mediation is similar to the conceptual model as shown in the figure above.

According to Baron & Kenny (1986) this model is tested through a series of regression analysis representing four conditions that necessary to demonstrate mediation. More specifically according again to Baron and Kenny mediation is tested through the following three regression models:

- 1- "A regression predicting the outcome from the predictor variable. The regression coefficient for the predictor gives the value of c in the figure"
- 2- "A regression predicting the mediator from the predictor variable. The regression coefficient for the predictor gives the value of a as showed in the figure above"
- 3- "A regression predicting outcome from both the predictor variable and the mediator. The regression coefficient for the predictor gives us the value of c', and the regression coefficient for the mediator gives us the value of b, as shown in the figure above" (Field, 2013, pp.410)

The abovementioned models test four conditions: in model (1) visual metaphor (the predictor) should significantly predict the attitude toward the brand (the outcome variable). In model 2 visual metaphor must significantly predict mediator variable which in this case is elaboration.

In model 3 elaboration must significantly predict the outcome variable which is attitude toward the brand. In model 4, visual metaphor must predict attitude toward the brand less strongly in model 3 than in model 1.

The Baron and Kenny (1986) approach has been widely used, yet this method of regression has some limitations. The key limitation is fourth predeterminant by which mediation is assessed: the predictor variable must predict the outcome variable less strongly in model 3 than in model 1 (Field, 2013, pp.410). Indeed, perfect mediation is shown when the relationship between predictor and outcome is reduced to zero in model 3, yet this is not usually the case. Instead we see a less strong relationship rather than one that is reduced to zero (Field, 2013).

Using PROCESS to Run the Mediation Analysis

Data will be analyzed using SPSS software. Furthermore, *PROCESS*, a freely-available computational tool for SPSS will be used for the purpose of this project. According to Hayes (2012) who is the developer of the PROCESS tool: "the goal of mediation analysis is to establish the extent to which some putative causal variable x influences some outcome Y through one or more mediator variables" (Hayes, 2012, -pp.1).

In the process of developing the existing research on the effect of visual metaphor in advertising on consumer response the focus of this experiments also is extended to demonstrate not only the existence of an effect towards understanding the mechanism(s) by which and effect operates and establishing its boundary conditions or contingencies. In this case the aim is to answer such questions of "how" which are typically approached using process or *mediation* analysis (Hayes, 2012).

Moreover, *PROCESS* offers many of the capabilities of existing programs and tools while expanding the number and complexity of models estimated. There is a list 76 models that PROCESS can estimate.

To test the mediating effect of each of the three proposed mediating variables, elaboration, objective comprehension and subjective comprehension on each of the final response outcomes (e.g. attitude toward the brand), the simple mediation model (model number 4) was estimated. The simple mediation model is the most basic model where the independent variable (i.e. visual metaphor) is modeled to influence the dependent variable (i.e. attitude toward the brand) directly as well as indirectly through single intermediary or mediator variable (i.e. elaboration). Elaboration here or the mediating variable is causally located between x and y as depicted in the figure above. Two linear models exist in this case. From these two models the direct and indirect effects are derived. One estimates the mediating variable (i.e. elaboration) from the independent variable (i.e. visual metaphor), and the second estimates the dependent variable (i.e. attitude toward the brand) from both the independent variable (i.e. visual metaphor) and the mediating variable (i.e. elaboration).

According the Hayes (2012), the direct effect of the independent variable (i.e. visual metaphor) on the dependent variable (i.e. attitude toward the brand) quantifies how much two cases differing by one unit on the independent variable (i.e. visual metaphor) are estimated to differ on the dependent variable independent of the effect of the mediating variable (i.e. elaboration) on the dependent variable (i.e. attitude toward the brand). Furthermore, the indirect effect of visual metaphor on elaboration is estimated as *ab* as related to the figure above. This means that the product of the effect of visual metaphor on elaboration (a) and the effect of elaboration on attitude toward the brand controlling for visual metaphor. This estimates how much two cases differing by a unit on visual metaphor are estimated to differ on attitude toward the brand as a result of the effect of visual metaphor on elaboration, which in turn effect attitude toward the brand. Different methods for testing hypotheses about indirect effect have been developed and mentioned in the literature. These include product of coefficient approaches such as the Sobel test (Sobel, 1982), the distribution of the product method (McKinnon, Fritz Williams, and Lockwood, 2007) and bootstrapping (Preacher & Hayes, 2004, 2008; Shrout & Bolger, 2002).

The latter two are recommended. The reason for this is that they make less unrealistic assumptions than does the Sobel test about the shape of the sampling distribution of the indirect effect and are more powerful. "The direct and indirect effects of X on Y sum to yield the total effect of X on Y" (Hayes, 2012, pp.6).

Therefore, the direct and indirect effects of visual metaphor and attitude toward the brand sum to yield the total effect of visual metaphor on attitude toward the brand (Hayes, 2012).

Steps of Running the Analysis

- 1- Access PROCESS tool in SPSS by selecting analyze regression. The variables in the data file related to this experiment were listed in the box labelled Experiment 1.
- 2- To test the mediation effect of each mediating variable (e.g. elaboration) on each of the final response outcomes (e.g. attitude toward the brand) the simple mediation model (model 4) is selected to run the mediation analysis. This is done by selecting number 4 in the drop-down list under model number.
- 3- The dependents variable (e.g. attitude toward the brand) is selected and dragged to the box labeled *outcome variable*. Similarly, the predictor variable (e.g. visual metaphor) is selected and dragged to the box labelled *independent variables*. The mediator variable is also dragged to the box labelled M variable(s).
- 4- To test the indirect effects bootstrapping was used to generate a confidence interval around the indirect effect. PROCESS by default uses 1000 bootstrap samples, and will compute bias corrected and accelerated confidence intervals.
- 5- The dialog *Options* is then selected. In this dialogue box, the following four useful options for mediation are chosen: 1) *Effect size* produces the estimates of the size of the indirect effect. 2) *Sobel test* produces a significance test of the indirect effect, which was developed by Sobel. 3) *Total effect model* produces the direct effect of the independent variable (the predictor) on the dependent variable (the outcome). 4) Compare indirect effects estimates the effect and confidence interval for the difference between the indirect effects resulting from these mediators.
- 6- Click OK to run the analysis (Field, 2013).

Dummy Coding

Given that the independent variable represented in visual metaphor is a categorical variable comprised of five categories, which are the five types of visual metaphor under study (e.g. replacement metaphor, verbo-pictorial metaphor, etc.).

For this reason and for the purpose of this experiment dummy coding was used. Each group representing each type of visual metaphor will be coded as one and the rest of the groups as zero.

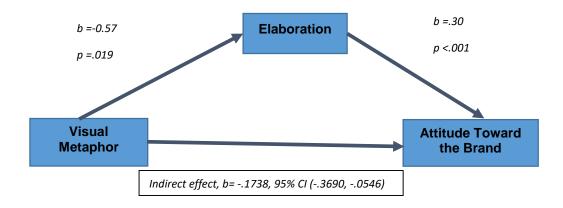
For example, fusion metaphor or the group of participants exposed to the fusion metaphor ad will be coded as one and the rest of the groups or types as zero and this represents a dummy variables.

This will be the case for each of the five groups each representing one of the five types of visual metaphor. The simple mediation analysis will run for each of the dummy variables separately.

Results from the Mediation Analysis

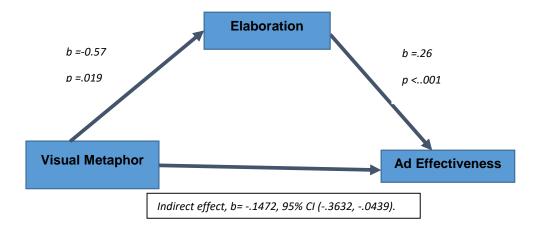
Mediation analysis using *PROCESS* showed that elaboration mediates the effect of visual metaphor on a number of final response outcomes. This mediation effect, however, occurs only in the case of replacement metaphor and verbo-pictorial metaphor. Elaboration indeed mediates the effect of each of the aforementioned two types of visual metaphor on the following final responses: attitude toward the brand, ad effectiveness, and purchase intention. There was a significant negative indirect effect of verbo-pictorial metaphor on attitude toward the brand through elaboration, b = -.1738, BCa CI (-.3690, -.0546).

- Verbo-Pictorial Metaphor



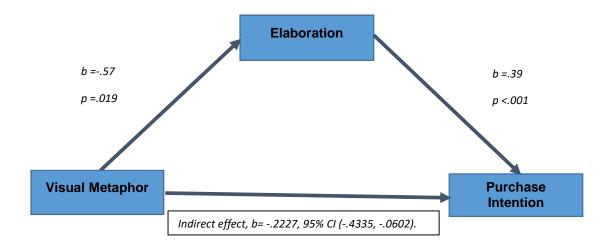
There was a significant negative indirect effect of verbo-pictorial metaphor on perceived effectiveness of the ad through elaboration, b = -.1472, BCa CI (-.3132, .0439).

Verbo-Pictorial Metaphor



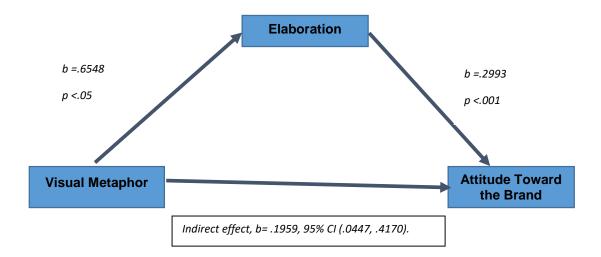
There was also a significant negative indirect effect of verbo-pictorial metaphor on purchase intention through elaboration, b = -.2227, BCa CI (-.4335, -.0602).

Verbo-Pictorial Metaphor



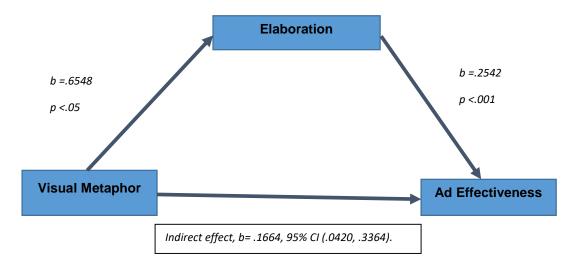
With regards to replacement metaphor, there was also a significant positive indirect effect of replacement metaphor on attitude toward the brand through elboration, b = .1959, BCa CI (0.447, .4170).

- Replacement Metaphor



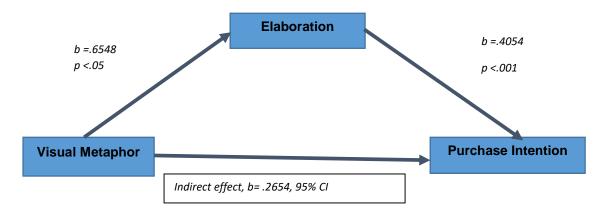
There was a significant positive indirect effect of replacement metaphor on perceived effectiveness of the ad through elaboration, b = .1664, BCa CI (.0420, .3364)

- Replacement Metaphor



There was a significant positive indirect effect of replacement metaphor on purchase intention through elaboration, *b*= .2654, BCa CI (.0736, .5294).

Replacement Metaphor



The more consumers elaborated on replacement metaphor, the higher their attitude toward the brand, their peceived effectiveness of the ad as well as their purchase intention. Based on the aforementioned, it could be said that Hypothesis 2 was partially accepted.

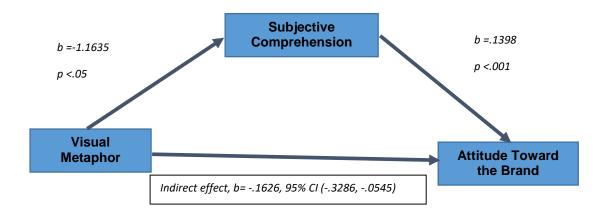
Subjective Comprehension

With regards to subjective comprehension, results from ANOVA were performed comparing the effect of five different types of visual metaphor (juxtaposition metaphor, fusion metaphor, verbo-pictorial metaphor, verbo-pictorial indirect effect metaphor, replacement metaphor) on subjective comprehension.

There was a significant effect for the visual metaphor type, F (4, 195) = 4.553, p < .05. Post Hoc tests (Benferroni), however, showed that the significant differences were only between verbo-pictorial metaphor and replacement metaphor on one side. And replacement metaphor and fusion metaphor on the other side. With replacement metaphor scoring the highest (M= 5.6125, SD = 2.59063) with regards to subjective comprehension and verbo-pictorial metaphor the lowest (M= 3.3500, SD = 2.14297). Therefore, hypothesis 3 was refuted.

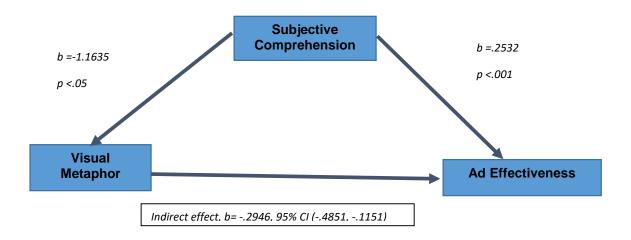
Mediation analysis using *PROCESS* showed that subjective comprehension mediates the effect two types of visual metaphor on a number of final response outcomes. These types are verbo-pictorial metaphor and replacement metaphor. There was a significant negative indirect effect of verbo-pictorial metaphor on attitude toward the brand though subjective comprehension, b = -.1626, BCa CI (-.3286, -.0545).

Verbo-Pictorial Metaphor



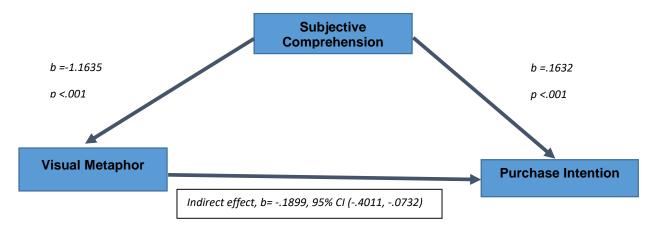
There was a significant negative indirect effect of verbo-pictorial metaphor ad on perceived effectiveness of the ad through subjective comprehension, b = -.2946, BCa CI (-.4851, -.1151).

- Verbo-Pictorial Metaphor



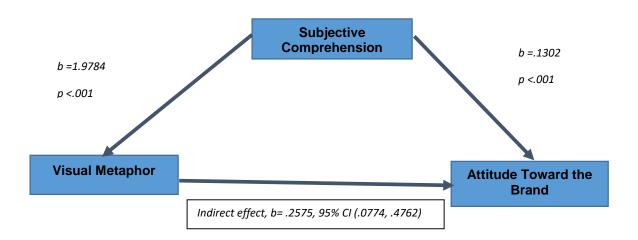
There was a significant negative indirect effect of verbo-pictorial metaphor on purchase intention through subjective comprehension, b = -.1899, BCa CI (-.4011, -.0753).

Verbo-Pictorial Metaphor



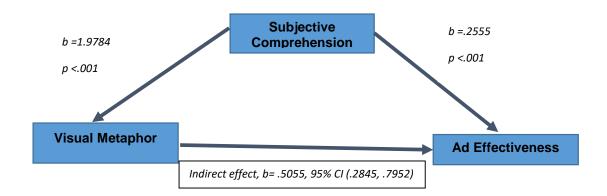
With regards to replacement metaphor, there was a significant positive indirect effect of replacement metaphor on attitude toward the brand through subjective comprehension, *b* = .2575, BCa CI (.0774, .4762).

- Replacement Metaphor



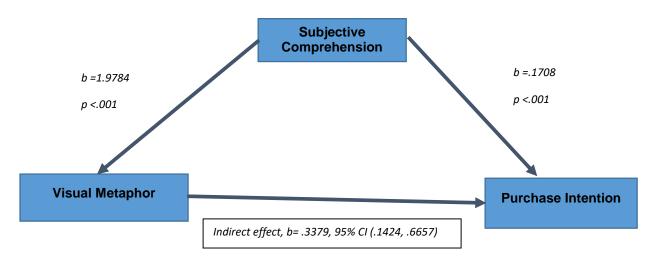
There was a significant positive indirect effect of replacement metaphor on the perceived effectiveness of the ad through subjective comprehension, b = .5055, BCa CI (.2845, .7952).

- Replacement Metaphor



There was a significant positive indirect effect of replacement metaphor on purchase intention through subjective comprehension, b = .3379, BCa CI (.1424, .6657).

- Replacement Metaphor



Based on the aforementioned, it could be said that hypothesis 5 was partially supported.

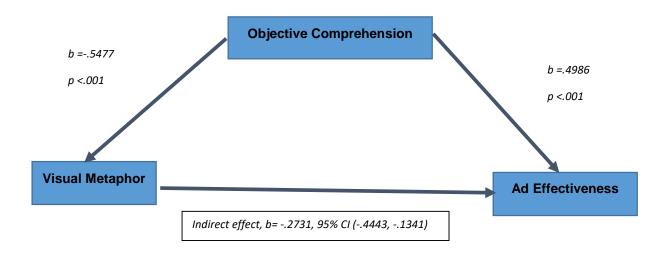
Objective Comprehension

With regards to objective comprehension, results from ANOVA were performed comparing the five different types of visual metaphor (juxtaposition metaphor, fusion metaphor, verbo-pictorial metaphor, verbo-pictorial indirect effect metaphor, replacement metaphor) on objective comprehension. There was a significant effect for the visual metaphor type, F(4, 195) = 18.585, p < .05.

Post Hoc tests (Benferroni), however, showed that the difference was mainly between the verbo-pictorial metaphor (M= .4750, SD= .67889) and each of the fusion metaphor (M= 1.0250, SD = .57679), Juxtaposition metaphor (M= 1.2500, SD= .54302) and replacement metaphor (M= 1.3500, SD= .62224) on one side. The same three types of visual metaphor (juxtaposition metaphor, fusion metaphor and replacement metaphor) were also significantly different than the verbo-pictorial indirect effect metaphor (M= .4750, SD= .64001). Therefore, hypothesis 4 was refuted.

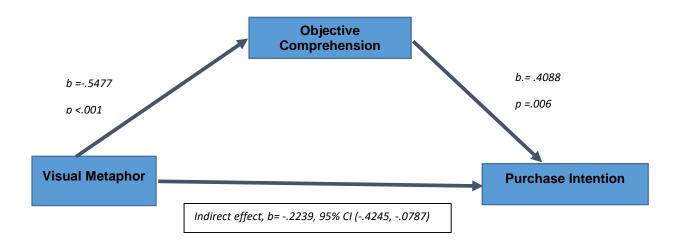
Mediation analysis using *PROCESS* showed that objective comprehension mediates the effect of two types of visual metaphor on a couple of final response outcomes. There was a significant negative indirect effect of verbo-pictorial metaphor on perceived effectiveness of the ad through objective comprehension, b = -.2731, BCa CI (-.4443, -.1341).

Verbo-Picotrial Metaphor



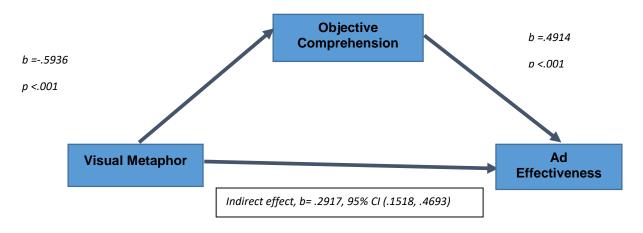
There was a significant negative indirect effect of verbo-pictorial metaphor on purchase intention through objective comprehension, b = -.2339, BCa CI (-.4245, -.0787).

Verbo-Picotrial Metaphor



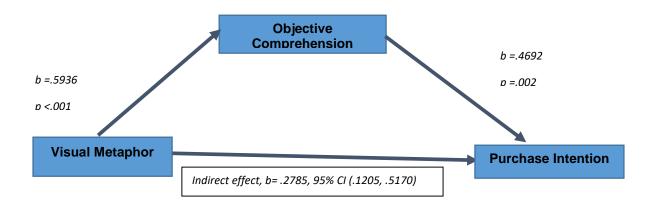
There was also a significant positive indirect effect of replacement metaphor on the perceived effectiveness of the ad through objective comprehension, b = .2917, BCa CI (.1518, .4693).

Replacement Metaphor



There was a significant positive indirect effect of replacement metaphor on purchase intention through objective comprehension, b = .2785, BCa CI (.1205, .5170).

- Replacement Metaphor



Based on the aforementioned, it could be said that Hypothesis 6 was partially supported.

Objective Metaphor Comprehension

A chi-square test was performed and a relationship was found between the type of visual metaphor (e.g. fusion, juxtaposition, etc.) and objective metaphor comprehension (χ^2 = 43.759, p < .05), with replacement metaphor scoring the highest with regard to this response and verbo-pictorial metaphor scoring the lowest. The exact percentages for the objective metaphor comprehension related to each of the five types of visual metaphor under study is illustrated in figure 28 below.

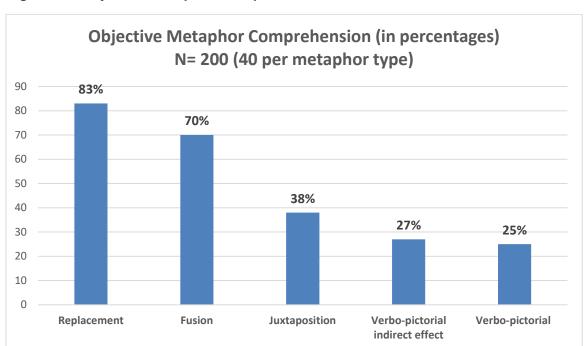


Figure 28: Objective Metaphor Comprehension Results

Results related to the objective metaphor comprehension indicate the importance of the functional characteristics as a key element that participants focus on when solving the visual metaphors. Indeed, the correct answer for this specific question/measure was defined in terms of a functional/performance characteristic related to object(s) depicted in each of the five ads/types of visual metaphor. The above mentioned results indicate that the more these characteristics were visually explicit through the visual 'clues' provided in the ad the higher the score in the specific question for the related visual metaphor.

For example, in the case of replacement metaphor were the Samsonite bag was associated with the sand bag in terms of the 'protection' it provides. This functional characteristic was more visually 'explicit' considering also the 'context' of the ad (e.g. war situation) and the additional visual 'clues' (e.g. protected soldier) provided in the same ad. In addition to the essential conceptual proximity between the two terms of the visual metaphor (Samsonite bag, sand bag) as they both belong to the same product category (bags). This 'explicitness' was less present particularly with regards to the visual aspect of the ad in the juxtaposition metaphor ad were the puma running show was compared to the butterfly in terms of its colors but also its speed. And this could be the reason why participants scored lower with regards to the objective metaphor comprehension in this ad. These results will also be discussed further in the discussion section of this experiment.

Open Ended Questions

Tables, 14, 15, 16, and 17 present the results from the open ended questions for each condition/type of visual metaphor as included in the questionnaires of the current experiment. The results presented in the tables below are related to the answers participants gave to specific questions. The first question relates to the advertisers' intention or the key intended message of the ad. And the second questions are related to how participants knew or understood what the advertiser was trying to communicate with the ad.

These following tables state the questions and the results of the specific questions after quantifying the answers participants gave for each of these questions.

Table 14: Open Ended Questions Results - Replacement Metaphor

Visual Metaphor Type	% of participants who answered these questions	Advertiser's intention: product function/performance qualities)	How do you know what the advertiser is trying to communicate with this ad?
Replacement Metaphor (N=40)	(33 participants) 83%	(22 participants) 67% mentioned function/performance qualities (e.g. durability, protection, etc.) (9 participants) 27% other (2 participants) 6% don 't know/no answer	(10 participants) 30% through the metaphorical relation (bag and sandbag) (17 participants) 52% thought other clues (6 participants) 18% No answer

Table 15: Open Ended Questions Results – Fusion Metaphor

Visual	% of participants who	Advertiser's intention:	How do you know
Metaphor Type	answered these questions	product function/performance qualities)	what the advertiser is trying to communicate with this ad?

Fusion Metaphor	93%	(18 participants) 48% mentioned	(11 participants) 30% through the
(N=40)	(37 participants)	function/performance qualities. (12 participants) 33% Other	metaphorical relation (bag and nut). (4 participant) 11%
		(7 participants) 19% don't know/no answer	Other (22 participants) 59% don't know/no answer

Table 16: Open Ended Questions Results – Juxtaposition Metaphor

Visual Metaphor Type	% of participants who answered these questions	Advertiser's intention: product function/performance qualities)	How do you know what the advertiser is trying to communicate with this ad?
Juxtaposition Metaphor (N=40)	80% (32 participants)	(12 participants) 38% mentioned function/performance qualities.	(9 participants) 28% through the metaphorical relation (shoe and frog)
		(9 participants) 28% other (11 participants) 34% don't know/no answer	(16 participants)50%(7 participants)22%

Table 17: Open Ended Questions Results – Verbo-Pictorial Metaphor and Verbo-Pictorial Indirect Effect Metaphor

Visual Metaphor Type	% of participants who answered these questions	Advertiser's intention: product function/performance qualities)	How do you know what the advertiser is trying to communicate with this ad?
Verbo-Pictorial Indirect Effect Metaphor (N=40)	88% (35 participants)	(5 participants) 14% mentioned the intended message. (24 participants) 69% other (6 participants) 17% don't know	(1 participants) 3% of participants recognized that through the metaphorical indirect relation. (15 participants) 43% other (19 participants) 54%
Verbo-pictorial Metaphor (N=40)	88% (35 participants)	(29 participants) 83% other (messages) (6 participants) 17% don't know/no answer	(25 participants) 71% other (10 participants) 29% don't know/ no answer

In the above-mentioned table, some interesting results can be seen. Across the five types of visual metaphorical ads (conditions), a relatively similar percentage of participants actually answered the first question. Participants were not able to guess advertisers' intention in the verbo-pictorial metaphor.

Only 14% of participants, who actually answered the related question, were able to understand the intended message in the verbo-pictorial indirect effect metaphor ad. Moreover, the percentage of participants who focused on product's functional/performance characteristics when interpreting the ad's message increased gradually across the other three types of visual metaphor.

Starting from juxtaposition metaphor (38%), and moving through fusion metaphor (48%), and replacement metaphor (67%). These results to a high extent are relatively consistent with the results of the objective metaphor comprehension. Another important finding is that participants compared the advertised product to the metaphorical object mainly in terms of these functional/performance characteristics.

Moreover, the replacement metaphor ad was the one in which participants mostly 'saw' these functional/performance characteristics (e.g. durability, protection, etc.). A possible reason for this maybe the use of the specific source of the metaphor (i.e. sandbag). Another possible reason is the context of the ad (war situation) in which durability and protection is a vital element. Another possible reason could be the conceptual closeness between the two terms of this metaphor (Samsonite bag and sandbag). Both terms belong to the same product category (bags). Indeed, the primary function of this product category is to contain durables and protect them. Moreover, the more 'durable' the bag is the more it is able to 'protect' the things it contains.

A closer look at the other two ads, wall-nut (fusion) ad and the frog ad (juxtaposition ad) we can see that this conceptual closeness is less in the case of fusion metaphor (bag, nut-shell) and even lesser in the case of juxtaposition metaphor (shoe, butterfly). Despite of this, however, the similarities between the two terms of the metaphor in terms of function are strong particularly in the case of the fusion metaphor. The hard-to-crack and hence safety of the nut-shell as a container is transferred to the Samsonite bag. Indeed, participants took notice of this functional similarity more than any other similarity between this two objects (e.g. shape similarity). In the case of the juxtaposition metaphor again participants saw this common functional characteristic (speed) between the two terms of the metaphor (Puma shoe, frog), however to a lesser extent. A reason for this might be that other clues in the ad, highlighted another similarity, that of colourfulness and design, between the advertised brand and the metaphor source, the frog.

6.3.5. Small Complementary Study

Based on the results of the open-ended questions in experiment one a small complementary study was conducted with 32 students from Aston university (both male and female). The objective of this study was to further reaffirm the results obtained from the open ended exploratory questions in experiment one. In this study the same five advertising stimuli used in experiment one were used. Here, however, all participants viewed each of the five ads. The questionnaire used for the purpose of this study included definitions of each type of the five types of visual metaphor under study.

Moreover, after viewing each ad, the 32 participants in this study were asked to go through the metaphor identification procedure proposed by Forceville (1996). In this procedure participants were asked to answer the following three open ended questions for each on the five ads under study:

- 1. Which are the two terms or objects of the metaphor under study
- 2. Which is the object that borrows characteristics from the other object (the metaphor target) and which is the object from which the characteristics are borrowed (the metaphor source).
- 3. What feature(s) or characteristics are mapped of transferred from one object (source) to the other object (target)?

The quantified results including the specific percentages related to these answers are illustrated in figure 29 below.

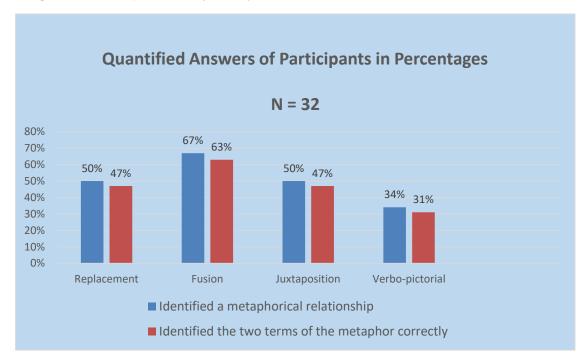


Figure 29: Complementary Study - Results

At least half of the participants were able to describe a metaphorical relationship for fusion metaphor, replacement metaphor and juxtaposition metaphor.

A relatively high percentage of the participants also were able to identify the two terms of the metaphor correctly (e.g. bag and sand bag for replacement metaphor). These percentages were lower for the verbo-pictorial metaphor ad (31%). Results regarding verbo-pictorial indirect effect metaphor are not presented as the 'process' through which participants go through to identify this specific type is different. The reason for this is that the

relationship between the two objects depicted in the ad is indirect rather than direct as explained in the definition of the specific type stated earlier.

Therefore, the three questions stated above might have not been the best to indicate participant's understanding and comprehension of this specific type of visual metaphor.

A key and important finding derived from this complementary study, however relates to the characteristics in terms of which participants primarily created these metaphorical relations. The quantified results including the specific percentages related to these answers are illustrated in figure 30 below.

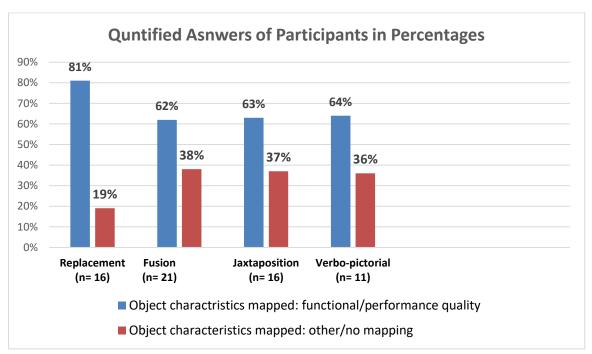


Figure 30: Complementary Study Results

Results presented above illustrate that regardless of the visual metaphor type (e.g. fusion), consumer primarily focused on the shared *functional* characteristics that the objects have in common. Not equally, however, on other similarities (e.g. appearance, materials, etc.). A possible reason for this might be the context and the genre in which these visual metaphors appear. Consumers are mostly interested in the actual benefits of the advertised product. These benefits are usually represented in these functional/performance characteristics. Therefore, the consumers compare the advertised product to the metaphorical object primarily in terms of these characteristics (e.g. protection in the case of the Samsonite bag in comparison to the sand bag). Moreover, there is also a theoretical explanation that supports this result that will be presented later on in the discussion section of this experiment.

These results strongly relate to the concept of conceptual similarity/tension discussed earlier in this chapter. These open ended questions allowed to probe further to what characteristics actually participants 'saw' in the objects/concepts depicted in the ads. Moreover, there answers also uncovered in terms of what did they construct the metaphorical relationship between the different objects/concepts.

Furthermore, this open ended questions approach as employed in this small study, represents a more indicative measure that can explain the nature of these shared characteristics as understood by the consumers. This further provides the rationale for the difficulty experienced when comprehending the visual metaphor.

Moreover, these results further supported the answers provided in the open ended questions in the main questionnaire.

Another important finding derived from these open-ended exploratory questions related to the aforementioned concepts (e.g. artful deviation, incongruity, conceptual similarity/tension, etc.). These concepts are supposed to highlight the differences between the visual metaphor types. Indeed, however, the operational definitions of these concepts (i.e. scales) are very week. They do not tap into the essence of these constructs. Indeed, these operational definitions do not reflect what is actually different between the different types of visual metaphor as 'seen' primarily by consumers. Moreover, they do not explain, in terms of what are the two metaphorical objects similar (or different) again as perceived by consumers. Moreover, as mentioned earlier in this chapter, all these same aforementioned concepts converge, and relate essentially to the difficulty experienced by consumers in comprehending the different visual metaphors.

6.3.6. Discussion

In this experiment five types of visual metaphor were tested and compared with regards to their effect on the different consumer responses. Before reflecting on the results related to the effects of the different visual metaphorical ads, another section of the results will be discussed. This section is related to the results of exploratory open-ended questions in both the experiment as well as the complementary small study described above.

Indeed, the insights provided from the answers of this open-ended enquiry were valuable. These results uncovered what participants primarily focus on when identifying the key intended advertising message. In this process participants indeed relay on solving the visual metaphor depicted in these ads. Furthermore, they focus on identifying the shared characteristics between the two metaphorical objects. Moreover, participants mainly look for

the functional and performance aspects of these characteristics. This is the case across all the types of visual metaphor.

This was particularly the case for replacement metaphor, which proved most effective. 67% of the participants who answered the question related to advertiser's intention for this metaphor stated product's functional/performance qualities (durability, protection, etc.). 24% of the same participants identified this through the metaphorical relationship (bag, sandbag). In the objective metaphor comprehension questions participants were asked to check out one single characteristic that the two metaphorical objects share. 83% of the participants chose (protection) which is a shared functional/performance characteristic between the two metaphorical objects (Samsonite bag and sand-bag). This was also the right answer for the specific question. These results further support the findings from the open ended questions stated above.

These were further reaffirmed by the results of the small complementary study. Results from this study confirmed that participants again focus on these functional shared attributes when comprehending the visual metaphor. They look for these common functional characteristics between the advertised product and the object to which the product is compared. This was the case across all the types of visual metaphor. For example, 81% of the participants who were able to identify a metaphorical relation in the replacement metaphor ad, mapped these functional/performance characteristics from the source to the target of the metaphor (from sand bag to Samsonite bag).

The example related to replacement metaphor is particularly important because the two terms of the metaphor as shown in the visual ad share a lot in common in terms of form or appearance. This is given that they belong to the same product category (bag). Participants, however, focused more on the functional similarities (durability, protection) of the two terms rather than any other similarities (e.g. appearance, material, etc.).

Moreover, researchers in other related disciplines (e.g. psychology, language) have stated that the importance of *function* in our knowledge of the named objects is established so deeply that it often serves as a starting assumption in the ontogeny and nature of naming objects. Object names are cover terms for categories, and function is an integral component of many such categories. This in turn means that objects' names are generalized on the basis of function (Landau and Jones, 1998). Function is a critical aspect of categorizing most human artifacts. Indeed, "function, at least for artifacts, is more basic to the definition than form" (Miller and Johnson-Laird, 1976, pp.22).

According to Landau and Jones (1998), there is considerable evidence that object function plays an important role in adult's decisions about category membership for a novel object, for example their decision of when an object can be called a "boat". This notion of function and its importance could be extended to the categorization and the mapping process that consumer perform when identifying a metaphorical relationship.

In other words, the conceptual similarity between the two metaphorical objects primarily in terms of their function (and not necessarily their shape or form) is important. Indeed, it might be a vital reason for the easiness experienced by consumers in comprehending a metaphorical relationship between these two objects. Therefore, the more explicitly these functional/performance attributes are depicted, the easier becomes the visual metaphor's comprehension for consumers. The aforementioned open-ended enquiry contributed to uncovering the importance of this functional dimension as perceived by consumers. This enriched even further the understanding of these concepts (e.g. conceptual similarity, incongruity, etc.). This same understanding is essential in 'building' more valid and hence effective 'measures' for these concept(s) that reflect this understanding. Therefore, this measures will actually measure what is supposed to be measured. Moreover, they will reflect what consumers actually consider when differentiating between the visual metaphors. Hence, become more realistic and valid.

Results from experiment one regarding the effect of the different types of visual metaphor on consumer responses showed that the significant differences in effect were mainly between the replacement metaphor and the verbo-pictorial metaphor. Replacement metaphor scored the highest with regards to the three mediating variables, elaboration, subjective comprehension and objective comprehension. The particular visual structure led to the higher level of elaboration as predicted by the Phillips and McQuarrie (2004) typology.

According to these predictions, the fact that in the replacement metaphor one element is missing requires higher demands on the cognitive effort needed to disentangle the two terms of the visual metaphor. Unlike what was predicted by the same typology, however, replacement metaphor scored higher with regards to subjective as well as objective comprehension. This means that this high level of elaboration also led to high level of comprehension. These positive results related to the subjective comprehension as well as the objective comprehension of this type of visual metaphor are likely to be due to the specific encoding choices that the ad designers made.

In this ad the designers provided clear clues that helped the viewer identify the missing element (Madupu, Sen and Ranganathan, 2013).

This is also related to the aforementioned regarding the characteristics that participants primarily focus on when they compare the two metaphorical objects. In this replacement metaphor ad, the designers of the ad used two objects that are very similar with regards to their functional/performance characteristics (e.g. protection, durability) given that both terms (Samsonite bag, sandbag) belong to the same product category (bags). The findings from the open ended questions showed that participants indeed focused on these functional/performance characteristics. It seems that these same characteristics are what consumer 'look for' in the visual metaphor when trying to comprehend the metaphor but also the ad overall. Therefore, the specific encoding choice that was used in the specific ad and which clearly reflected this similarity could have actually caused this high level of comprehension for the same ad.

An additional reason could be also the other contextual 'clues' that the designer of the same ad provided that might have equally facilitated the comprehension of the visual metaphor. For example, the replacement of one of the sand-bags with the Samsonite bag for the construction of the safety wall and the presence of the armed soldier who stands behind the specific wall for protection. These 'clues' highlighted the first key functional characteristic that the Samsonite bag borrows from the sandbag. This characteristic is 'protection'. The clear context again is depicted in the 'war situation' which demands the use of sand-bags that are known of being protective but also durable considering the tough war circumstances. Moreover, the 'clues' as depicted in the soldier, the safety wall but also the gloomy sky which shows a high indication for possible rain, adds to this need for 'durability' that is vital in facing these challenging circumstances.

This same durability is mapped from the sand-bags to the Samsonite bag through the metaphorical relation. Protection and durability are also two key characteristics that good quality bags in general have to possess. Moreover, it is a key functional benefits that Samsonite brand traditionally is also known for. This was also confirmed by the results related to the objective metaphor comprehension, in which the same visual metaphor scored highest (83%) and in which participants again chose a key functional attribute as the one being shared by the two terms of the metaphor.

The same ad also scored highest with regards to overall perceived effectiveness of the ad. Furthermore, it also scored high with regards to attitude toward the brand and purchase intention. Results also showed that elaboration as well as subjective comprehension positively mediate the effect of the replacement metaphor ad on the three aforementioned final response outcomes.

Moreover, objective ad comprehension also mediates the effect the same visual metaphorical ad on overall ad effectiveness and purchase intention. This confirms previous theorization as well as previous research regarding the mediating effect of comprehension and the positive impact it has on attitudinal and intentional outcomes. The high level of cognitive effort or elaboration led to this feeling of relief or pleasure ones the ad was comprehended. This was further translated in positive attitudes and also purchase intentions. Moreover, it seems that this high level of cognitive effort was not too high to make participants feel tired and in turn decrease this sense of relief or pleasure once they comprehend the ad. Instead, it actually increased the positive attitudes toward the effectiveness of the ad, the brand as well as their purchase intention.

Another reasons for this positive outcome despite of the high cognitive effort exerted might be due to the fact that the particular ad or visual metaphor was found more interesting as a 'creative idea'. Participants may have liked the idea. Simply found it 'cool' or 'clever'. These, however, were not parameters that were measured in the specific study. Yet, they could be possible reasons for the highly positive results related to this particular ad.

The second important result yet also contradictive to the predictions made in this experiment is related to the verbo-pictorial metaphor. It was originally hypothesized that verbo-pictorial metaphor will induce the lowest level of elaboration compared to all other types of visual metaphor. It was also hypothesized that subjective comprehension for verbo-pictorial metaphor will be the highest compared to all other visual metaphorical ads and the same was predicted regarding objective comprehension.

The rationale behind this hypothesis as stated earlier was based on the fact that this type of visual metaphor includes a verbal element. This element should facilitate the comprehension of the ad overall as well as the metaphor more specifically (as opposed to purely visual metaphors, e.g. replacement). Moreover, there was no previous research to base this prediction on, as verbo-pictorial metaphor was tested for the first time in comparison to the other types.

Result, however, showed that the amount of cognitive elaboration was indeed the lowest but it was only significantly lower compared to the level of cognitive elaboration induced by the replacement metaphor. The fact that participants did not elaborate much on the specific ad was not an indication that they found the specific ad at all easy to comprehend neither subjectively nor objectively. Indeed, the specific ad scored lowest with regards to the two levels of comprehension.

Moreover, it scored lowest also as far as the objective comprehension of the specific metaphor (25%). It seems that participants due to the high difficulty experienced decided to opt out from this process of elaboration as well as their attempt to comprehend the ad and the metaphor depicted in it.

One reason for this could be linked to what is referred to as verbal complexity (Putervu et al, 2004; Pileilene and Grigaliunaite, 2014). Before explaining how the concept of verbal complexity actually applies to the specific verbo-pictorial metaphor ad, the concept of verbal complexity will be explained in the following paragraphs.

Verbal complexity relates to "the linguistic structure and semantic content of communications" (Pileilene and Grigaliunaite, 2014, p.71). This complexity in turn can be subdivided into sub-groups of syntactic, lexical, rhetorical, and technical complexity. According to a group of researcher (e.g. Ke, Wang, 2013; Rikute, Pakalnyle, 2009) lexical complexity can be analyzed from a morphological perceptive. This type of research aims to define the usage of verbs, nouns, adjectives, pronouns, etc. According to, Q Ke and W wang (2013) adjectives can give consumers good image that will persuade them to buy a specific brand. Another group or researchers on the other hand state that lexical complexity can be analyzed from semantic perspective (e.g. lexical borrowings, slang, neologisms, jargon, etc.) (Nevinskaite, 2013; Pileilene and Grigaliunaite, 2014). With regards to the syntactic complexity it is suggested that analysis of this type of complexity is concerned more with the grammatical relations between words; when syntactic structure gets more complicated (Pileilene and Grigaliunaite, 2014).

According to Jae (2011), this type of complexity in an advertising context may include things related to the structure of the sentences namely: length of a headline, affirmative statements/negation, active passive constructions, right-/left branching sentence structures. A right-branching sentence is a sentence which describes first the main subject, followed by a sequence of modifiers that provide additional information about the subject. The Left-branching sentence on the other hand is the inverse of that.

Moreover, advertisements that include sentences that are left branched are considered more complex and hence more difficult to comprehend (Jae, 2011; Pileilene and Grigaliunaite, 2014).

Technical complexity is related to the technical content and special words or expressions that are often used by a group of people belonging to a particular profession or culture. What is also referred to as jargon or slang, often used in ads. Technical language is mainly present in new concepts or terms that usually require more processing or cognitive

capacity (Yang and Meeds, 2008 Pileilene and Grigaliunaite, 2014). According to Anderson and Jolson (1980) the ability of consumers to engage, be interested but also understand the technical language in an advertisement, is related to the participants' level of education as well as their familiarity with the advertised product to determine the effectiveness of the ad (Pileilene and Grigaliunaite, 2014).

Opposite to technical complexity another type of complexity which is referred to as rhetorical complexity is concerned more with the way in which a specific statement is expressed rather than its propositional content. Rhetorical complexity is usually present in a sentence through the employment of a rhetorical figure. One type of these rhetorical figures is the trope figure. A trope deviates from readers' or audience expectations at deeper level, by means of irregular semantic usage (McQuarrie and Mick, 2009).

Trope figures in turn are also subdivided into different situations. One of the most complex situations is what is referred to as destabilization trope (Pileilene and Grigaliunaite, 2014) (e.g. verbal metaphor). Another key dimension of complexity contributing also equally to advertising is what is referred to as informational complexity. This dimension reflects the extent to which ad message contains cues that allow consumers to make optimal buying decisions (Pileilene and Grigaliunaite, 2014).

Resink and Stern (1977) propose evaluative criteria to measure how informative an ad is and which include things such as: "price, quality, performance component or contents availability" (Pileilene and Grigaliunaite, 2014, p.73). Moreover, informational complexity is also captured in the visual element of the ad. The reason for this is that 'information' in an advertisement can be provided verbally (using text) and/or visual (providing visual cues to consumers). Informational complexity is thus considered an independent dimension of complexity that captures both verbal and visual complexities of advertising.

So, how do the above mentioned drivers of verbal complexity apply to the verbopictorial metaphor advertisement used in this experiment?

A strong presence of lexical complexity and technical complexity is obvious in the verbal part of the verbo-pictorial metaphor ad. The use of the term "Cast Iron Skillet" for the object (metaphor source) that the advertised product, the Harley Davidson Jacket (or metaphor target) is supposed to resemble. This term is more of a cooking term or jargon commonly used in the cooks' community. It actually refers to a frying pan more specifically in the U.S.A. culture. This makes it also a "slang" word which is more relevant to the American culture. Moreover, it is used by a generational group which is quite older to the generation to which the participants (students) of the specific experiment belong. This in turn adds even

more to the lexical as well as the technical complexity of the particular sentence. The same applies to the term "fashion plate" which refers to the actual jacket. This is a technical term that is mostly used within the fashion industry. Therefore, participants (students) might not have been familiar with these specific term. What adds even more to this complexity is also the rhetorical complexity that by default also exists in this metaphorical statement. This rhetorical complexity may also have increased due to the semantic distance between the two objects of the metaphor (frying pan and Jacket).

This possibly made it even harder for participants even to compare and relate them. The same ad scored the lowest with regards to the effectiveness of the ad, attitude toward the brand as well as purchase intention. Results also showed that elaboration as well as subjective comprehension negatively mediates the effect of the verbo-pictorial metaphor ad on the three aforementioned final response outcomes. Moreover, objective ad comprehension also negatively mediates the effect the same visual metaphorical ads on overall ad effectiveness and purchase intentions.

This means that higher elaboration and comprehension leads to lower perceived effectiveness of the ad, attitude toward brand and purchase intentions. A possible reason for this interesting finding might be that even if and when comprehended, participants may still think of this visual metaphorical ad as being far-fetched and artificial (van Mulken, Le Pair, Forceville, 2010). Moreover, it could be also that the pleasure derived from comprehension, and which is supposed to play a role in the appreciation of tropes (e.g. visual metaphor) is overestimated in the case of advertising.

Participants perhaps unlike advertising researchers or practitioners are not willing to give up their time and energy beyond a certain level of comprehension difficulty. At least not without some kind of tangible reward, other than merely understating an advertising message (van Mulken, Le Pair, and Forceville, 2010). Another possible reasons for this same finding might not have to do specifically with the difficulty of the ad or metaphor comprehension. Instead, participants might have simply found the aesthetics/design or the idea of the ad unappealing, not creative or boring. Therefore, the more they 'got it' or comprehended this 'idea' the more they disliked it. This in turn might have caused the decrease in the other response outcomes (e.g. attitude toward the brand).

With regards to the other types of visual metaphor investigated in this experiment, the most interesting results relate to fusion metaphor and juxtaposition metaphor. Both scored also quite high with regards to the objective ad comprehension. Contrary to the predictions made by (Phillips and McQuarrie, 2004), there were no significant differences between the three types of visual metaphor (replacement metaphor, fusion metaphor, and

juxtaposition metaphor) with regards to the ad comprehension whether on the subjective level or the objective level. One possible reason for this as related to the replacement metaphor ad and the fusion metaphor ad maybe due to the proximity of the product advertised (both ads for the same bag brand). Therefore, both ads highlight the same functional/performance attributes. Furthermore, juxtaposition visual structure has also scored high with regards to comprehension in previous research. Another possible reason could be again related to the encoding choices of the particular visual metaphor. Clues provided in the ad might have helped participants to comprehend the key message.

6.4. Experiment Two

6.4.1 Introduction

The purpose of this experiment is to investigate the moderating effect of ad viewing time on consumer response to visual metaphor in advertising.

Previous Research on the Moderating Effect of Ad Viewing Time

As discussed in chapter two there are limited number of studies that have investigated the effect of looking time on how consumers evaluate visuals. These studies showed that time spent viewing visuals increases with the increase in the complexity of those visuals (Lackrat and Bakan, 1965; Watman, 1967; Morrison and Dainoff, 1972). Research has also showed that reduced ad exposure leads consumers to elaborate less. This also negatively affects ad recall (Houston, Childers and Heckler, 1987).

Media types in a way pre-determine the time consumers spend viewing an ad. For example, television commercials have a pre-determined ad viewing time of 15-30 seconds on average, and a beginning, middle and end. In print advertising, however, consumers/readers are the ones who decide on the time they spend viewing the ad. It has been observed, however, that the average time consumers spend looking at an ad is 2-5 seconds and up to 15-20 seconds. This depends on who these target consumers are, the product category being advertised as well as the specific execution of the ad (Young, 2015).

According to Elliot Young (2015), chairman of perception research services Inc. (PRS), a leading research company, there are three important patters regarding how print advertisements are read. The first observation is that ads are scanned rather than read. Readers, even the most qualified ones such as doctors and IT managers do not consider thoroughly even the most engaging print executions. Indeed, there is a limit of 15 seconds of average ad looking time.

The second observation relates to the fact that readers start with the dominant visual element within an ad, which is often positioned at the center of the ad. Moreover, generally readers focus on the visual information provided in the ad. Accordingly, readers spend at least half of their viewing time on the visual element.

6.4.2. Proposed Hypothesis

Considering the above-mentioned the following hypotheses are re-stated below as related to this moderating effect that ad viewing time will have on consumer' responses to visual metaphor in advertising.

H1: Ad viewing time will moderate the effect of visual metaphor on elaboration.

H2: Ad viewing time will moderate the effect of visual metaphor on subjective comprehension.

H3: Ad viewing time will moderate the effect of visual metaphor on objective comprehension.

6.4.3. Methodology

Experimental Design

The independent variables are represented in two types of visual metaphorical ads. These types are: replacement metaphor, and verbo-pictorial metaphor. These two types showed the most significant differences with regards to consumers' responses in experiment one. For this reason, they were chosen for the purpose of this experiment. The design of this experiment was a between subject design: 2 X 2 (2 types of visual metaphor – verbo-pictorial metaphor, replacement metaphor) X (2 ad viewing time spans– limited time of 15 seconds, unlimited time). This means that there are four different groups, each group consists of 40 participants. The limited ad viewing time was decided to be limited to 15 seconds. According to the relevant literature mentioned above this time frame is considered the upper limit of the average ad viewing time for magazine ads (Young, 2015). It was chosen, however, considering also that visual metaphor is relatively complex and not easy to comprehend. Each group was exposed to one of the 4 conditions. The assignment of participants to the different conditions was random. The specific experimental design is selected because it best fits with the goal of this study (Myers and Hansen, 2012).

Sample

A total of 160 participants participated in this experiment (40 participants per group). Participants' age varied from 18-21 years old (53.1% female). Participants were students

from Aston Business School. The assignment of participants to the 4 conditions was random.

Advertising Stimuli/Visual Metaphor Manipulation

The researcher together with the supervisory team chose initially four ads:

- 1. Two replacement metaphor ads. Each ad representing an alternative manipulation for this type of visual metaphor (see appendix 12).
- 2. Two verbo pictorial metaphor ads. Each ad representing an alternative manipulation for this type of visual metaphor (see appendix 12).

These above mentioned ads were chosen by the researcher and the supervisory team based on the results of the coding conducted by the researcher and the second trained coder as in experiment one. The decision, however, on the specific two ads that were finally used for this experiment was further based on the results of the stimuli pretests.

With the help of a professional graphic designer, at first a duplicate of each of the four original ads was made. Only logos were removed and were replaced by fictitious brand names. For each ad, key verbal and visual elements that made up the visual metaphor were abstracted and altered according to the different specifications/versions. These different versions represented different metaphorical conditions for each ad. Two conditions per ad. These two conditions differed in terms of the explicitness of the visual metaphor depicted which in turn contributed to the ease of comprehending the visual metaphor by participants.

Two pretests were conducted. These two pre-tests are described in the following sections.

Pretest One

Design: the design employed was 2 x 2 x 2 three way mixed design. A within subjects design (2 types of visual metaphor x 2 manipulation alternatives for each type) with a between subjects' factor (metaphor explicitness) was used.

Sample: The sample used for the purpose of this pretest was 32 students at Aston University, both male and female.

Stimuli: Please see appendix 12 for the eight ads used for the purpose of this pretest

Dependent Variables: subjective comprehension was chosen as the key response variable on which the ads needed to differ. Subjective comprehension was particularly chosen given that is it is a key variable used to categorize the different types of visual metaphor as discussed earlier.

Moreover, it is also a key consumer response to visual metaphor in advertising. Furthermore, it is also the key mediator for the effect of visual metaphor on other final response outcomes as shown in experiment one.

Measures: Subjective comprehension was measured as in van Mulken, Le Pair, and Forceville, 2010 and McQuarrie and Mick (1999). A seven-point semantic deferential item anchored by the adjectives "easy to understand – difficult to understand"

Results:

Table 18: Means and Standard Deviations For Subjective Comprehension

Ad	Subjective Comprehension			
	М	SD		
Phone Ad 1	3.9375	1.77687		
Replacement				
Metaphor				
Phone Ad 2	6.1563	1.32249		
Replacement				
Metaphor – Explicit				
Coffee Ad 1	5.6250	1.43122		
Replacement				
Metaphor				
Coffee Ad 2	6.0625	1.38977		
Replacement				
Metaphor- Explicit				
Radio Ad 1	2.4688	1.74105		
Verbo-pictorial				
Metaphor				
Radio Ad 2	2.3750	1.51870		
Verbo-Pictorial				
Metaphor – Explicit				
Sweets Ad 1	2.8125	1.63505		
Verbo-Pictorial				
Metaphor				
Sweets Ad 2	3.6875	2.07034		
Verbo-Pictorial				
Metaphor - Explicit				

A three-way mixed ANOVA was conducted. The results were the following:

The main effect of metaphor type was significant: F(1, 62) = 146.3, p = .000, partial $\eta 2 = .702$. The main effect of manipulation alternatives was significant: F(1, 62) = 19.460, p = .000, partial $\eta 2 = .239$.

The metaphor type by metaphor explicitness interaction was significant: F (1, 62) = 4.721, p = .034, partial η 2 = .071. The metaphor type by manipulation alternative interaction, however, was not significant. The manipulation alternative by metaphor explicitness was also not significant. The three-way interaction between metaphor type, manipulation alternatives, and metaphor explicitness was significant: F (1, 62) = 17.014, p = .000, partial η 2 = .215.

The replacement metaphor ad and verbo-pictorial metaphor ad that differed significantly between each other with regards to their effect on subjective comprehension at both conditions of metaphor explicitness were chosen. Therefore, coffee ads (replacement metaphor) and radio ads (verbo-pictorial metaphor) were chosen to represent the two types of metaphor under study.

To reaffirm the results regarding coffee ads and radio ads, and to choose the specific two ads to be used in this experiment, a second pre-test was conducted. In this pre-test a much bigger sample was used. Subjective comprehension, however, in the second pre-test was measured using the same measure as in the main experiment, and also in experiment one.

Pretest 2

Design: The design of this pre-test was a between-subjects design. The exact description of this design is the following: 2×2 (2 types of visual metaphor) \times (2 levels of explicitness for each type). This means that there is a total of four conditions.

Sample: a total f 160 participants in this pre-test (40 participants per group). Participant were students at Aston Business School (55% female). Participants were randomly assigned to the four conditions.

Stimuli: Please see appendix 12 for the four ads that were used for the purpose of this pre-test.

Measures: Subjective comprehension was measured as in Mohanty and Ratneshwar (2015) by a two item, 9-point bipolar scale. The two items were: "Did not understand at all/ completely understood it" and "Not at all certain/ completely certain". Reliability of the scale was deemed appropriate (Cronbach's α = .929).

Results: results from ANOVA were performed comparing the effect of the four ads (2 conditions for replacement metaphor and 2 conditions for verbo-pictorial metaphor) on subjective comprehension.

The results reaffirmed the results of pre-test 1. There was a significant effect for the ads, F(3, 156) = 30.397, p < .05. Post Hoc tests (Benferroni), showed that the significant differences were only between metaphor types (verbo-pictorial metaphor and replacement metaphor) but not between levels of metaphor explicitness within each type, with Coffee Ad 2 (replacement metaphor) scoring the highest (M= 6.8125, SD = 1.71975) with regards to subjective comprehension and Radio Ad 1 (verbo-pictorial metaphor) the lowest (M= 2.8625, SD = 2.53182). Results for the four ads are showed in table 19 below.

Table 19: Means and Standard Deviations For Subjective Comprehension

	Coffee ad 1 Replacement		Coffee Ad 2 Replacement		Redio Ad 1 Verbo-Pictorial		Radio Ad 2 Verbo-Pictorial -		
	Metapho	etaphor m		metaphor – Explicit		Metaphor		Explicit	
	М	SD	М	SD	М	SD	М	SD	
Subjective	5.6750	2.07411	6.8125	1.71975	2.8625	2.53182	3.3750	2.19776	
Comprehension									

The two ads that were finally chosen as stimuli for this experiment were coffee ad 2 (replacement metaphor) and Radio ad 1 that showed the most significant difference with regards to their effect of subjective comprehension. These two ads are shown in table 20 below.

Table 20: Advertising Stimuli used in Experiment Two



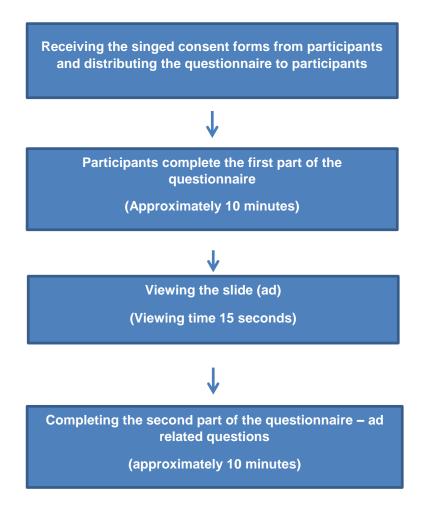
Illustration removed for copyright restrictions

Method of administration - Procedures

The experiment was a paper-and pencil experiment administered in class at Aston University in the March 2015. Procedures were the same as in experiment one. However, in the two limited ad viewing time span conditions (ad viewing time limited to 15 seconds), participants answered the first part of the questionnaire. After that the participants were shown a slide which depicts the specific ad (type of visual metaphor under study) for 15 seconds. Exactly after the 15 seconds the slide was removed and then participants started answering the questions related to the ad they viewed (the second part of the questionnaire).

Please see figure 31 below for an illustration of the procedures to be used in the limited ad viewing time (15 seconds) conditions of this experiment.

Figure 31: Procedures Followed in the Limited Ad Viewing Time Condition



Measures

Independent Variables

The independent variables are represented in the two types of visual metaphor, replacement metaphor, and verbo-pictorial metaphor as depicted in the two ads used in for this experiment.

Mediating Variables

The conceptual and operational definitions for elaboration (Cronbach's α = .750), subjective comprehension (Cronbach's α = .964), as well as objective comprehension, were similar to what was used in experiment one. The same applies also to objective comprehension.

Moderating variable

Ad Exposure Time: The time participants will be allowed to view each of the visual ads before answering the questions related to each of these ads.

Operational Definitions: Ad exposure time will be operationalized as follows:

Unlimited time: Participants will be exposed to and have the chance to view and process each of the visual ads under study as much as they wish before they start answering the questions related to each ad.

Limited Time: Participants will be exposed to and have the chance to view and process each of the visual ads under study for a specific time frame of 15 seconds after which they start answering the questions related to each ad.

Dependent Variables

The moderating effect was tested on the following three dependent variables: subjective comprehension, objective comprehension and elaboration. The conceptual and operational definitions for elaboration (Cronbach's α = .750), subjective comprehension (Cronbach's α = .964), as well as objective comprehension, was similar to what was used in experiment one. Objective metaphor comprehension was also measured as in experiment one. Moreover, ad recall was also included as a dependent variable in this experiment.

Ad recall was defined as the mental reproduction of some target item experienced or learned earlier (Bagozzi and Silk, 1983). Moreover, ad recall was measured in this experiment with an open-ended question as in McQuarrie and Mick (2003).

The question related to ad recall was stated as follows:

- You have viewed an ad for product x, please write down in the following space whatever you can recall concerning this ad

Covariates

Only attitude towards advertising (Cronbach's α = .599), and Mood (Cronbach's α = .884), were measured as covariates in this experiment in the same way as in experiment one.

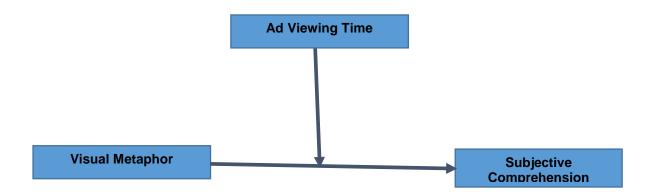
Extraneous Variables and Confounding

To control for extraneous variables and confounding and to guarantee that the experiment is well controlled the researcher has considered the same points as in experiment one. In the case of this experiment however, brand familiarity was not considered as an extraneous variable, because mock ads with fictitious brand names were used.

6.4.4. Data Analysis and Results

Moderation: The Conceptual Model

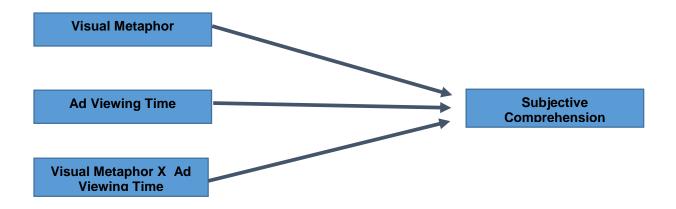
To test the moderating effect of ad viewing time on consumer response to visual metaphor in advertising, the moderating analysis. According to Hayes (2012) this type of analysis is used to test whether the magnitude of a variable's effect on some outcome variable depends on a third variable or set of variables. Field (2013) on the other hand states that the combined effect of two variables on another is known conceptually as moderation, and in statistical terms as an interaction effect. The conceptual model of moderation is the relationship between two others. The following diagram illustrates the conceptual moderation model using as an example the effect of visual metaphor (the independent variable), subjective comprehension (the dependent variable) moderated by ad viewing time (moderator).



Moderation: The Statistical Model

The statistical model for moderation the outcome is predicted from the predictor variable, the proposed moderator, and the interaction of the two (Field, 2013). The interaction effect tells us whether moderation has occurred, but for the interaction term to be valid the predictor and moderator must be included.

The following diagram shows that the statistical moderation model using the same example as for the conceptual moderation model shown above.



According to the diagram above, we are looking at a regression in which subjective comprehension is the outcome and it is predicted from visual metaphor, ad-viewing time and their interaction (Field, 2013).

Using PROCESS to Run the Moderation Analysis

Moderation is indicated through a significant interaction between the predictor (visual metaphor), and the moderator (ad viewing time). To run a moderation analysis first predictor and moderator should be centered, then the interaction term should be created. Following that forced entry regression with the centered predictor, centered moderator and the interaction of the two centered variables, as predictors will run. This general procedure approach fitting linear models allows the inspection of sources of bias in the model. This is also a key advantage of this model.

For the purpose of this experiment in terms of conducting the moderation analysis, the PROCESS tool will be used. There are several advantages for using PROCESS as opposed to normal regression tools. 1) it will center predictors for us; 2) it computes the interaction term automatically; and 3) it will do the simple slopes analysis (Field, 2013, pp. 401).

Running the Analysis

- 1- To access the dialogue box select analyze regression. The variables in the data file will be listed in the box labelled data file variables.
- 2- Select the outcome variable (i.e. subjective comprehension) and drag it to the box labelled outcome variable (Y) or click on related arrow. Similarly, we select the predictor variable (visual metaphor) and drag it to the box labelled independent variable (X). Finally select the moderator variable (ad viewing time) and drag it to the box labeled moderating variable(s)
- 3- Simple moderation is represented in model number one (of the 74 different models that PROCESS can test). We select model 1 from the drop-down list.

- 4- Click on options for another dialogue box to appear. Select Mean Center for Products to center the predictor and moderator. 2) Heteroscedasticity-Consistent SEs indicates that we do not need to worry that we have heteroscedasticity in the model.
 3) OLS/ML confidence intervals produces confidence intervals for the model, and I have tried to emphasize the importance of these throughout the book, and 4) generate data for plotting is helpful for interpreting and visualizing the simple slope analysis.
- 5- Keep the simple slopes at +/-1 standard deviation of the mean of the moderator (the default which is fine).
- 6- Select Johnson-Neyman method to get zone of significance for the moderator.
- 7- Back in the main dialogue box Click OK to run the analysis. (Field, 2013)

Results

The results of the moderation analysis using *PROCESS* tool in SPSS is shown in tables 21, 22, and 23 below.

Table 21: Linear Model of Predictors of Subjective Comprehension.

	В	SE B	T	p
Constant	4.7031	.1577	29.8165	p<.001
	(4.3916, 5.0147)			
Ad Viewing Time	.0438 (5794, .6669)	.3155	.1387	<i>p</i> >0.05
Visual Metaphor Type	-4.4563 (-5.0794 - 3.8331)	.3155	-14.1257	<i>p</i> <.001
Ad Viewing Time x Visual Metaphor Type	1.0125 (2338, 2.2588)	.6309	1.6047	<i>p</i> >0.05

From the table above we can see that there is no significant interaction effect, indicating that in this case the relationship between the visual metaphor type and subjective comprehension is not moderated by ad viewing time.

Table 22: Linear Model of Predictors of Objective Comprehension

	В	SE B	T	p
Constant	.9938	.0447	22.2088	p<.001
	(.9054, 1.0821)			
Ad Viewing Time	.0625	.0895	.6984	<i>p</i> >0.05
	(1143, .2393)			
Visual Metaphor Type	9625	.0895	-10.7552	<i>p</i> <.001
	(-1.1393 -			
	.7857)			
Ad Viewing Time x	.3250	.1790	1.8158	<i>p</i> >0.05
Visual Metaphor Type	(0285, .6785)			

From the table above we can see that there is no significant interaction effect, indicating that in this case the relationship between the visual metaphor type and objective comprehension is not moderated by ad viewing time.

Table 23: Linear Model of Predictors of Elaboration

	В	SE B	T	p
Constant	3.6391	.1244	29.2524	p<.001
	(3.3933, 3.8848)			
Ad Viewing Time	2156	.2488	8666	<i>p</i> >0.05
	(7071, .2758)			
Visual Metaphor Type	1844	.1166	-1.5819	p>.05
	(4146, .0458)			P. 100
Ad Viewing Time x	3063	.2331	-1.3138	p>0.05
Visual Metaphor Type	(7667, .1542)	.2001	-1.0100	ρ-0.00

From the table above we can see that there is no significant interaction effect, indicating that in this case the relationship between the visual metaphor type and elaboration is not moderated by ad viewing time.

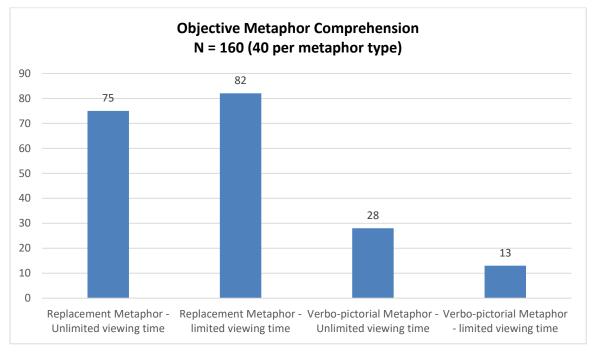
Based on the above-mentioned hypothesis 1, 2 and 3 are refuted.

Objective Metaphor Comprehension

A chi-square test was performed and a relationship was found between the 4 conditions and objective metaphor comprehension X2 (3, N = 160) = 55.535, p < .05

As illustrated in figure 32 the differences in objective metaphor comprehension are mainly between the types of visual metaphor (replacement metaphor versus verbo-pictorial metaphor) rather than within the type of visual metaphor, with replacement metaphor scoring the highest in the limited ad viewing time condition (82%) and verbo-pictorial in the same condition scoring the lowest (13%) with regards to the same condition.

Figure 32: Objective Metaphor Comprehension for the Four Conditions



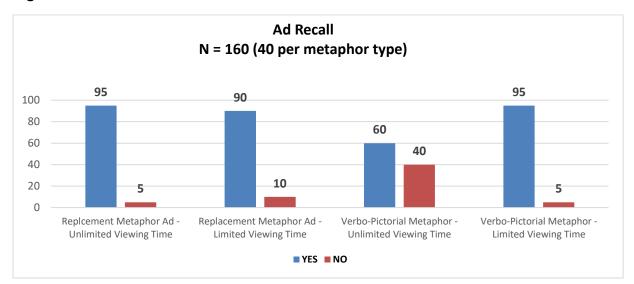


Figure 33: Ad Recall for the Four Conditions

In figure 33 above we can see the results of the quantified answers to the ad recall question. This figure shows the results regarding whether participants were able to recall (anything) from the ad as opposed to no recall.

From the above mentioned results it can be seen that across the three of the four conditions over 90% of the participants recalled something from the ad they had been exposed to.

For replacement metaphor there was no difference between the unlimited viewing time condition and the limited viewing time condition for ad recall, as in both conditions it was very high. For verbo-pictorial metaphor, however, there was a difference between the two conditions. Participants in the limited viewing time condition scored higher (95%) than participants in unlimited viewing time condition (60%).

6.4.5 Discussion

This experiment tested the moderating effect of ad viewing time, across two types of visual metaphor. These types are replacement metaphor and verbo-pictorial metaphor. These two types had showed the most significant difference between each other with regards to their effect on consumer respose in experiment one. Results from experiment two did not support the hypotheses related to this moderating effect. Indeed, results showed that there is no significant interaction, indicating that in this case the relationship between the visual metaphor type and each of the three dependent variables (subjective comprehension, objective comprehension, and elaboration) was not moderated by ad viewing time.

A possible explanation for these results could be due to the time frame of 15 seconds that was used in the limited ad viewing time condition. This time frame was possibly too long to produce significantly different results compared the unlimited exposure time condition. The rationale for using the 15 seconds as a time frame in this experiment was based on the assumption that comprehending a visual metaphorical ad would require more time than the minimum average ad viewing time. This however, proved not to be the case. Results might have been different if the time frame for the limited ad viewing time condition was shortened to 2-3 seconds. Indeed, this time frame is more relevant to the stated low-end average viewing time which according to previous research ranges from low 3-5 seconds up to a high of 15-20 seconds (Young, 2016). Another reason complementing the aforementioned explanation might be related to the homogeneity of the student sample. These same reasoning might be the rationale for the relatively close levels of visual metaphor comprehension as well as ad recall particularly for the two conditions of the replacement metaphor ad.

As for the verbo-pictorial metaphor ad surprisingly participants' level of ad recall was higher in the limited ad viewing time condition (95%) as opposed to the unlimited viewing time condition (60%). A possible explanation for this result is that participants pay more attention to the ad and view it more thoroughly when they are aware that the viewing time is limited, and hence they recall more of the ad in this case. Moreover, Mick (1992) showed that deep levels of subjective comprehension are positively related to ad recall.

Given that ad viewing time did not finally moderate the effect of visual metaphor on subjective comprehension in this current experiment, it is also expected that it would not in turn influence ad recall.

6.5. General Discussion

An integrative framework for the effect of visual metaphor on consumer response to advertising was proposed. The first part of this framework focused on comparing the effect of five different types of visual metaphor on different consumer responses. Moreover, it proposed a hierarchy by which these responses occur.

More specifically it was hypothesized that elaboration, subjective ad comprehension, and objective ad comprehension will mediate the effect of each of the types of visual metaphor under study on a number of final consumer response outcomes. These final responses are attitude toward the ad, ad credibility, effectiveness of the ad, attitude toward the brand, purchase intention, and perceived quality of the advertised product. Experiment one compared the effects of the different types of visual metaphor and tested this mediating

effect. Three of the five types of visual metaphor were compared to each other in previous research. It is the first time, that all five types are compared for their effect. Results from this experiment confirmed the mediation effect of the three aforementioned variables. This effect however, was the case in only two of the five types of visual metaphor under study. These types are, replacement metaphor and verbo-pictorial metaphor. Moreover, this effect was positive in the case of replacement metaphor and negative in the case of verbo-pictorial metaphor. Moreover, in this experiment replacement metaphor appears as the most effective type with regards to consumer responses. Possible explanations for these results were provided also from the exploratory part of this experiment represented in the open ended questions as well as the complementary small study that followed.

Results showed that when comprehending the visual metaphor, participants mainly focus on the shared characteristics between the metaphorical objects in terms of their function. Therefore, the stronger this similarity in terms of function the easier it becomes for participants to comprehend the metaphor. In the case of replacement metaphor this similarity was obvious and perceived as such by consumers. Furthermore, this was not the case for verbo-pictorial metaphor ad and this might explain its low scores across all consumer responses in this experiment. The second part of this framework introduced a new moderating factor in the visual metaphor literature. This factor is ad viewing time.

Experiment two tested the moderating effect of ad viewing time on each of the following thee variables; elaboration, subjective ad comprehension, and objective ad comprehension. It tested this effect using mock ads. The effect was tested across the two types of visual metaphor that showed the most significant difference between each other with regards to their effect in experiment one. These types are replacement metaphor and verbo-pictorial metaphor. Results did not support the hypotheses related to this moderating effect in the case of this specific experiment where a student sample was used.

This was possibly due to the time span of 15 seconds which was used in limited ad exposure time condition. Another reason could be the homogeneous characteristics of this student sample. These limitations, however represent also opportunity for future research. Future research in which a different sample and a shorter time span can be used could produce more positive results.

These two experiments in total tested this integrative framework. They examined visual metaphor as a major phenomenon in the advertising creative process. This integrative and comprehensive analysis contributes to the study of visual rhetoric in advertising.

It does so by systematically comparing and analyzing the effect of these different combinations of visuals on consumer response. The inclusion of additional types of visual metaphor into this comparison (e.g. verbo-pictorial metaphor) builds on and updated previous research (e.g. Gkiouzepas and Hogg, 2011; Mohanty and Ratneshwar, 2015). Furthermore, it provides new insights regarding the effect of these different types. The openended enquiry further showed how these different types actually differ from the consumer's perspective. Moreover, it uncovered the main characteristics that contribute to this differences always as perceived by consumers.

The experiments demonstrated that indeed different types of visual metaphor types can indeed have an impact on a number of important consumer responses such as attitude toward the brand, perceived effectiveness of the ad as well as purchase intention. Moreover, the mediating effect of elaboration, subjective ad comprehension, and objective ad comprehension on the aforementioned final response outcomes was also demonstrated. This, largely validated the conceptual model proposed in this thesis. These findings provide also important managerial implications. Advertisers should exercise some caution when employing these visual metaphors. The type of similarity they choose to highlight between the product and the object to which it is metaphorically compared is important. Depicting strong similarities in terms of functional/performance attributes could facilitate the comprehension of the visual metaphor and hence its effectiveness.

Indeed, consumers seem to take primarily notice of these specific similarities when trying to comprehend the visual metaphor. Advertisers should also be careful with regards to the wording they use when employing a verbo-pictorial metaphor. They should make sure that the verbal part of the metaphor is free of lexical, technical or strong rhetorical complexity. The high level of verbal complexity can impede the comprehension of the visual metaphor by consumers. This in turn can lead to negative attitudinal and intentional responses to the ad.

6.6. Ethical Considerations for Experiments

Before participating in the different studies, participants (students) were given an information sheet which included full information about the study as well as a consent form to sign. The signed consent forms were then collected from the students. After that the questionnaire related to the experiment was distributed only to the students who had expressed their desire to participate in the study and who had signed the related consent form.

Chapter 7

Discussion

7.1. Introduction

In this chapter the objectives of this thesis will be revisited and the extent to which this thesis has achieved them will be discussed. This in turn will aid in delineating the important contributions of this PhD research project. Each of the chapters/studies presented as part of this thesis aimed at fulfilling one or more of the objectives of the thesis. This chapter will discuss whether these chapters/studies succeeded in achieving their target objective. Furthermore, the contribution of each of the studies and the overall thesis will be summarized. Finally, the key limitations as well as recommendations for further research will be presented. The chapter will start by restating the aim and the objectives of this thesis. Following that each chapter in the thesis will be discussed separately in terms of its objectives and how it met them starting with chapter two and ending with chapter five while reflecting also on the key findings of the different studies. The key contributions of this thesis as well as the managerial implications will then be presented. Finally, this chapter will end with the limitations of this research project and the recommendations for future research.

7.2. Aim and Objectives of This Thesis

The overall aim of this PhD thesis is to provide an integrative framework for the use and effect of visual metaphor on consumer response to print advertising.

More specifically the key research objectives are the following:

- 1- To identify and examine previous research on the nature of visual metaphor in advertising.
- 2- To question existing advertising theory and use the insights of advertising practitioners to provide more realistic and valid operational definitions for the different ad design elements (e.g. headline, type of visual, etc.).
- 3- To provide a comprehensive assessment of the use of visual metaphor in print advertising.
- 4- To identify and examine previous research on the effect of visual metaphor in advertising.
- 5- To compare the effect of the different types of visual metaphor proposed by Forceville (1996) on consumer response to print advertising.
- 6- To test the mediating effects of elaboration, subjective ad comprehension and objective ad comprehension on consumer response to visual metaphor in advertising

7- To test the moderating effect of ad viewing time.

7.3. Meeting the Objectives

The following section will discuss whether the different chapters succeeded in achieving their target objective.

Chapter 3, the literature review chapter aimed at identifying the nature of visual metaphor in advertising. A review of the key literature was presented in order to offer an understanding of the nature and character of this important visual rhetorical figure. Moreover, this chapter offers a clear explanation of alternative visual metaphor typologies/categories from which Marketing managers as well as advertising practitioners can select to frame their advertisements. Moreover, it offers a clear explanation of the 'mechanisms' by which these different types are 'created'. It also highlights and provides the rationale for the importance of Forceville's (1996) typology of visual metaphor in advertising. Moreover, this chapter offers also a clear explanation of alternative visual metaphor typologies/categories that were based on Forceville's (1996) typology. Marketing managers as well as advertising practitioners can select to frame their advertisements. Moreover, it offers a clear explanation of the 'mechanisms' by which these different types are 'created'. This chapter also highlights the need for further research on the presence of visual metaphor in print advertising because existing research is limited and dated. This research should identify the percentage and the different types of visual metaphor in contemporary print advertising, compare the presence of visual metaphor to other ad elements (e.g. textual element), and also cover different print media categories. This chapter, therefore, has met objective one as it identified and examined prior research on the nature and the effect of visual metaphor in advertising.

Chapter 4, firstly provided a list of realistic and valid operational definitions for the different ad design elements. This was achieved through a qualitative open-ended enquiry with print advertising experts (copywriters and art directors). This enquiry allowed participants to use their practical insight and develop their own operational definitions for the different ad elements.

It further aided them to raise their own issues and present their more 'realistic' perspective that directly relates to how 'print ads are 'actually' designed and how this creative process actually works. An important finding that came out of this qualitative research study was that practitioners are aware of the metaphor as an advertising strategy. However, they are not always fully 'conscious' themselves of the process by which they 'create' these metaphors when designing print ads. This possibly results from their lack of knowledge regarding the theory underlying the concept and its different types. Another important finding is the 'creativity' and hence the flexibility that characterizes the 'team-work' needed for the design and the production of print ads.

This creativity is present in the 'roles' played by these copy-writers and ad directors in this process. Moreover, this is also reflected in the way they define the different ad design elements. This was particularly evident in the operational definitions provided for the textual elements of the print ads (e.g. headline, subhead, tagline, etc.) which were based on 'metaphors' that clearly explained and differentiated these elements mainly in terms of their 'role' and the 'effect' they have on the ad reader rather than their design characteristics (e.g. font size, position in the ad, etc.). In this way this study questioned existing advertising theory with regards to how the different ad elements can be defined but most importantly operationalized. Therefore, these definitions correspond more accurately to how these elements are actually and realistically encoded in print advertising. Considering this it could be seen that objective two was met through this study. Furthermore, the insight provided from this qualitative study directly contributed to the development of a coding grid that was used in the second study which was a content analysis study that was presented in this chapter. This study also shed light on how the different types of visual metaphor proposed by Forceville (1996) are encoded and used by advertisers in practice. These types include juxtaposition metaphor, fusion metaphor, replacement metaphor and verbo-pictorial metaphor. The review of literature on previous content analytic studies illustrated the lack of research particularly on the presence and percentage of visual metaphor (across its different types) in print advertising. Furthermore, it illustrated a narrow focus approach regarding the different ad elements as well as the codes related to these elements in these previous studies. A number of key findings came out of this study. The study showed that visual metaphor is strongly present in modern print advertising. Furthermore, this presence is showing an increasing trend over time. Certain types are generally more strongly present in print advertising (e.g. replacement metaphor, verbo-pictorial metaphor).

However, this presence is slightly decreasing over time compared to the presence of other more 'novel' types (e.g. verbo-pictorial indirect effect metaphor), which show an increasing trend over the time period covered in this study. This also indicates that visual metaphor is not only an existing advertising phenomenon but also a continuously evolving one. Another important finding is related to the development of print ad design, with the visual element playing definitely the predominant role. Some textual elements (e.g. headline) still play also a key role in print ads.

A role, however, that is clearly changing with regards to the text 'size' and 'form' and hence maybe its importance over time. This indicates that this same 'role' is expected to change even more in the future. This content analysis study provides an important contribution by showing that the different types of visual metaphor proposed by Forceville's (1996) actually correspond to how visual metaphors are encoded in modern print ads across different print media outlets. It further identifies two 'new' additional types that represent extensions to the same typology of visual metaphor (e.g. verbo-pictorial indirect effect metaphor, total replacement metaphor). This research brings to light the variety of ad design elements (including visual metaphor) employed in print advertising. Moreover, it also offers an important rationale for future empirical research comparing these different elements, for example the different types of visuals, or text elements.

This study also meets objective 3 (*providing a comprehensive assessment of the use of visual metaphor in print advertising*). It clearly illustrates the frequency with which these different existing as well as new types of visual metaphor are employed in practice. This in turn highlights the perspective of the advertising industry with regards to what types of visual metaphor are 'actually' used in print ads. This research study contributes to knowledge on the role of visual metaphor in print advertising by: presenting the different types used in print advertising by modern advertisers, highlighting the frequency with which these types are used as well as the link between what is actually used in practice, and the most theoretically sound types. Finally, it extends this theoretical typology by identifying 'new' additional types of visual metaphor.

Chapter 5, this second literature review chapter aimed at identifying and examining literature on the effect of visual metaphor in advertising. Furthermore, it offered an understanding of the effect that visual metaphor has on the different consumer responses. The hierarchy by which these responses occur (e.g. mediating responses, final responses), as well as the 'new' possible moderating factor for this effect. The review helped in generating the key research questions of this thesis as well as the conceptual model that highlights the specific areas/relations that require further testing. An important finding that came out of this chapter was the lack of empirical research particularly with regards to the effect of visual metaphor on the different consumer responses. The number of responses investigated in previous research is also small. These studies, however, still generate important findings and challenge traditional thinking by highlighting the effectiveness of visual metaphor compared to visual non-metaphorical ads. It is rare that the different types of visual metaphor are compared to each other with regards to their effect on consumer responses in previous research. This is perhaps related to the difficulty of defining these different types and hence how they are manipulated for research purposes. An important typology that provides a sound conceptual menu for the different types of visual metaphor in print advertising is the one proposed by Forceville (1996). The reason for this is that these proposed types are simple yet the differentiating characteristics between them are clear. Moreover, this typology emphasized the importance of the visual structure as a ground-base on which these different types of visual metaphor differ. These same visual structures are seen as the 'vehicles' which facilitate the meaning making process or alternatively make it more difficult for consumers. Studies which have empirically tested the effect of moderating factors that influence the effect of visual metaphor on advertising response are only five and these were discussed in this chapter. A review of a 'new' potential moderating factor that could moderate the effect of visual metaphor on consumer response is also provided. This factor is ad viewing time. This chapter also highlights the need for further empirical research. This research should compare the effect of the different types of visual metaphor as well as factors that could moderate this effect. This in turn increases the academic understanding of this topic. This chapter in turn has identified and examined prior research on the nature and the effect of visual metaphor in advertising, therefore it can be confirmed that objective four has been met.

Chapter 6, the final chapter aimed at achieving objectives: 5) compare the effect of the different types of visual metaphor proposed by Forceville (1996) on consumer responses to print advertising and 6) Test the mediating effect of elaboration, subjective ad comprehension, and objective ad comprehension 7) Test the moderating effect of ad viewing time. It attempted to do so via an experimental methodology. Literature review of the limited previous research conducted on effect of the different types of visual metaphor proposed by Froceville (1996) highlighted the call for more research on the effect of these types.

Moreover, this 'call' is based on a number of limitations/points that needed to be covered and met with more empirical research. The most important of these points are the following: a) the need to grasp deeper and capture the 'essence' of the factors (e.g. conceptual tension) that influence the effect of the different types of visual metaphor but also in a way determine how these different types actually differ. This point was tackled in this chapter by employing an open-ended questions approach as part of experiment one questionnaire. This part in turn served more of an exploratory purpose. The answers of these open-ended questions provided insight with regards to what exactly participants actually 'see' in the different visual metaphors. This insight also uncovered what participants preliminary 'look for' in these metaphorical objects. Moreover, what are the shared characteristics of these objects that consumers focus on when trying to comprehend the metaphor. This further contributed to the understanding of how the different types of visual metaphor are perceived by consumers themselves, and what could facilitate consumer's comprehension of these different visual metaphors. In other words, their subjective comprehension, which is also a key determinant of their attitudes formation regarding the ad, the product/brand as well as their purchase intentions.

b) the need to compare more types of visual metaphor proposed by Forceville (e.g. verbo-pictorial metaphor) with regards to their effect (e.g. juxtaposition metaphor, fusion metaphor, replacement metaphor). This point was covered by the inclusion of this fourth type of multimodal metaphor proposed by Forceville (1996), the verbo-pictorial metaphor. This in turn provided new insights regarding the effect of the different types of visual metaphor as well as the differences with regards to this effect when all four types are compared to each other. What added to the richness of these insights even more is the inclusion of the new additional type labelled, verbo-pictorial indirect effect metaphor and which also represents a multimodal type of metaphor.

c) the need to include and measure more response variables considering the very limited number of variables stated in previous research. This point was met by including a large number of response variables. The effect of the different types of visual metaphor was tested across ten different response variables.

Moreover, the hierarchy by which these effects occur was also investigated. In this research three key response variables were tested for their mediating effect. These responses are elaboration, subjective ad comprehension, and objective ad comprehension. The mediation effect was tested on six final response outcomes.

These final responses are: attitude toward the ad, ad credibility, effectiveness of the ad, attitude toward the brand, perceived quality of advertised product and purchase intention.

d) the need to use real ads and understand the effect of the different types of visual metaphor as they are 'actually' encoded in print advertising. This point was also covered in the first experiment which used five real magazine ads each of which depicted one of the five types of visual metaphor under study. This first experiment raised some interesting findings that provided important contribution to the area of visual metaphor in advertising.

First, important finding is the effectiveness of the replacement visual metaphor type, on the different consumer responses and hence its contribution to advertising effectiveness. This type of visual metaphor scored, the highest with regards to elaboration, subjective ad comprehension as well as objective ad comprehension. Furthermore, the mediation effect of this three response variables had a positive effect on three very important final response outcomes. These are: effectiveness of the ad, attitude toward the brand, and purchase intention.

The results of this experiment regarding this specific type of visual metaphor were unexpected, considering the findings of the limited previous research regarding this specific types. Unlike Previous theorization (Phillips and McQuarrie, 2004) as well as previous research studies (e.g. van Mulken, Le Pair, and Forceville, 2010; van Mulken, Hooft, and Nederstigt; 2014) which had predicted and showed that replacement metaphor is the most difficult type of visual metaphor to comprehend compared to other types (e.g. juxtaposition metaphor, fusion metaphor, etc.). Results of this first experiment as mentioned above,

however, were different. The explanation for this interesting result was partially based on the insights provided from participant's answers to the open ended questions included the main questionnaire used in this experiment. These insights revealed that participants preliminary focus on the functional/performance characteristics of the two metaphorical objects when trying to comprehend the metaphor and hence the ad. It is in terms of these functional characteristics that participants mainly relate the two terms of the metaphor and hence construct the metaphor in their minds. These results regarding the functional characteristics were further confirmed in the complementary small study that followed this experiment.

It seems that the replacement metaphor ad employed in experiment one clearly encoded and depicted these shared functional characteristics between the advertised product (Samsonite bag) and the object (sand bag) which acted as the source domain for this specific metaphor. This is addition to other 'contextual' clues in the ad that have possibly facilitated the comprehension of the specific replacement metaphor and have aided participants in overcoming the presumingly difficult to comprehend visual structure (the replacement structure). This result also suggests that visual structure might not be the preliminary factor that finally determines the degree of difficulty consumers experience in solving the visual metaphor and hence understanding the key ad message.

Second, important finding is the difficulty which was associated with comprehending the verbo-pictorial metaphor ad, and hence the ineffectiveness of this specific ad. The specific ad scored the lowest across all the response variables (mediating and final responses). Moreover, the mediation effect of elaboration, subjective ad comprehension as well as objective ad comprehension was in a negative direction, leading to negative effect on the final response outcomes (e.g. effectiveness of the ad, attitude toward the brand, purchase intention). This finding was again contra to the initial predictions made in this experiment. Given the verbal element in this multimodal type of metaphor, it was expected that the verbal part will facilitate to a high extent the comprehension of the specific metaphor and the ad overall and hence positively contribute to the ad effectiveness. This, however, was not the case. Lexical, technical, and metaphorical (rhetorical) verbal complexity was strongly present in the verbal part of this visual metaphor, and provided a possible explanation for the great difficulty consumers experienced in comprehending this specific type of visual metaphor and the related ad and hence contributed to its infectiveness. Also, the possibility that participants simply did not like the 'idea' of this ad and found it even more

unappealing the more they comprehended it, provided another possible explanation for the same negative result related to this verbo-pictorial metaphor.

This experiment used real ads with nearly no text and without any alterations conducted on the original ads (as it was the case in two previous research studies which also used real ads to test the effect of the different types of visual metaphor). This in turn enhanced the external validity on this current experiment. The open ended questions (exploratory) part of these experiments shed light and contributed to a deeper understanding of the differences between the different types of the visual metaphor, and subsequently their effect (e.g. comprehension). This was achieved by grasping deeper into the nature of these differences, from the consumers' point of view.

This view is more essentially related to the effect that these differences, and how it impacts visual metaphor's effectiveness as well as overall advertising effectiveness. Considering the aforementioned, through this first experiment, this chapter met objectives 4, and 5. The main objective of experiment two, was to test the moderating effect of ad viewing time on consumer response to visual metaphor in advertising. It tested this effect on each of the three mediating variables, elaboration, subjective ad comprehension, and objective ad comprehension. It tested this moderating effect across two types of visual metaphor. These types are replacement metaphor and verbo-pictorial metaphor. Moreover, the specific two types differed most significantly with regards to their effect on consumer response and more specifically consumer's subjective comprehension. Mock ads were used in this experiment further enhancing its internal validity. Surprisingly, results did not support the predictions made regarding the moderating effect of ad viewing time in this experiment. The main explanation for this was based on the time frame that was used to operationalize the limited ad viewing time. This time frame was 15 seconds. Moreover, it seems that this time frame was too long to be able to produce significant differences as opposed to the unlimited ad viewing time condition. Another explanation for these results is related to the student sample hat was used for the purpose of this experiment. Therefore, there was insufficient variance possibly in the abilities needed to comprehend the visual metaphor (e.g., education level) in this presumably homogeneous student sample. Despite the fact that results from this experiment did not support the predictions made, it did manage however to shed light on the importance that this factor can have on consumers' response to visual metaphor in advertising. Moreover, it presented the methodological procedures through which these moderating effect can be tested, and the limitations which can be avoided and improved in

future research. Considering this, it could be said that experiment two still met objective 6 stated above.

Considering the above mentioned the key contributions of this thesis can be re-stated summarized and ordered in terms of the sequence of the related studies, as follows: Firstly, it provides a detailed and comprehensive coding grid for analysing print ads in general and visual metaphor in print advertising more specifically. Secondly, it extends the Froceville (1996) typology of visual metaphor in advertising and identifies 'new' additional types. Thirdly, it extends the theoretical understanding of the mechanisms related to how visual metaphor engages the consumer and elicits favourable responses to different print advertisements. It tests this effect across 5 different types of visual metaphor, as well as eleven different consumer responses.

Furthermore, it explains the hierarchy by which these responses occur (e.g. mediating responses, final responses). Fourthly, it tests the possible moderating effect of ad viewing time on consumer response to visual metaphor in advertising. The aforementioned contributions are addressed through a qualitative research study conducted with advertising experts, a content analysis study on 320 print ads and two experiments.

7.4. Managerial Implications

This research offers important findings that provide insight to how creatives and advertising practitioners can better design and frame their ads on one hand, and how to better employ visual metaphors in print advertising more specifically. A number of factors as indicated in this thesis need to be considered to ensure the effective design of advertisements, including, the different print media types (e.g. magazine, outdoor etc.), and the consistency of the print advertisement design with the unique character of these different print media categories, the context in which they are placed, as well as the current and emerging trends in print advertising design in general.

This research also provides valuable knowledge to practitioners with regards to which types of visual metaphor are mostly employed in print advertising across the different media categories, what are the established types as well as the more emerging (new) types that contribute to the development of this phenomenon of visual metaphor in advertising as

an advertising strategy. Moreover, it also provides the guidance needed for creatives and ad designers with regards to the different metaphors' visual structures/forms that are mostly comprehended and liked by consumers (e.g. replacement metaphor), but also most importantly regarding the key products' characteristics/attributes (e.g. functional/performance attributes) that these creatives should stress on and explicitly depict when designing and constructing these different visual metaphors employed in print ads. This in turn will lead to more effective encoding strategies to be employed by advertising practitioners which will positively contribute to the overall advertising effectiveness. Moreover, this same insight will aid in the evolvement and the development of the advertising practice in general over time, and the introduction of yet newer trends/practices that will equally contribute to this development.

7.5. Limitations and Future Research

The research curried out in this thesis makes an important step towards increasing our knowledge regarding the effectiveness of visual metaphor in advertising. A topic which is underrepresented in advertising research particularly with regards to the specific visual metaphor types investigated in this research. However, this research is not devoid of limitations and hence the findings should be interpreted with care. These same limitations yet also provide opportunities for future research. The first limitation related to the stimuli used specifically as related to the first experiment. Pre-testing a large number of real ads might have led to a better choice of the five real ads that depicted the five types of visual metaphor investigated in experiment one. This, might have provided better control for other different ad elements that possibly influenced the results with regards to the effect of the specific ads/types on consumer response. The second limitation relates to the measure used for measuring objective ad comprehension. This multiple choice question was developed by the researcher for the purpose of this project. The development of this question/measure was based on the objective metaphor comprehension measure that was used in previous research (van Mulken, van Hooft, and Nederstigt, 2014) and also in the current research, to measure participants' objective comprehension of the specific visual metaphor (as opposed to the ad as whole). Of course the wording of the objective ad comprehension question was adopted to better fit its purpose. In the case of this question participant's answer created a score which was either (0) if he/she chose the wrong answer(s) or (1) if he/she choose one the two right answers or (2) if he/she chose the 2 right answers from the multiple choice answers menu they were provided. In the case of objective metaphor comprehension, however, only one answer was considered correct. Therefore, the visual metaphor specifically was either comprehended or not comprehended by participant based on whether or not he or she chose this right answer from the list of multiple choice answers.

Despite the aforementioned differences between the two questions, the answers that were considered the right answers in the case of both questions were quite similar/related to each other. This in turn led to less differentiation between the ad's key message as a whole, and the visual metaphor meaning more specifically. This differentiation was less explicit in this research due to the fact that visual metaphor was actually the key element in these different metaphorical ads. Therefore, the visual metaphorical meaning was also preliminary the ad's key message in the meanwhile.

This was done and the specific ads were used to control for other confounding elements other than the visual metaphor as such, (such as richer and more detailed images, etc.) that could possibly influence the effect the specific visual metaphorical ads, which was vital for the purpose and the context of this project. However, the use of different stimuli/ads or the rewording/reformulation of the specific objective ad comprehension question in future research could help in further developing/validating this measure and also essentially differentiating it from the objective visual metaphor comprehension measure.

In experiment two the aim was to achieve high validity, by being accurate in measuring what the study is aiming to measure. In this regard, every attempt was made to increase both internal validity by using mock ad with fictitious brand names (controlling for a range of confounding variables) and external validity (mock ad were reproductions of real ad to create a more realistic setting). Ensuring, however, high internal validity and high external validity in the same time is not always an easy task. Yet, the use for stimuli in this second experiment was consistent with prior research on the effect of visual metaphor in advertising (e.g. McQuarrie and Mick, 1999). Another limitation that should be mentioned is related to the samples used in experiment two. Experiments (including the pre-tests) used a student sample represented in undergraduate and postgraduate students at Aston University. This samples choice has possibly limited to a high extent the findings from the experiment. There were insufficient differences in the educational backgrounds as well as relatively in the cultural backgrounds of this presumingly homogeneous student sample. This in turn was also reflected in insufficient variance in participants' ability to comprehend the different visual metaphorical ads.

Future research can overcome this limitation by using a more diverse sample of participants with regards to their characteristics. This could be achieved for example by conducting the experiments online and recruiting these participants again online using different sources/databases (e.g. Amazon Mechanichal Turk).

Finally, future research can also look into testing the same typology of visual metaphor in advertising while using ads which focus more on a specific product category (more sophisticated technologically advanced products), or ads from a different print media outlet (e.g. outdoor ads), or even a completely different media category (e.g. TV commercials). This could in turn enrich the insights provided as well as the contributions to this important and continuously evolving advertising phenomenon, and also important research area, visual metaphor in advertising.

References

Aitchinson. J. (1999), Cutting Edge Advertising: How to Create the World's Best Print for Brands in the 21st Century. New York: Prentice Hall.

Alba, J. W., & Hutchinson, J. W. (1987). Dimensions of consumer expertise. *Journal of consumer research*, 411-454.

Anand, P., & Sternthal, B. (1989). Strategies for designing persuasive messages: Deductions from the resource matching hypothesis.

Anderson, R. E., 1. Jolson, M. A. (1980). Technical Wording in Advertising: Implications for Market Segmentation // *Journal of Marketing*, Vol. 44, No. 1.

Andrews, S. J. (2011). Visual rhetoric in advertising: How consumers cope with a pleasant experience (Doctoral dissertation, University of Oregon).

Ang, S. H., & Lim, E. A. C. (2006) "The Influence of Metaphors and Product Type on Brand Personality Perceptions and Attitudes", *Journal of Advertising*, 35(2), 39-53.

Ang, S. H., & Low, S. Y. (2000). Exploring the dimensions of ad creativity. *Psychology & Marketing*, 17(10), 835-854.

Arens, W. F., & Schaefer, D. H. (2008). Essentials of contemporary advertising. Recording for Blind & Dyslexic.

Arnheim, R. (1967). Toward a Psychology of Art. Berkeley, CA: University of California Press.

Arnheim, R. (1969). Visual thinking. Univ of California Press.

Aston Business School Research Ethical Guidelines II (2010). Supplementary and updated information to the ABS Research Ethical Guidelines, 2004

Ausburn, L. J., & Ausburn, F. B. (1978), "Visual literacy: Background, theory and practice", *Programmed Learning and Educational Technology*, 15(4), 291-297.

Avgerinou, M. (2001). Visual literacy: anatomy and diagnosis (Doctoral dissertation, University of Bath).

Avgerinou, M. D., & Pettersson, R. (2011), "Toward a Cohesive Theory of Visual Literacy", *Journal of Visual Literacy*, 30(2), 1-19.

Babbie, E. R. (2004). The practice of social research. Wadsworth Publishing Company.

Barron, F. (1963). The needs for order and for disorder as motives in creative activity. Scientific creativity: Its recognition and development, 153-160.

Barthes R. (1978). The Death of an Author in Image, Music, Text, Trans Stephen Heath, 142-48. New York: Hill and Wang.

Bartlett, M.S. (1954). A note on the multiplying factors for various chi square approximations. *Journal of Royal Statistical Society*, 16 (Series B), 296-8.

Batra, R., & Stayman, D. M. (1990). The role of mood in advertising effectiveness. *Journal of Consumer research*, 203-214.

Baumgartner, H., & Steenkamp, J. B. E. (2001). Response styles in marketing research: A cross-national investigation. *Journal of marketing research*, 38(2), 143-156.

Belch, G. E dan Belch, Michael. A, (2009), Advertising and Promotion: An Integrated Marketing Communications Perspective.

Beltramini, R. F., & Blasko, V. J. (1986). An analysis of award-winning advertising headlines. *Journal of Advertising Research*, 26(2), 48-52.

Biswas, A., Olsen, J. E., & Carlet, V. (1992). A comparison of print advertisements from the United States and France. Journal of Advertising, 21(4), 73-81.

Braden, R.A. (1996). Visual Literacy. Journal of Visual Literacy, 16(2),9-83.

Bruner, G. C., Hensel, P. J., & James, K. E. (2005). Marketing scales handbook. Chicago, IL: American Marketing Association.

Bryman, A. (2001). The nature of qualitative research. *Social research methods*, 365-399.

Bu, K., Kim, D., & Lee, S. Y. (2009). Determinants of visual forms used in print advertising: a cross-cultural comparison. *International Journal of Advertising*, 28(1), 13-47.

Bulmer, S., & Buchanan-Oliver, M. (2006). Visual rhetoric and global advertising imagery. *Journal of Marketing Communications*, 12(1), 49-61.

Burnett, J., Moriarty, S., & Wells, W. (2000). *Advertising Principles and practice*. Prentice Hall

Burton, P., W., and Purvis, S., C. (1987). Which Ad Pulled Best? 5th ed. Lincolnwood, IL: NTC Business Books.

Cacioppo, John T., and Richard E. Petty (1982), "The Need of Cognition," Journal of Personality and Social Psychology, 42 (January), 116–31.

Campbell, M. C., & Keller, K. L. (2003). Brand familiarity and advertising repetition effects. *journal of Consumer Research*, 30(2), 292-304.

Caples, J. (1975). Fifty things I have learned in fifty years in advertising. *Advertising Age*, 22.

Carroll, N. (1994). Visual Metaphor. In Jaakko Hintikka, ed., *Aspects of metaphor*, pp.189-218. Dordrecht: Kluwer.

Creswell, J. (2008). W. 1994. Research Design: Qualitative and Quantitative Approaches. Thousand Oaks.

Chae, B. G., & Hoegg, J. (2013). The Future Looks "Right": Effects of the Horizontal Location of Advertising Images on Product Attitude. *Journal of Consumer Research*, 40(2), 223-238.

Chang, C. (2009). Repetition variation strategies for narrative advertising. *Journal of Advertising*, 38(3), 51-66.

Chang, C. (2013). Imagery fluency and narrative advertising effects. *Journal of Advertising*, 42(1), 54-68.

Chang, C. T., & Yen, C. T. (2013), "Missing Ingredients in Metaphor Advertising: The Right Formula of Metaphor Type, Product Type, and Need for Cognition", *Journal of Advertising*, 42(1), 80-94

Chattopadhyay, A., & Alba, J. W. (1988). The situational importance of recall and inference in consumer decision making. *Journal of Consumer Research*, 1-12.

Choy, L. T. (2014). The Strengths and Weaknesses of Research Methodology: Comparison and Complimentary between Qualitative and Quantitative Approaches. IOSR *Journal of Humanities and Social Science*, 19(4), 99-104.

Christensen, L. (1980). Experimental methodology. Boston.

Clarke, I., & Honeycutt, E. D. (2000). Color usage in international business-to-business print advertising. *Industrial Marketing Management*, 29(3), 255-261.

Corbett, E. P. J. (1990), *Classical Rhetoric for the Modern Student*, New York: Oxford University Press

Coyle, J. R., & Thorson, E. (2001). The effects of progressive levels of interactivity and vividness in web marketing sites. *Journal of advertising*, 30(3), 65-77.

Csikszentmihalyi, M. (1988). The dangers of originality: Creativity and the artistic process. *Psychoanalytic perspectives on art*, 213-224.

Cutler, B. D., Javalgi, R. G., & Erramilli, M. K. (1992). The visual components of print advertising: A five-country cross-cultural analysis. *European Journal of Marketing*, 26(4), 7-20.

Daechun, A. (2003). Content analysis of advertising visuals in the magazine advertisements: The roaring twenties and the great depression. *Web Journal of Mass Communication Research*, 3(6), 1-6.

Decrop, A. (2007). The influence of message format on the effectiveness of print advertisements for tourism destinations. *International Journal of Advertising*, 26(4), 505-525.

Dillard, J. P., Weber, K. M., & Vail, R. G. (2007). The relationship between the perceived and actual effectiveness of persuasive messages: A meta-analysis with implications for formative campaign research. *Journal of Communication*, 57(4), 613-631.

Donthu, N., Cherian, J., & Bhargava, M. (1993). Factors influencing recall of outdoor advertising. *Journal of Advertising Research*. 33 (3), 64-72.

Drake, R. A. (1987). Effects of gaze manipulation on aesthetic judgments: Hemisphere priming of affect. *Acta Psychologica*, 65(2), 91-99.

Durand, J. (1987). Rhetorical figures in the advertising image. *Marketing and semiotics: New directions in the study of signs for sale*, 295-318.

Edell, J. A., & Staelin, R. (1983). The information processing of pictures in print advertisements. *Journal of Consumer research*, 45-61.

Einstein, G. O., & Hunt, R. R. (1980). Levels of processing and organization: Additive effects of individual-item and relational processing. *Journal of Experimental Psychology: Human Learning and Memory*, 6(5), 588.

Evans, V., & Green, M. (2006). *Cognitive linguistics: An introduction*. Lawrence Erlbaum Associates Publishers.

Evers, J. L. (1969). Mediacy Means Understanding Metaphor. Audiovisual Instr.

Fauconnier, G. (1994). *Mental spaces: Aspects of meaning construction in natural language*. Cambridge University Press.

Fauconnier, G. (1997). *Mappings in thought and language*. Cambridge University Press.

Feasley, F. G., & Stuart, E. W. (1987). Magazine advertising layout and design: 1932–1982. *Journal of Advertising*, 16(2), 20-25.

Festinger, L. (1962), A Theory of Cognitive Dissonance (Vol. 2). Stanford University Press.

Field, A. (2013). Discovering statistics using IBM SPSS statistics. Sage.

Forceville, C. (1996), *Pictorial Metaphor in Advertising*, Routledge.

Forceville, C. (2002), "The Identification of Target and Source in Pictorial Metaphors", *Journal of Pragmatics*, 34(1), 1-14.

Foucault, M. (1977). What Is an Author, Language, Counter-Memory. Practice. Ithaca: Cornell University Press.

Franklin, L. R. (2005). Exploratory experiments. *Philosophy of Science*, 72(5), 888-899.

Freiden, Jon B. (1984), "Advertising Spokesperson Effects: An Examination of Endorser Type and Gender on Two Audiences," *Journal of Advertising Research*, 24 (October/ November), 33-41).

Fries, C. C. (1952). The structure of English. New York.

Gardner, M. P. (1985), "Does Attitude Toward the Ad Affect Brand Attitude Under a Brand Evaluation Set?", *Journal of Marketing Research*, 192-198.

Gaski, J. F., & Etzel, M. J. (1986). The index of consumer sentiment toward marketing. *The journal of marketing*, 71-81.

Gentner, D. (1982). Are Scientific Analogies Metaphors?" In Metaphor: Problems and perspectives, D. Miall eds., Brighton, UK: Harvester Press, 106-132.

Gkiouzepas, L. (2006). Visual structures in advertising metaphors: A conceptual framework (Doctoral dissertation, Lancaster University).

Gkiouzepas, L., & Hogg, M. K. (2011). Articulating a New Framework for Visual Metaphors in Advertising, *Journal of Advertising*, 40(1), 103-120.

Govoni, N. A. (2004). *Dictionary of marketing communications*. Thousand Oaks: Sage Publications.

Gresham, L. G., & Shimp, T. A. (1985). Attitude toward the advertisement and brand attitudes: A classical conditioning perspective", *Journal of Advertising*, 14(1), 10-49.

Gubrium, J. F., & Holstein, J. A. (2002). *Handbook of interview research: Context and method.* Sage Publications, Incorporated.

Guthrie, M. (1972). Effects of Credibility, Metaphor, and Intensity of Comprehension, Credibility and Attitude Change, Unpublished master's thesis, Illinois State University, Normal.

Hafer, C. L., Reynolds, K. L., & Obertynski, M. A. (1996). Message comprehensibility and persuasion: Effects of complex language in counterattitudinal appeals to laypeople. *Social Cognition*, 14(4), 317-337.

Hair, J. F., Jr., Money, A. H., Samouel, P., & Page, M. (2007). Research methods for business. West Sussex, UK: John Wiley & Sons.

Hanssens, D. M., & Weitz, B. A. (1980). The effectiveness of industrial print advertisements across product categories. *Journal of Marketing Research*, 294-306.

Harvey, L., (2012-16), Social Research Glossary, Quality Research International. Web-Links: http://www.qualityresearchinternational.com/socialresearch/pragmatism.htm
Accessed on 10/03/2016

Hattwick, Melvin S., Needham, Maurice H., Olsen, Harvey W. (1950), *How to use psychology for better advertising*. Prentice Hall, Inc. New York.

Hayes, A. F. (2012). PROCESS: A versatile computational tool for observed variable mediation, moderation, and conditional process modeling [White paper]. Retrieved from http://www.afhayes.com/public/process2012.pdf

Higgins, D. (1986). *The Art of Writing Advertising*. Lincolnwood, IL: NTC Business Books.

Hitchon, J. C. (1991). To Be or What To Be: Metaphorical Predication in Advertising, (Doctoral dissertation, University of Wisconsin—Madison, 1991), Dissertation Abstracts International, 52,1438.

Holsti, O. R. (1969). Content analysis for the social sciences and humanities. Reading Mass

Hong, J. W., Muderrisoglu, A., & Zinkhan, G. M. (1987). Cultural differences and advertising expression: A comparative content analysis of Japanese and US magazine advertising. *Journal of advertising*, 16(1), 55-68.

Houston, M. J., Childers, T. L., & Heckler, S. E. (1987). Picture-word consistency and the elaborative processing of advertisements. *Journal of Marketing Research*, 359-369.

Hovland, C. I., Janis, I. L., & Kelley, H. H. (1953). *Communication and persuasion;* psychological studies of opinion change. New Haven CT: Yale University Press.

Howard D. J. and Barry T. E. (1988). The prevalence of question use in print advertising: Headline Strategies. *Journal of Advertising Research*. 28(4), 18-25.

Huhmann, B. A., & Brotherton, T. P. (1997). A content analysis of guilt appeals in popular magazine advertisements. *Journal of Advertising*, 26(2), 35-45.

Jae, H. (2011). Cognitive load and syntactic complexity of printed advertisements: effects on consumers' attitudes, *Marketing Management Journal*, Vol. 21, No. 1.

James, W. L., & Kover, A. J. (1992). Do overall attitudes toward advertising affect involvement with specific advertisements?. *Journal of Advertising Research*. 32, 5: 78-83

Janiszewski, C. (1990). The influence of print advertisement organization on affect toward a brand name. *Journal of Consumer Research*, 53-65.

Janiszewski, Chris (1988), Preconscious Processing Effects: The Independence of Attitude Formation and Conscious Thought, *Journal of Consumer Research*, 15 (September), 199–209.

Janssens, W., Wijnen, K., De Pelsmacker, P., & Van Kenhove, P. (2008). *Marketing research with SPSS*. Pearson.

Jefkins, F., & Yadin, D. (2000). Advertising. Harlow: Pearson Education.

Jeong, S. H. (2008). Visual Metaphor in Advertising: Is the Persuasive Effect Attributable to Visual Argumentation or Metaphorical Rhetoric?, *Journal of Marketing Communications*, 14(1),59-73.

Jones, D. A., Shultz, J. W., & Chapman, D. S. (2006). Recruiting through job advertisements: The effects of cognitive elaboration on decision making. *International Journal of Selection and Assessment*, 14(2), 167-179.

Kaiser, H. (1970). A second generation little Jiffy. Psychometrika, 35, 401-15.

Kapferer, J., N. (1992), Strategic Brand Management: New Approaches to Building and Evaluating Brand Equity. London: Kogan Page.

Kaplan, S. J. (1992). A Conceptual Analysis of Form and Content in Visual Metaphors, *Communication*, 13, 197-209.

Kardes, F. R., Cronley, M. L., Kellaris, J. J., & Posavac, S. S. (2004). The role of selective information processing in price-quality inference. *Journal of Consumer Research*, 31(2), 368-374.

Ke, Q., Wang, W. (2013). The Adjective Frequency in Advertising English Slogans // Theory and Practice in Language Studies, Vol. 3, No. 2. doi:10.4304/tpls.3.2.275-284.

Keller, K. L. (1987). Memory factors in advertising: The effect of advertising retrieval cues on brand evaluations. *Journal of Consumer Research*, 316-333.

Keller, K. L., & Aaker, D. A. (1992). The effects of sequential introduction of brand extensions. *Journal of marketing research*, 35-50.

Keller, K., L. (2003) Strategic Brand Management: Building, Measuring, and Managing Brand Equity. Upper Saddle River, NJ: Prentice Hall.

Keller, P. A., & Block, L. G. (1996). Increasing the persuasiveness of fear appeals: The effect of arousal and elaboration. *Journal of consumer research*, 448-459.

Kenney, K., & Scott, L. M. (2003). A review of the visual rhetoric literature, in ed. Linda M. Scott and Rajeev Batra. *Persuasive imagery: A consumer response perspective*, ed. Linda M.Mahwah, NJ: Erlbaum, 17-56.

Kent, R. J., & Allen, C. T. (1994). Competitive interference effects in consumer memory for advertising: the role of brand familiarity. *The Journal of Marketing*, 97-105.

Kim, J., Baek, Y., & Choi, Y. H. (2012). The Structural Effects of Metaphor-Elicited Cognitive and Affective Elaboration Levels on Attitude Toward the Ad. *Journal of Advertising*, 41(2), 77-96.

Kövecses, Z. (2002). *Metaphor: A practical introduction*. Oxford University Press, USA.

Kover, A. J. (1995). Copywriters' implicit theories of communication: An exploration. *Journal of Consumer Research*, 596-611.

Lakoff, G. (1993). The contemporary theory of metaphor.in *Metaphor and thought*, 2, pp.202-251. Cambridge University Press.

Lakoff, G., & Johnson, M. (1980). *Metaphors we live by*, (Vol. 111). London: Chicago

Landau, B., Smith, L., & Jones, S. (1998). Object shape, object function, and object name. *Journal of Memory and Language*, 38(1), 1-27.

Larsen, V., Luna, D., & Peracchio, L. A. (2004). Points of view and pieces of time: A taxonomy of image attributes. *Journal of Consumer Research*, 31(1), 102-111.

Leckart, B. T., & Bakan, P. (1965). Complexity judgments of photographs and looking time. *Perceptual and Motor Skills*, 21(1), 16-18.

Lee, A. Y., & Aaker, J. L. (2004). Bringing the frame into focus: the influence of regulatory fit on processing fluency and persuasion. *Journal of personality and social psychology*, 86(2), 205.

Lee, N., & Lings, I. (2008). *Doing business research: a guide to theory and practice*. SAGE Publications Limited.

Leonidou, L. C., Spyropoulou, S. A., Leonidou, C. N., & Reast, J. D. (2006). An integrated framework of newspaper advertising: a longitudinal analysis. *Journal of Marketing Management*, 22(7-8), 759-797.

Lutz, R. J. (1985). Affective and cognitive antecedents of attitude toward the ad: A conceptual framework. *Psychological processes and advertising effects*, 45-63.

Lutz, R. J., MacKenzie, S. B., & Belch, G. E. (1983). Attitude Toward the Ad as a Mediator of Advertising Effectiveness: Determinants and Consequences, *Advances in consumer research*, 10(1), 532-539.

Ma, L. (2008). Pictorial Metaphor in Advertising and Consumer Interpretation of its Cultural Meaning, *China Media Research*, 4(3), 9-17.

Macagno, F., & Zavatta, B. (2014). Reconstructing metaphorical meaning. *Argumentation*, 28(4), 453-488.

MacInnis, D. J., & Price, L. L. (1987). The role of Imagery in Information Processing: Review and Extensions, *Journal of Consumer Research*, 473-491.

MacKenzie, S. B., & Lutz, R. J. (1989). An empirical examination of the structural antecedents of attitude toward the ad in an advertising pretesting context. *The Journal of Marketing*, 48-65.

MacKenzie, S. B., Lutz, R. J., & Belch, G. E. (1986). The role of attitude toward the ad as a mediator of advertising effectiveness: A test of competing explanations. *Journal of marketing research*, 130-143.

Madupi, V., & Ranganathan, S. (2013). The impact of visual structure complexity on ad liking, elaboration and comprehension. *Marketing Management*, 58.

Maes, A., & Schilperoord, J. (2008). Conceptual and Structural Heuristics.in *Go Figure! New Directions in Advertising Rhetoric*, ME Sharpe, Armonk, NY and London, pp.227-253

Marquardt, R. A., & McGann, A. F. (1975). Does advertising communicate product quality to consumers? Some evidence from consumer reports. *Journal of Advertising*, 4(4), 27-31.

Marsh, Ian. *Theory and practice in sociology*. Pearson Education, 2002.

McGinn, K. A. (2013). Effective framing strategies for services advertising: The impact of narrative, rhetorical tropes and argument on consumer response across different service categories (Doctoral dissertation, Cass Business School).

McGuire, W. J. (1968). *Personality and susceptibility to social influence*. In E. F. Borgatta & W. W. Lam bert (Eds). *Handbook of personality theory and research*, 2, 1130-1187. Chicago: Rand McNall

McGuire, W. J. (1972). Attitude change: The information processing paradigm. Experimental social psychology, 108-141.

McQuarrie, E. F., & Mick, D. G. (1996). Figures of Rhetoric in Advertising Language. *Journal of Consumer Research*, 22, 424-438.

McQuarrie, E. F., & Mick, D. G. (1999). Visual Rhetoric in Advertising: Text-interpretive, Experimental, and Reader-Response Analyses, *Journal of Consumer Research*, 26(1), 37-54.

McQuarrie, E. F., & Mick, D. G. (2003). Visual and verbal rhetorical figures under directed processing versus incidental exposure to advertising. *Journal of Consumer Research*, 29(4), pp.579-587.

McQuarrie, E. F., & Phillips, B. J. (2005). Indirect Persuasion in Advertising: How Consumers Process Metaphors Presented in Pictures and Words, *Journal of Advertising*, 34(2), 7-20.

McQuarrie, E., F., and Phillips, B., J. (2008). It's not Your Father's Magazine Ad: Magnitude and Direction of Recent Changes in Advertising Style. *Journal of Advertising*, 37(3), 95-106.

Mehta, A. (2000). Advertising attitudes and advertising effectiveness. *Journal of advertising research*, 40(3), 67-71.

Messaris, P. (1997). Visual persuasion: The role of images in advertising. Sage.

Meyers-Levy, J., & Malaviya, P. (1999). Consumers' processing of persuasive advertisements: An integrative framework of persuasion theories. *The Journal of Marketing*, 45-60.

Mick, D. G. (1992). Levels of subjective comprehension in advertising processing and their relations to ad perceptions, attitudes, and memory. *Journal of Consumer Research*, 411-424.

Mick, D. G., & Politi, L. G. (1989). Consumers' interpretations of advertising imagery: A visit to the hell of connotation. *Interpretive consumer research*, 85-96.

Miniard, P. W., Bhatla, S., & Rose, R. L. (1990). "On the Formation and Relationship of Ad and Brand Attitudes: An Experimental and Causal Analysis. *Journal of Marketing Research*, 290-303.

Miniard, P. W., Bhatla, S., Lord, K. R., Dickson, P. R., & Unnava, H. R. (1991). Picture-based persuasion processes and the moderating role of involvement. *Journal of Consumer Research*, 92-107.

Mitchell, A. A. (1986). The effect of verbal and visual components of advertisements on brand attitudes and attitude toward the advertisement. *Journal of Consumer Research*, 12-24.

Mitchell, A. A., & Olson, J. C. (1981). Are product attributes the only mediator of advertising effects on brand attitudes? *Journal of Marketing Research*, 18(1), pp. 318-322.

Mitchell, Andrew A. and Jerry C. Olson (1981). Are Product Beliefs the Only Mediator of Advertising Effect on Brand Attitude? *Journal of Marketing Research*, 18 (August), 318-32.

Mohanty, P., & Ratneshwar, S. (2015). Did You Get It? Factors Influencing Subjective Comprehension of Visual Metaphors in Advertising. *Journal of Advertising*, (ahead-of-print), 1-11.

Mooi, E., & Sarstedt, M. (2011). A concise guide to market research: The process, data, and methods using IBM SPSS statistics. Springer.

Moran, W., T. (1990). Brand Presence and the Perceptual Frame. *Journal of Advertising Research*, 30 (October–November), 9–16.

Morgan, S. E., & Reichert, T. (1999). The Message is in the Metaphor: Assessing the Comprehension of Metaphors in Advertisements, *Journal of Advertising*, 1-12.

Moriarty, S. (1986). The role of visuals in advertising. A paper presented at the international Visual Literacy conference, Madison, WI, October.

Moriarty, S. (1994). Visual Communication as a Primary System. *Journal of visual literacy*, 14(2), 11-21.

Moriarty, S. E. (1987). A Content Analysis of Visuals Used in Print Media Advertising. *Journalism Quarterly*, 64, 550-54.

Moriarty, S.(1986). *Creative Advertising: Theory and Practice*. Englewood Cliffs, NJ: Prentice Hall.

Morrison, B. J., & Dainoff, M. J. (1972). Advertisement complexity and looking time. *Journal of Marketing Research*, 396-400.

Mothersbaugh, D. L., Huhmann, B. A., & Franke, G. R. (2002). Combinatory and separative effects of rhetorical figures on consumers' effort and focus in ad processing. *Journal of consumer research*, 28(4), 589-602.

Mulken, M. V., & Pair, R. L. (2012), "Appreciation and Interpretation of Visual Metaphors in Advertising Across Three European Countries", in *Metaphor in Use: Context, Culture, and Communication*, MacArthur, F.; Oncins-Martínez, J.L.; Sánchez-García, M. ed.

Myers, A., & Hansen, C. (2012). Experimental psychology. Cengage Learning.

Myers, J. H., & Haug, A. F. (1967). Declarative Vs Interrogative Advertising Headlines. *Journal of Advertising Research*, 7(3), 41-44.

Myers, J., Faber, R., Duff, B., & Lutchyn, Y. (2011). Coordinating Headlines and Consumer Processing Styles in Executing Visual Metaphor Advertisements, *International Journal of Integrated Marketing Communications*, 3(2), 65-75.

Nevinskaitė, L. (2013). Kam reklamai skoliniai? Leksikos skoliniai reklamos tekstuose // *Taikomoji kalbotyra*, Nr. 3.

Oglivy, D. (1964). Confessions of an advertising man. New York: Dell Publishing Co.

Oglivy, D. (1983). Oglivy on Advertising. Toronto: John Wiley & Sons

Pallant, J. (2001). SPSS Survival Manual: A Step by Step Guide to Data Analysis Using IBM SPSS. Open University Press.

Pasadeos, Y. (1987). Information Content of Newspaper Advertisements. *Newspaper Research Journal*, 8(3), 1-9.

Peracchio, L. A., & Meyers-Levy, J. (1994). How ambiguous cropped objects in ad photos can affect product evaluations. *Journal of Consumer Research*, 190-204.

Percy, L. (1989) The influence of pictures on advertising effectiveness, in B. von Keitz (ed.) 3. Symposium zur Kommunikationsforschung: Institut für Kommunikationsforschung von Keitz GmbH. Saarbrücken: Physica.

Petrova, P. K., & Cialdini, R. B. (2005). Fluency of consumption imagery and the backfire effects of imagery appeals. *Journal of Consumer Research*, 32(3), 442-452.

Petty, R. E., Cacioppo, J. T., & Schumann, D. (1983). Central and peripheral routes to advertising effectiveness: The moderating role of involvement. *Journal of Consumer Research*, 10(2), 135.

Petty, R. E., Schumann, D. W., Richman, S. A., & Strathman, A. J. (1993). Positive mood and persuasion: Different roles for affect under high-and low-elaboration conditions. *Journal of personality and social psychology*, 64(1), 5.

Petty, R., & Cacioppo, J. T. (1986). *Communication and persuasion: Central and peripheral routes to attitude change*. Springer Science & Business Media.

Phillips, B. (2003). Understanding Visual Metaphor in Advertising, in *Persuasive Imagery: A Consumer Response Perspective*, Scott, L. and R. Batra, eds, Mahwah, NJ: Lawrence Erlbaum Associates, 297–310.

Phillips, B. J. (1997). Thinking Into It: Consumer Interpretation of Complex Advertising Images, *Journal of Advertising*, 26(2), 77-87.

Phillips, B. J. (2000). The Impact of Verbal Anchoring on Consumer Response to Image Ads, *Journal of Advertising*, 15-24.

Phillips, B. J., & McQuarrie, E. F. (2002). The Development, Change, and Transformation of Rhetorical Style in Magazine Advertisements 1954-1999, *Journal of Advertising*, 31(4), 1-13.

Phillips, B. J., & McQuarrie, E. F. (2004). Beyond Visual Metaphor: A new Typology of Visual Rhetoric in Advertising, *Marketing Theory*, 4(1-2), 113-136.

Pieters, R., & Wedel, M. (2004). Attention capture and transfer in advertising: Brand, pictorial, and text-size effects. *Journal of Marketing*, 68(2), 36-50.

Pilelienė, L., & Grigaliūnaitė, V. (2014). Complexity of Print Advertising: Theoretical Insights. Organizacijų vadyba: *sisteminiai tyrimai*, (70), 65-77.

Pollay, R. W. (1984). Twentieth-Century Magazine Advertising Determinants of Informativeness. *Written Communication*, 1(1), 56-77.

Pollay, R. W. (1984). The identification and distribution of values manifest in print advertising, 1900-1980, *in Personal Values and Consumer Behavior*, R. E. Pitts, Jr, and A. Woodside, eds., Lexington, MS: Lexington Books, 111-135.

Pollay, R. W. (1985). The subsiding sizzle: A descriptive history of print advertising, 1900-1980. *The Journal of Marketing*, 24-37.

PR Newswire US. (2013). Club Med Launches New Brand Campaign Worldwide. *PR Newswire US*.

Purchase, H. C., Freeman, E., Hamer, J. (2012). Predicting Visual Complexity // Proceedings of the 3rd International Conference on Appearance, Edinburgh, UK, ISBN 978-1-4716-6869-2.

Putrevu, S., Tan, J., Lord, K. R. (2004). Consumer Responses to Complex Advertisements: The Moderating Role of Need for Cognition, Knowledge, and Gender, *Journal Of Current Issues & Research In Advertising* (CTC Press), Vol. 26, No. 1.

Ranganathan, S. K., Madupu, V., Sen, S., & Brooks, J. R. (2013). Affective and cognitive antecedents of customer loyalty towards e-mail service providers. *Journal of Services Marketing*, 27(3), 195-206.

Ratneshwar, S., & Chaiken, S. (1991). Comprehension's role in persuasion: The case of its moderating effect on the persuasive impact of source cues. *Journal of Consumer Research*, 52-62.

Resnik, A., & Stern, B. L. (1977). An analysis of information content in television advertising. *The Journal of Marketing*, 50-53.

Riff, D., Lacy, S., & Fico, F. (2014). *Analysing media messages: Using quantitative content analysis in research*. Routledge.

Rimkutė, E., Pakalnylė, N. (2009). Socialinų reklamų tematika ir kalbinės ypatybės Respectus Philologicus, Nr. 16(21/A).

Roehm, M. L., & Sternthal, B. (2001). The moderating effect of knowledge and resources on the persuasive impact of analogies. *Journal of Consumer Research*, 28(2), 257-272.

Roman, K., & Mass, J. (1976). How to Advertise. New York: St. Martin's Press.

Rose, G. (2007). Visual methodologies: an introduction to the interpretation of visual materials. Sage

Rossiter, J. R., & Percy, L. (1980). Attitude change through visual imagery in advertising. *Journal of Advertising*, 9(2), 10-16.

Rossiter, J. R., & Percy, L. (1983) Visual communication in advertising, in R.J. Harris (ed.) Information Processing Research in Advertising. Hillsdale, NJ: Erlbaum.

.Saunders, M. N., Lewis, P., & Thornhill, A. (2009). Research methods for business students. Pearson. Prentice Hall.

Schindler, P. S. (1986). Color and contrast in magazine advertising. *Psychology & Marketing*, 3(2), 69-78.

Scott, L. M. (1994), Images in Advertising: The need for a Theory of Visual Rhetoric, *Journal of Consumer Research*, 21(2), 252-273.

Searle, J. (1981). Metaphor. *In Philosophical perspective on metaphor*, ed. Mark Johnson, 248-285. Mineapolis: University of Minnesota Press.

Semenik, R. J., Allen, C., O'Guinn, T. C., Kaufmann, H., R. (2012). *Advertising and promotions: an integrated brand approach*. South – Western

Simonin, B. L., & Ruth, J. A. (1998). Is a company known by the company it keeps? Assessing the spillover effects of brand alliances on consumer brand attitudes. *Journal of Marketing Research*, 30-42.

Smith, C., S. (1973). How to Get Big Results from a Small Advertising Budget. New York: Hawthorn Books.

Smith, R. E., & Yang, X. (2004). Toward a general theory of creativity in advertising: Examining the role of divergence. *Marketing Theory*, 4(1-2), 31-58.

Smith, R. E., Chen, J., & Yang, X. (2008). The impact of advertising creativity on the hierarchy of effects. *Journal of Advertising*, 37(4), 47-62.

Soley, L. C., & Reid, L. N. (1983). Industrial ad readership as a function of headline type. *Journal of Advertising*, 12(1), 34-38.

Sopory, P., & Dillard, J. P. (2002). The Persuasive Effects of Metaphor: A Meta-Analysis, *Human Communication Research*, 28(3), 382-419.

Spears, N., & Singh, S. N. (2004). Measuring attitude toward the brand and purchase intentions. *Journal of Current Issues & Research in Advertising*, 26(2), 53-66.

Sperber, D., & Wilson, D. (1986). *Relevance: Communication and Cognition*. Oxford UK: Blackwell

Starch, D. (1966). How does the shape of ads affect readership. *Media/Scope*, 10, 83-85.

Steinle, F. (1996). Entering new fields: Exploratory uses of experimentation. *Philosophy of Science*, S65-S74.

Stern, B. B. (1990). Beauty and Joy in Metaphorical Advertising: The Poetic Dimension, *Advances in consumer research*, 17(1), 71-77.

Sturken, M., Cartwright, L., & Sturken, M. (2009). *Practices of looking: An introduction to visual culture*. Oxford: Oxford University Press.

Swinyard, W. R. (1993). The effects of mood, involvement, and quality of store experience on shopping intentions. *Journal of Consumer Research*, 271-280.

Tellis, G. J. (1998). Advertising and sales promotion strategy. Prentice Hall.

Thorson, E., & Zhao, X. (1997). Television viewing behaviour as an indicator of commercial effectiveness. *Measuring advertising effectiveness*, 221-237.

Till, B. D., & Baack, D. W. (2005). Recall and Persuasion: does creative advertising matter?. *Journal of Advertising*, 34(3), 47-57.

Tom, G., & Eves, A. (1999). The Use of Rhetorical Devices in Advertising, *Journal of Advertising Research*, 39, 39-44.

Trampe, D., Stapel, D. A., Siero, F. W., & Mulder, H. (2010). Beauty as a tool: The effect of model attractiveness, product relevance, and elaboration likelihood on advertising effectiveness. *Psychology & Marketing*, 27(12), 1101-1121.

Tscheulin, D. K., & Helmig, B. (1998). The optimal design of hospital advertising by means of conjoint measurement. *Journal of Advertising Research*, 38(3), pp. 35-46.

Turley, L. W., & Kelley, S. W. (1997). A comparison of advertising content: Business to business versus consumer services. *Journal of advertising*, 26(4), 39-48.

Unnava, H. R., & Burnkrant, R. E. (1991). An Imagery-Processing View of the Role of Pictures in Print Advertisements, *Journal of Marketing Research*, 226-231.

Van Mulken, M., le Pair, R., & Forceville, C. (2010), "The Impact of Perceived Complexity, Deviation and Comprehension on the Appreciation of Visual Metaphor in Advertising Across Three European Countries. *Journal of Pragmatics*, 42(12), 3418-3430.

van Mulken, M., van Hooft, A., & Nederstigt, U. (2014). Finding the Tipping Point: Visual Metaphor and Conceptual Complexity in Advertising. *Journal of Advertising*, 43(4), 333-343.

Ward, J., & Gaidis, W. (1990). Metaphor in Promotional Communication: A review of Research on Metaphor Comprehension and Quality, *Advances in Consumer Research*, 17(1), 636-642.

Waters, C. K. (2007). The nature and context of exploratory experimentation: An introduction to three case studies of exploratory research. *History and philosophy of the life sciences*, 29, 275-284.

Watman, W. A. (1967). Complexity judgments of photographs and looking time: Replication. *Perceptual and motor skills*, 25(3), 768-768.

Wegener, D. T., Petty, R. E., & Klein, D. J. (1994). Effects of mood on high elaboration attitude change: The mediating role of likelihood judgments. European *journal of social psychology*, 24(1), 25-43.

Weinberger, M. G., Spotts, H., Morrison, M. (2012). More complex than meets the eye: a look at print ad performance. American Academy of Advertising Conference Proceedings, No. 34.

Wenzel, Peter (1990). Rhetoric and Semiotics, in Semiotics in the Individual Sciences, Vol. 2, ed. Walter A. Koch, Bochum: Brockmeyer, 558-551.

Whaley, B. B. (1991). Toward a Comprehensive Model of Analogy in Persuasion: A Test of the Persuasive Roles of Analogy (Doctoral dissertation, Purdue University, 1991). Dissertation Abstracts International, 53,20.

Wickens, T. D., & Keppel, G. (2004). *Design and analysis: A researcher's handbook*. Prentice-Hall, Inc.

Wilmshurst, J., & Mackay, A. (1999). *Fundamentals of Advertising (2nd edn)*. Oxford: Butterworth-Heinemann.

Yang, X., & Smith, R. E. (2009). Beyond attention effects: Modeling the persuasive and emotional effects of advertising creativity. *Marketing Science*, 28(5), 935-949

Yauch, C. A. and Steudel, H. J. (2003). Complementary Use of Qualitative and Quantitative Cultural Assessment Methods, *Organizational Research Methods*, Vol. 6, No. 4, pp. 465-481.

Yauch, C. A., & Steudel, H. J. (2003). Complementary use of qualitative and quantitative cultural assessment methods. *Organizational Research Methods*, 6(4), 465-481.

Young, S. (2015). A campaign for improvement – Getting more from print advertising: Insights from PRS Eye-Tracking of Ad Readership. *Perception Research Services International*, Inc.

Appendices

A lis	st of the 42 papers on the nature and effect of visual metaphor in Advertising
	Citation
1	Mohanty, P., & Ratneshwar, S. (2015). Did You Get It? Factors Influencing Subjective Comprehension of
	Visual Metaphors in Advertising. Journal of Advertising, 44(3), 232-242.
2	van Mulken, M., van Hooft, A., & Nederstigt, U. (2014). Finding the tipping point: Visual metaphor and
	conceptual complexity in advertising. Journal of Advertising, 43(4), 333-343.
3	Alousque, I. N. (2014). Verbo-pictorial metaphor in French advertising. Journal of French Language
	Studies, 24(02), 155-180.
4	Chang, C. T., & Yen, C. T. (2013). Missing ingredients in metaphor advertising: The right formula of
	metaphor type, product type, and need for cognition. Journal of Advertising, 42(1), 80-94.
5	Madupu, V. I. V. E. K., & Ranganathan, S. A. M. P. A. T. H. (2013). The impact of visual structure
	complexity on ad liking, elaboration and comprehension. Marketing Managemen, 23(2), 58-70.
6	Bergkvist, L., Eiderbäck, D., & Palombo, M. (2012). The Brand communication effects of using a headline
	to prompt the key benefit in Ads with pictorial metaphors. Journal of Advertising, 41(2), 67-76.
7	Lagerwerf, L., van Hooijdonk, C. M., & Korenberg, A. (2012). Processing visual rhetoric in advertisements:
	Interpretations determined by verbal anchoring and visual structure. Journal of pragmatics, 44(13),
8	1836-1852. Gkiouzepas, L., & Hogg, M. K. (2011). Articulating a new framework for visual metaphors in advertising.
0	Journal of Advertising, 40(1), 103-120.
9	Myers, J. R., Faber, R., Duff, B., & Lutchyn, Y. (2011). Coordinating Headlines and Consumer Processing
	Styles in Executing Visual Metaphor Advertisements. International Journal of Integrated Marketing
	Communications, 3(2).
10	Morris, P. K., & Waldman, J. A. (2011). Culture and metaphors in advertisements: France, Germany, Italy,
10	the Netherlands, and the United States. International Journal of Communication, 5, 27.
11	Delbaere, M., McQuarrie, E. F., & Phillips, B. J. (2011). Personification in advertising. Journal of
	Advertising, 40(1), 121-130.
12	Mzoughi, N., & Abdelhak, S. (2011). The impact of visual and verbal rhetoric in advertising on mental
	imagery and recall. International Journal of Business and Social Science, 2(9).
13	Van Mulken, M., Le Pair, R., & Forceville, C. (2010). The impact of perceived complexity, deviation and
	comprehension on the appreciation of visual metaphor in advertising across three European countries.
	Journal of Pragmatics, 42(12), 3418-3430.
14	Phillips, B. J., & McQuarrie, E. F. (2009). Impact of advertising metaphor on consumer belief: Delineating
	the contribution of comparison versus deviation factors. Journal of Advertising, 38(1), 49-62.
15	Martín de la Rosa, V. (2009). The role of pictorial metaphor in magazine advertising.
16	Lagerwerf, L., & Meijers, A. (2008). Openness in metaphorical and straightforward advertisements:
1.7	Appreciation effects. Journal of Advertising, 37(2), 19-30.
17	Jeong, S. H. (2008). Visual metaphor in advertising: Is the persuasive effect attributable to visual
10	argumentation or metaphorical rhetoric?. Journal of Marketing Communications, 14(1), 59-73.
18	Ma, L. (2008). Pictorial Metaphor in Advertising and Consumer Interpretation of Its Cultural Meaning. China Media Research, 4(3).
19	Mohanty, P. (2008). The Use of Visual Metaphors in ads: Incongruity, The Aha Effect and Affect.
17	Marketing Theory and Applications, 1.
20	DeRosia, E. D. (2008). The effectiveness of nonverbal symbolic signs and metaphors in advertisements:
20	An experimental inquiry. Psychology & Marketing, 25(3), 298-316.
21	Pop, A. (2008). The Nature of Visual Metaphors in IT Advertising. Acta Linguistica, 2(2), 55.
<u>~ 1</u>	

- Kenyon, A. J., & Hutchinson, P. L. (2007). Exploring rhetoric: alcohol and Absolut Vodka advertisements. British Food Journal, 109(8), 594-607.
- Ang, S. H., & Lim, E. A. C. (2006). The influence of metaphors and product type on brand personality perceptions and attitudes. Journal of Advertising, 35(2), 39-53.
- Van Mulken, M. (2006). Towards a new typology for visual and textual rhetoric in print advertisements. European advances in consumer research, 7, 59-65.
- Proctor, T., Proctor, S., & Papasolomou, I. (2005). Visualizing the metaphor. Journal of Marketing Communications, 11(1), 55-72.
- McQuarrie, E. F., & Phillips, B. J. (2005). Indirect persuasion in advertising: How consumers process metaphors presented in pictures and words. Journal of advertising, 34(2), 7-20.
- 27 Phillips, B. J., & McQuarrie, E. F. (2004). Beyond visual metaphor: A new typology of visual rhetoric in advertising. Marketing theory, 4(1-2), 113-136.
- Burroughs, J. E., & Mick, D. G. (2004). Exploring antecedents and consequences of consumer creativity in a problem-solving context. Journal of Consumer Research, 31(2), 402-411.
- 29 El Refaie, E. (2003). Understanding visual metaphor: The example of newspaper cartoons. Visual communication, 2(1), 75-95.
- McQuarrie, E. F., & Mick, D. G. (2003). Visual and verbal rhetorical figures under directed processing versus incidental exposure to advertising. Journal of consumer research, 29(4), 579-587.
- Forceville, C. (2002). The identification of target and source in pictorial metaphors. Journal of pragmatics, 34(1), 1-14.
- Mothersbaugh, D. L., Huhmann, B. A., & Franke, G. R. (2002). Combinatory and separative effects of rhetorical figures on consumers' effort and focus in ad processing. Journal of consumer research, 28(4), 589-602.
- Ang, S. H. (2002). Effects of metaphoric advertising among mainland Chinese consumers. Journal of Marketing Communications, 8(3), 179-188.
- Phillips, B. J. (2000). The impact of verbal anchoring on consumer response to image ads. Journal of Advertising, 29(1), 15-24.
- Forceville, C. (2000). Compasses, beauty queens and other PCs: Pictorial metaphors in computer advertisements. Hermes, Journal of Linguistics, 24, 31-55.
- 36 Tom, G., & Eves, A. (1999). The use of rhetorical devices in advertising. Journal of Advertising.
- Morgan, S. E., & Reichert, T. (1999). The message is in the metaphor: Assessing the comprehension of metaphors in advertisements. Journal of advertising, 28(4), 1-12.
- 38 McQuarrie, E. F., & Mick, D. G. (1999). Visual rhetoric in advertising: text-interpretive, experimental, and reader-response analyses. Journal of consumer research, 26(1), 37-54.
- 39 Phillips, B. J. (1997). Thinking into it: Consumer interpretation of complex advertising images. Journal of Advertising, 26(2), 77-87.
- 40 McQuarrie, E. F., & Mick, D. G. (1996). Figures of rhetoric in advertising language. Journal of consumer research, 424-438
- Forcevill, C. (1995). IBM is a tuning fork: Degrees of freedom in the interpretation of pictorial metaphors. Poetics, 23(3), 189-218.
- 42 Scott, L. M. (1994). Images in advertising: The need for a theory of visual rhetoric. Journal of consumer research, 252-273.

Types of headlines

Source	Туре	Description
Wells, Burnett, and	Direct Headlines	Are straightforward, informative and
Moriarty (2000)		highly targeted, but they may fail to
		lead the reader into the message if they
		are captivating enough.
	Indirect Headlines	Are not as selective and may not
		provide as much information but may
		be better in drawing the reader into the
		message. They are provocative and
		intriguing and compel people to read on
		to find out the point of the message.
		Sometimes called blind headlines
		because they give very little
		information.
Jefkins and Yadin (2000)	Declarative	e.g. the world's toughest tire
	Interrogative	e.g. Do you want more interest?
	Commanding	e.g. Buy your books at Brown's
	Challenging	e.g. Why put with higher prices
	Testimonial	e.g. "I always use Washo", says
		Millicent Day
	Association of	e.g. Even Roger Bacon liked eggs
	ideas	
	News	e.g. The new royal cooker
	Emotional	e.g. No one knows she's crying

Incongruous	e.g. The fat make you thin
Idenitification	e.g. Bullman's Brown Ale
Curiosity	e.g. Ever heard of a pig cleaning a
	pipe?
Bargain	e.g. Now only 99p
Humorous	e.g. Josephine's Restaurant is open
	every night!
Picture and	e.g. She's enjoying an indoor tan
caption	(below a picture of a girl with sun lamp)
Topical	e.g. The sherry to cheer your
	Christmas guests
Slogan	e.g. Crooks the cleanest cleaners
Play on words	e.g. Who's for Denis?
Alliterative	e.g. The wonderful watches by
	waterman
Gimmick	e.g. zzzzzz-Buzzz-z-z-z-z-Bar
Negative	e.g. Don't spend it, bank it
Display copy	e.g. This is the lownmowner, which
	takes you for a ride round your lawn.
TV tie-Up	e.g. Perfect picture control (repeating
	TV commercial jingle)
Quotation	e.g. 'My kingdom for a horse' – Play it
	safe with Bronco Brakes.
Split	e.g. an armchair in the sky (picture of
	passenger on airline) with pacific
	airlines.
Intriguing	What's square about a round hole?

Arens and Schaefer (2007)	Benefit headline	Promises the audience that
		experiencing the utility of the product or
		service will be rewarding.
	News/information	Announces news or promises
	headline	information.
	Provocative	Provoke the reader's curiosity – to
	headlines	stimulate questions and thoughts.
	Question headline	Asks a question, encouraging readers
		to search for the answer in the body of
		the ad.
	Command	Orders or requests the reader to do
	headline	something.

Types of Body Copy

Source	Туре	Description
Wells, Burnett, and Moriarty (2000)	Straightforward	Factual copy usually written in the words of an anonymous or unacknowledged source.
	Narrative	Used to tell a story in first person or third person.
	Dialogue	Lets the reader "listen in" on a conversation,
	Explanation	Explains how something works.
	Translation	Technical information, such as that written for the high-technology and medical industries, must be defined and translated into understandable language.
Jefkins and Yadin (2000)	Factual-Hard-selling	Competitive, persuasive, and action promoting. The action may be provoked by a free offer or price cut, and there may be addresses to write to or call at the phone numbers to ring or response may be sought by means of coupon.

Factual-educational	This is still a hard-selling ad, but it
	will be more informative, like the
	ads for the latest car model.
Narrative	The copy is more like a story and it
	might be used to promote s holiday
	cruise. Such copy is also used in
	the business press to tell a story of
	a bank or insurance company, and
	it has been used to recruit nurses
	and police.
Prestige	The copy may be in the narrative
	style, but being used mainly for
	public relations purposes the
	modern corporate ad has taken on
	a more vigorous character, setting
	out facts and arguments in no-
	nonsense terms.
Dieture and cention	In this kind d there is a series of
Picture and caption	
	pictures or cartoons with captions,
	perhaps explaining how to use the
	product.
Monologue and	Real or fictitious characters may be
dialogue	used to present the sales
	message. This could be a
	testimonial advertisement with
	tesumoniai auvenisement with

	well-known personalities
	expounding the merits of the
	product or the service.
Gimmick	Difficult to put over effectively
	because there is usually need for
	concentrated reading, this style is
	sometimes used when a very
	original presentation is required. It
	is more likely to be used in
	magazines, which are read less
	hurriedly than newspapers, and
	addressed to sophisticated
	readership.
l	
Reader	Such advertisements are usually
Reader	Such advertisements are usually headed by a statement that it is an
Reader	
Reader	headed by a statement that it is an
Reader	headed by a statement that it is an advertiser's announcement
Reader	headed by a statement that it is an advertiser's announcement because editors do not like
Reader	headed by a statement that it is an advertiser's announcement because editors do not like advertisements which pretend to
Reader	headed by a statement that it is an advertiser's announcement because editors do not like advertisements which pretend to be editorial. However, there are
Reader	headed by a statement that it is an advertiser's announcement because editors do not like advertisements which pretend to be editorial. However, there are shopping features in which a series
	headed by a statement that it is an advertiser's announcement because editors do not like advertisements which pretend to be editorial. However, there are shopping features in which a series of reader ads (usually illustrated) are assembled.
Testimonial	headed by a statement that it is an advertiser's announcement because editors do not like advertisements which pretend to be editorial. However, there are shopping features in which a series of reader ads (usually illustrated)
	headed by a statement that it is an advertiser's announcement because editors do not like advertisements which pretend to be editorial. However, there are shopping features in which a series of reader ads (usually illustrated) are assembled.
	headed by a statement that it is an advertiser's announcement because editors do not like advertisements which pretend to be editorial. However, there are shopping features in which a series of reader ads (usually illustrated) are assembled. This may be in a form of

		testimonial statement linked to
		normal text copy.
	Quotation	It is possible at times to find a
		statement in a book, play or
		speech which is relevant to the
		subject, such as famous person's
		description of a place.
	Back selling	This is used to tell readers about a
		material, ingredient or component
		which is contained in a finished
		product, the object being to
		encourage its continued usage and
		especially to encourage buyers of
		the finished product to insist that it
		includes this item. It could also be
		applied to equipment in a new
		house such as the central heating
		system.
Arens and Schaefer	Straight Sell Copy	Straightforward factual
(2007)		presentation
	Institutional Copy	Promotes a philosophy or extol the
		merits of an organization rather
		than product features
	Narrative Copy	Tells a story

	Dialogue/monologue	The characters portrayed in a print
	Сору	ad do the selling in their own words
	Picture-Caption	Is especially useful for products
	сору	that have a number of different
		uses or come in a variety of styles
		and design.
	Device Copy	Uses figures of speech. Verbal
		devices help people remember the
		brand and tend to affect attitude
		favorability.
Semenik, Allen,	Straight-line copy	Explains in straightforward terms
O'Guinn, and		why a reader will benefit from the
Kaufmann (2012)		use of a brand.
	Dialogue	Delivers the selling points of a
		message to the audience through a
		character or characters in the ad
		having a conversation.
	Testimonial	Uses dialogue as if the
		spokesperson is having a one-
		sided conversation with reader
		through the body copy.
	Narrative	Simply displays a series of
		statements about a brand. A
		person may or may not be
		portrayed as delivering the copy.
	Direct Response	The least complex of copy
	Сору	techniques. The copywriter tries to

	highlight the urgency of acting
	immediately.

Table 1: Types of visuals in print ads

Source: Moriarty (1986)		
Туре	Subtype	Description
Literal Visuals	Identification	Brand, Logo, Package
	Description	What it looks like, attribute, parts,
		schematics
	Comparison	Between two competitors, before & after
	Demonstration	How to do, use, apply, make
Symbolic visuals	Association	Lifestyle, typical person, situation.
		Association using a character or celebrity.
	Metaphor	Allegorical use, unexpected substitution
		based on similarity of some features.
	Storytelling	Narrative, drama, playlet
	Aesthetics	Details become art, pattern, abstraction.

Table 2: Types of visual open ads

Source: Katelaar, Gisbergen, and Beentjes (2012)		
Туре	Description	
Riddle ad	Contains a hidden interpretation reflecting the	
	advertiser's intention. The verbal or visual element	
	in the ad create a puzzle. The hidden interpretation	
	is the solution of the riddle which the consumer	
	must discover. Various elements in the ad seem	

	unrelated to the advertised brand, they always point
	difference to the advertised braffu, they always point
	the way to a certain solution.
	the way to a certain solution.
Story ad	Shows only part of a story or event. It has an open
Story ad	Chows only part of a story of events it has an open
	narrative structure because it does not guide toward
	a apositic anding. Consumers are shallenged to
	a specific ending. Consumers are challenged to
	make up their own story. It is susceptible to a
	make up their own story. It is susceptible to a
	multitude of possible interpretations
	maintage of possible interpretations
Aesthetic ad	It is intended as art to look at, from which
7.000.700.0	
	consumers should derive feelings of aesthetic
	pleasure. It is less intended to invite consumers to
	construct a desired interpretation.

In-Depth Interviews with Advertising Experts.

(Copywriters and Art directors)

Interview Guide for Art Directors

Introduction and Objective of the study:

Good morning,

Thank you for having agreed to participate in my study and thank you for your time.

Just a few words of introduction: this interview is part of a study aiming at investigating the principles and elements of print advertising design and creation.

I would like to understand these principles and elements from their original 'source', the print advertising art directors. Given that these art directors are the ones who design and 'create' these ads in the first place.

The interview should last around 1hour

Before we start, do you have any questions?

Theme	Primary/Initial Question	Probing Questions
The Role	What does your role as an art director involve?	 Main skills? Main steps in ad creation? Cooperation with and dependency on copywriter?
Visual element	How do you decide on the visuals employed in print ads?	Number of visuals?Types of visuals?Location of visuals?
Differences between outlets	Do visuals differ (e.g. in type and content) across different print advertising mediums?	Magazine? Outdoor?Size alternatives for the visual part in an advertisement (Size of visuals)?
Visual Metaphor	Do you employ visual metaphor in the print ads?	Why? How?Types of visual metaphor?
Brand element (brand name, logo, trademark)	What are the different alternatives with regards to the employment of the brand element in the ad?	Position in the ad?Size?

Trends	What are the trends with regards to the visual element of print ads?	General trends? Latest/Emerging trends?
Ad Analysis Part - Section 1: Description and Coding	Please describe what you see in this ad?	 Is there a headline/subhead/tagline/slogan/body copy? Locations? Types? Visuals? Number? Types? Brand name/logo? Location? Size of textual and/or visual elements? Compliance with principles of ad design?
Ad Analysis Part - Section 2: Interpretation	What are the main message(s)/meaning(s) conveyed from this ad?	 How message(s)/meaning(s) are conveyed? Meaning: textual part? Visual part? Verbal metaphor? Visual metaphor? Terms of the metaphor? Types of metaphor? Intentions behind verbal metaphor and/or visual metaphor? Is message/meaning clearly communicated? Is there any confusion about ad meaning? If yes, why?

Interview Guide for Copywriters

Introduction and Objective of the study:

Good morning,

Thank you for having agreed to participate in my study and thank you for your time.

Just a few words of introduction: this interview is part of a study aiming at investigating the principles and elements of print advertising design and creation.

I would like to understand these principles and elements from their original 'source', the print advertising copywriters. Given that these copywriters are the ones who design and 'create' these ads in the first place.

The interview should last around 1hour

Before we start, do you have any questions?

Theme	Primary/Initial Question	Probing Questions
The Role	What does your role as a copywriter involve?	Main skills? Main steps in ad
		creation?
		Cooperation with and dependency
		on art director?
Textual	What are the main parts of	Identifying a headline?
element	the textual element in a print advertisement? (Headline)	Location? Number of headlines?
		What makes a good headline?
		 What differentiates a headline?
		Types of headlines?
	What is a	Definition?
	subhead/tagline/slogan/bod y copy?	 Location in a print advertisement?
		• Types?
Differences	Copywriting, does it differ	Magazine? Outdoor?
between outlets	and how does it differ between the different print ads outlets?	Size alternatives for the textual part
		in an advertisement?
Verbal	Is verbal metaphor	Why? How?
Metaphor	employed in copywriting?	Types of verbal metaphor?
Trends	What are the trends in copywriting for print ads?	General trends? Latest/Emerging
		trends?

Ad Analysis Part - Section 1: Description and Coding	Please describe what you see in this ad?	 Is there a headline/subhead/tagline/slogan/bod y copy? Locations? Types? Visuals? Number? Types? Brand name/logo? Location? Size of textual and/or visual elements? Compliance with principles of ad design?
Ad Analysis Part - Section 2: Interpretatio n	What are the main message(s)/meaning(s) conveyed from this ad?	 How message(s)/meaning(s) are conveyed? Meaning: textual part? Visual part? Verbal metaphor? Visual metaphor? Terms of the metaphor? Types of metaphor? Intentions behind verbal metaphor and/or visual metaphor? Message/Meaning clearly communicated? Is there any confusion about ad meaning? If yes, why?

Example of a coded ad by one of the advertising experts.



Illustration removed for copyright restrictions

The 3 ads used for coding and analysis by the advertising experts in the In-depth Interviews.



Illustration removed for copyright restrictions

Ad 1



Illustration removed for copyright restrictions

Ad 2



Illustration removed for copyright restrictions

Ad 3

Example from the in-depth interviews analysis table

This part of the analysis table summarizes the answers that one of participants gave regarding the headline as an ad element.

Ad Elements

1- Headline

1 <u>ricadime</u>	Tun
Copywriter 1	What is it?
	"top sentence that'll pull people in"
	"that'll either relate to the visual or it'll relate to some
	words underneath"
	 "could be the answer to what they're seeking"
	"is the words that are going to engage the viewer or the
	reader"
	"in its simplest form it would be the biggest type face
	and it would be the biggest font"
	 "Something that completely answers the brief"
	More than one headline "I guess that's another way of
	doing it – four points or something like"
	"but more conventionally I'd say print advertising is just
	the one"
	"what captures the reader's attention and encourages
	them to read more"
	Location in the ad • "could be at the top of the advert, but obviously we're
	more creative than that"
	Types
	"it's probably down to the concept itself"
	"it's either a statement or a question and both of them"
	"could vary from one word to fifteen words sort of thing."
	"there's definitely room for versatility because that's our
	job, to be creative"
	 "it's either a statement or a question and both of them" "could vary from one word to fifteen words sort of thing." "there's definitely room for versatility because that's our

Sample Size Calculations Using GPower 3.1 Software

t tests - Correlation: Point biserial model

Analysis: A priori: Compute required sample size

Input: Tail(s) = One

Effect size $|\rho| = 0.3$

 $\alpha \text{ err prob} = 0.05$

Power $(1-\beta \text{ err prob}) = 0.80$

Output: Noncentrality parameter $\delta = 2.5158836$

Critical t = 1.6698042

Df = 62

Total sample size = 64

Actual power = 0.8005036

Sample Size/type x 5 Media Types =

64 x 5 = 320

Total Sample of ads analyzed = 320

Content Analysis Study

List of Codes Constructing the Coding Grid

3-	Bu	siness Sector
4-	Me	edia
5-	Со	ountry
6-	Ag	ency
7-	Ca	mpaign
8-	WI	nich product or service (e.g. Chocolate, hotel, etc.)
9-	Aw	vard
	-	No Award
	-	Lions Grand Prix Campaign
	-	Gold Lion
	-	Silver Lion
	-	Bronze Lion
10	- Ye	ar Published
	-	2000
	-	2001
	-	2002
	-	2003
	-	2004
	-	2005
	-	2006
	-	2007
	_	2008

1- Ad Title

2- Brand

- 2009
- 2010
- 2011
- 2012
- 2013
- 2014

11-Logo Position

- Logo Upper Right
- Logo Upper Left
- Logo Lower Right
- Logo Lower Left
- Logo Upper Center
- Logo Lower Center
- Logo Center Right
- Logo Center Left

12-Type of Logo

- Logo Type
- Symbol Logo
- Both Logo Type and Symbol Logo
- Iconic Style Logo

13- Headline Position

- Headline Upper right
- Headline Upper left
- Headline Upper Center
- Headline Center
- Headline Center right

- Headline Center Left
- Headline Lower right
- Headline Lower Left
- Headline Lower Center

14- Type of headline

- A word or two
- Statement
- Declarative/Proposition of benefits
- Question
- Command/Motivational
- Testimonial
- Bargain
- Tagline/Slogan
- Quotation
- Emotional
- Dialogue
- 15- Headline includes product/service name
- 16- Headline Includes brand name
- 17- Headline includes visual content
- 18- Headline describes visual metaphorically
 - Subhead Position
- 19- Subhead Upper right
- 20-Subhead Upper left
- 21-Subhead Upper Center
- 22-Subhead Center

- 23-Subhead Center right
- 24- Subhead Center Left
- 25- Subhead Lower Right
- 26-Subhead Lower Left
- 27-Subhead Lower Center
 - Type of Subhead
- 28- A word or two
- 29- Statement
- 30- Declarative/Proposition of benefits
- 31-Question
- 32- Command/Motivational
- 33-Testimonial
- 34-Bargain
- 35-Quotation
- 36- Emotional
- 37- Dialogue
- 38-Subhead includes product /service name
- 39-Subhead Includes Brand Name
- 40- Subhead includes visual content
- 41- Subhead describes visual metaphorically
- 42-Tagline/Slogan Position
 - Tagline/slogan Upper Right
 - Tagline/slogan Upper left
 - Tagline/slogan Upper Center

- Tagline/slogan Center
- Tagline/slogan Center Right
- Tagline/slogan Center Left
- Tagline/slogan Lower Center
- Tagline/slogan Lower Right
- Tagline/slogan Lower Left

43-Type of Tagline/slogan

- A word or two
- Statement
- Declarative/Proposition of benefits
- Question
- Command/Motivational
- Quotation
- Emotional
- Mission

44- The Identity of the tagline/slogan

- Corporate or organization/company related
- Consumer related
- Campaign related a campaign theme
- Other
- 45- Tagline/slogan Includes Product Service name
- 46-Tagline/slogan Includes Brand Name
- 47- Tagline/slogan includes visual content
- 48- Tagline/slogan describes visual metaphorically

Body Copy Position

- 49-Body Copy Upper right
- 50-Body Copy Upper Left
- 51- Body Copy Upper Center
- 52-Body Copy Center
- 53-Body Copy Center right
- 54-Body Copy Center Left
- 55-Body Copy Lower Right
- 56-Body Copy Lower Left
- 57- Body Copy Lower Center
 - Type of Body Copy
- 58- Body Copy Factual/Informational
- 59-Body Copy Institutional
- 60-Body Copy Narrative
- 61-Body Copy Dialogue
- 62-Quotation
- 63- Body Copy Testimonial /Monologue
- 64- Motivational/Direct Response
- 65-Body Copy Includes Product Service name
- 66-Body Copy Includes Brand Name
- 67- Subhead includes visual content
- 68-Subhead describes visual metaphorically
- 69- Proportion of ad devoted to Text
 - no text
 - Minimal

- Substantial text but less than half the ad
- Text filling more than half the ad
- Visual's Position
- 70- Visual Upper
- 71- Visual Left
- 72- Visual Right
- 73- Visual Bottom
- 74- Visual Center
- 75- Visual Center Left
- 76- Visual Center Right
- 77- Visual Upper Right
- 78- Visual Upper Left
- 79- Visual Lower Right
- 80- Visual Lower Left
- 81- Visual Whole ad

82- Proportion of ad devoted to visuals

- Less than 50%
- 50% 75%
- More than 75%
- 83- Visual Product
- 84- Visual Object
- 85- Visual Celebrity
- 86- Visual Layperson Consumer
- 87- Visual animal
- 88- Visual Nature
- 89- Visual Drawing

90- Visual's Color

- Colored
- Black and White
- Both Black and white and colored
- 91- Visual depicts two Objects Fused Together
- 92- Visual depicts two Object Juxtaposed next to each other
- 93- Visual depicts an Object Placed in an Unexpected Context
- 94- Visual depicts an object which is described metaphorically by text.
- 95- Visual depicts an object in human like behavior. The portrayal of a human action is provided without any object in the picture being represented as a character (i.e. by giving it a face).
- 96- Visual depicts a non-human creature or a non-personal object which is attributed human characteristics (e.g. Mr. Peanut, M&M chocolate candy characters).

Type of Visual

- Non- Metaphorical (based on codes 84-90)
- 97- Product photography or brand photography
- 98- Lifestyle Photography
- 99- Crossover of product photography and lifestyle photography
- 100- Other (possible new types)
 - **Metaphorical** (based on codes 92-97 and metaphor identification procedure (Forceville, 1996)
- 101- Replacement metaphor
- 102- Juxtaposition metaphor
- 103- Fusion metaphor
- 104- Verbo-pictorial metaphor
- 105- Verbo-pictorial indirect effect metaphor (new type)

- 106- Personification
- 107- Anthropomorphism
- 108- Other (possible new Types)
- 110-Metaphor's conceptual similarity
- 111-Metaphor's perceived complexity

CODING INSTRUCTIONS MANUAL

Section 1: Text Element

Text Part	Description
Headline	First Criterion
	The part of the text which mainly grabs the attention
	To have the ability to 'grab attention' and engage the reader when he or her is initially exposed to an ad.
	To create the 'initial' interest and 'desire' in the reader to continue looking at and 'reading' the ad.
	Second Criterion
	The part of the text with the largest font
Headline	A word or Two
Types	• <u>Statement</u>
	Declarative/proposition of benefits (e.g. the world's toughest tire)
	Question (e.g. Do you want more interest?)
	Command/motivational (e.g. Buy your books at Brown's)
	Testimonial (e.g. "I always use Washo", says Millicent Day)
	Bargain (e.g. Now only 99p)
	Slogan/Tagline (e.g. Crooks the cleanest cleaners)
	Quotation: a well know expression which is explicitly attributed to an original source (e.g. 'My kingdom for a horse' – quote from a theatre play)
	Emotional (e.g. No one knows she's crying)

	Dialogue
Subhead	Clarify, support and answer a bit more, the 'questions' or 'issues' raised by the headline. May also be used to supply 'arrest of leverturbers a let of text."
	May also be used to purely 'organize' the print ad layout when a lot of text is used.
	It does not necessarily have to exist in an ad unless needed.
Body Copy	<u>First Criterion</u>
	• A main role of a body copy in a print ad is what is referred to as the 'call to action' or in other words 'what to do next' after viewing this ad.
	 This 'call to action' can be represented or achieved by giving more detailed information about the product or service being advertised and how it can be used (e.g. product features, ways of using it) or merely by aiding the viewer to call a phone number or visit a website or by simply stating a postal address (e.g. companies' address).
	Second Criterion
	a Hayally leasted at the bottom of the ad
	Usually located at the bottom of the ad
	Usually its word length is a bit longer than the headline or subhead
Types of Body Copy	Factual/Informational: Stated fact/information about the product and/or its benefits. May also include contact information for the company, stores, etc.
	Institutional: Promotes a philosophy or extol the merits of an organization/company rather than product features.
	Narrative: Used to narrate or tell a story (possibly about an object/product or a person/consumer or both whether depicted in the ad or not)
	Dialogue: Delivers the selling points of a message to the audience through a character or characters in the ad having a conversation.

	 <u>Testimonial/Monologue</u>: as if a spokesperson (or the person depicted in the ad) is having a one-sided conversation with reader through the body copy. <u>Motivational/Direct Response</u>: The copy motivated towards and/or highlights the urgency of acting immediately. 					
Tagline/Slogan	First Criterion A word, an expression or a statement that literally "signs off" the ad and "sums up" the brand					
	Second Criterion					
	Usually at the bottom of the ad					
	Usually next to the logo					

Important notes

- An additional type (code) for all the text elements (e.g. headline, subhead, tagline/slogan, body copy), is the 'Comparison' code. Any text element should be coded as 'comparison' type when it covers any of the following criteria:
 - 1- It asserts regarding the product's general standing among its competitors (e.g. better, best, one of the leading, etc.)
 - 2- Specific competitive brand or manufacturer is named.
- When coding any text element (e.g. headline, subhead, tagline/slogan, body copy) as including visual content. The text should literally include or state an item/object/product /human etc. which is depicted in the visual (not indirectly imply or refer to any of visual content).
- When coding the text element (e.g. headline, subhead, tagline/slogan, body copy) as including the brand name, the text should literally state the brand name or part of the brand name.
- When coding the type of headline as tagline/slogan, you should also code for tagline/slogan separately (meaning that the ad has a tagline as well). In this we code twice for the same thing which is tagline/slogan (once as a headline type, and once as the tagline/slogan as such)
- In the case when the ad is comprised wholly of one visual (100% visual), then the
 proportion of text in the ad could be within the visual element itself, yet it is still
 measured as proportion of the "ad" as a whole devoted to text.

Section 2: Brand Element

Types of Logo	Description
Logo Type	Brand Name
Symbol Logo	Symbol that stands for the brand
Both Logo Type and Symbol Logo	Brand name + Symbol that stands for the brand
Iconic Style Logo	For example VW which is based again on the brand name
Iconic Style Logo and logo Type	Both an abbreviation (e.g. two letters of the brand name) appears together with a full version of the brand name

Important Note

- When measuring the proportion of ad devoted to visual or text the logo (all types) is not counted as part of neither the visual element nor the text element.
- The ad should be coded as including a logo/brand name, whether the brand name in the ad is that of the 'specific' product being depicted in the ad or the brand name of the 'company' to which the specific product/brand depicted belongs.
- The ad should be coded as including a logo/brand name, even when the brand name appears only on the 'product package' being depicted in the ad and not separately.
- The brand name coded in the SPSS file under the 'Brand' code should be the exact one stated or depicted in the ad.

Section 3: Visual Element

Types of Non- Metaphorical Visuals	Description
Product photography or brand photography	Visual depicting the product or the brand
Lifestyle Photography	Visuals mainly depicting humans or consumers without however depicting the actual product or brand

Crossover of product photography and lifestyle photography	Both the Product/brand + Humans (e.g. Product in use)			
Types of Metaphorical Visuals	Description			
Fusion metaphor	Visual depicts two Objects Fused Together			
Juxtaposition Metaphor	Visual depicts two Object Juxtaposed next to each other			
Replacement Metaphor	Visual depicts an Object Placed in an Unexpected Context (replacing another object)			
Verbo-Pictorial Metaphor	Visual of an object (e.g. product) that is complemented/supported by text which describes the object depicted in terms of something else.			
Verbo-pictorial Indirect effect Metaphor	Visual of an object (e.g. product) juxtaposed next to an image that is a 'teaser' and acts as a 'metaphor' for the 'effect' that results from using (or not using) the specific product.			
Total Replacement Metaphor	An object (usually the advertised product) completely replaces and forms the object or concepts it is supposed to be representing metaphorically.			
Personification	 Visual that portrays an object (e.g. the product) in human like behaviour. The portrayal of a human action is provided without any object in the picture being represented as a character (i.e. by giving it a face). 			
Anthropomorphism	Anthropomorphism is attributing human characteristics to a non-human creature or to a non-personal object (e.g. Mr. Peanut, M&M chocolate candy characters)			

Important Notes

- A metaphor is considered Verbo-Pictorial Metaphor only when a text is vital for the
 construction as well as the comprehension of the metaphor. In other words the
 metaphor cannot exist, make sense and be understood without both the visual part
 and the textual or verbal part.
- When the visual is coded as depicting an object placed in an unexpected context, this object placed and this unexpected context should be within one same visual.
- If the visual includes or depicts only an image of the product without any other object(s). Then the visual is coded only as depicting a product (not as depicting a product and also as depicting an object). Only one code applies in this case (that of visual depicting product).

• Section 3: Visual Element (continued)

Visual Metaphor's Conceptual Similarity	Description
High Conceptual Similarity	This means that the two terms of the metaphor, the primary subject (target) and the secondary subject (source) are to a high extent <i>meaningfully</i> 'related', 'connected', and/or 'compatible' – Or in other words there is no big semantic distance between the two concepts or terms of the metaphor - And hence it is easier to compare the two concepts or terms of the metaphor
Low Conceptual Similarity	This means that the two terms of the metaphor, the primary subject (target) and the secondary subject (source) are to a high extent <i>meaningfully</i> 'not related, 'not connected', and/or 'not compatible' – Or in other words there is a big semantic distance between the two concepts or terms of the metaphor - And hence it is difficult to compare the two concepts or terms of the metaphor.
Examples	 An orange and a jar of marmalade share high conceptual similarity (hence the comparison between the two terms or concepts is easier) A plasma television and a painting share low conceptual similarity (hence the comparison between the two terms or concepts is more difficult).
Visual Metaphor's Perceived Complexity	 The complexity here refers to the level of difficulty experienced in identifying the visual metaphor. In other words the level of difficulty experienced in identifying or disentangling the two terms (the target and source) of the metaphor and deciding on the relationship between the two terms or in other words the feature(s) mapped from source to target (the metaphorical relation) Based on the level of difficulty of this experience the visual metaphor is coded as high complexity metaphor or low complexity metaphor.

Appendix 12

Questionnaire for Experiment One (Replacement metaphor)

Thank you very much for participating in this study.

Please be informed that your participation is voluntary and that your answers will only be used for the purpose of this experiment. All your answers will remain confidential.

This study investigates advertising effectiveness. As part of this questionnaire you are going to view 1 ad. After viewing this ad you are going to answer a number of questions related to this ad. Try to process the ad as it was placed in a magazine and answer the questions that follow as naturally as possible. Please answer all the questions in all the sections of this questionnaire.

Personal Information Section		
1.1.Gender (Please tick one box only	r): Male	Female
1.2. Nationality		
1.3 Age		
1.3. Course of Study (Please tick one	e box only)	
Business & Management		
International Business & Management		
Accounting for Management		
Economics & Management		
LLB Law		
LLB Law with Management	294	

Marketing					
Human Resource Ma	anagement	_			
International Busines	ss & Modern L	anguages			
		_	_		
International Busines	ss & Managen	nent)		
International Busines	ss and Econor	mics]		
International Busines	ss and Moderr	n Languages			
Accounting for Mana	gement]		
Finance]		
Business Computing	& IT]		
International Busines	ss & Economic	os 🔲			
Economics & Manag	ement				
1.4. Year of Stud	y 1 st	2 nd	3"	d	
2.1. Please indicate t statements.	to which exter	nt do you agre	e or disagree	with each of the fo	ollowing
Most od	orticina provid	00.000011755	with acceptic	Linformation	
	ertising provid	es consumer	with essentia		•
Strongly Disagree				Strongly Agree	
1	2	3	4	5	
	ertising is very	annoying.	1	Strongly Agree	Ī
Strongly Disagree		i	1	I STRODAIV AARAA	
1	2	3	4	5	

- Most advertising makes false claims.

Strongly Disagree				Strongly Agree
1	2	3	4	5

- If most advertising was eliminated, consumers would be better off.

Strongly Disagree				Strongly Agree
1	2	3	4	5

- I enjoy most ads

Strongly Disagree				Strongly Agree
1	2	3	4	5

- Advertising should be more closely regulated

Strongly Disagree				Strongly Agree
1	2	3	4	5

- Advertising is intended to deceive rather than to inform consumers

Strongly Disagree				Strongly Agree
1	2	3	4	5

2.2. Please indicate how familiar you are with the brand 'Samsonite'

Not at all familiar						Extremely
1	2	3	4	5	6	familiar
						7
Definitely do not						Definitely
recognize						recognize
1	2	3	4	5	6	
						7
Definitely have						Definitely have
not heard of it						heard of it
before	2	3	4	5	6	before
1						7

2.3. How would you describe your attitude towards the brand 'Samsonite'

Unfavourable						Favourable
1	2	3	4	5	6	7
Dislike						Like
1	2	3	4	5	6	7
Negative						Positive
1	2	3	4	5	6	7

2.4. How would you describe your mood at this point?

2.4. How would you describe your mood at this point:									
Sad						Нарру			
1	2	3	4	5	6	7			
Irritable						Pleased			
1	2	3	4	5	6	7			
Depressed						Cheerful			
1	2	3	4	5	6	7			
Bad mood						Good mood			
1	2	3	4	5	6	7			

You will now view an ad. After viewing this ad you will answer a number of questions related this ad.

- 3.1. Please indicate to which extent do you agree or disagree with each of the following statements.
- I had many thoughts in response to the advertisement

Strongly	Disagree						Strongly Agree
1		2	3	4	5	6	7

- The advertisement elicited a lot of thinking

Strongly Disagree						Strongly Agree
1	2	3	4	5	6	7

3.2. In your own words, please describe this ad.

3.3. What do you think the advertiser was trying to communicate with this ad?									
3.4. Please describe this ad according to your own personal opinion not the advertiser's?									
3.5. How do you know what the advertiser was trying to communicate with this ad? What makes you think so?3.6. To what extent did you understand the advertisement?									
	,	1	1	Г	T	Г	Г		
Did not								Completely	
understand at all 1	2	3	4	5	6	7	8	understood it	
								9	
3.7. How certain are you that you understood the ad?									
Not at all certain								Completely certain	
1	2	3	4	5	6	7	8	9	
3.8. In your opinion	, which	of the	follow	ing st	atemen	ts repre	sent the	e key message/meaning	

conveyed through this ad? (Please tick all that applies)

0 ". 1		_									
Samsonite bag is sir	nple [_									
Samsonite bag is sty	Samsonite bag is stylish										
Samsonite bag is du	ırable [
Samsonite bag is p	rotectiv	/e 🔲									
3.9. In this advertise express that (Please				roposed	d. To my ı	mind, the advertiser	has tried to				
Both elements have	beauty	y in com	nmon 🔲								
Both elements have	protec	tion in o	common								
Both elements have	unique	eness ir	common								
No comparison was	intend	ded by t	he advertis	ser 🔲							
3.10. Please indicate that extent to which			•		-	-	t reflects				
Disliked						Liked					
1	2	3	4	5	6	7					
Bad						Good					
1	2	3	4	5	6	7					
Unpleasant						Pleasant					
1 2 3 4 5 6 7											
Unconvincing						Convincing					

Unconvincing						Convincing
1	2	3	4	5	6	7
Biased						Unbiased

1	2	3	4	5	6	7
Unbelievable						Believable
1	2	3	4	5	6	7
1		3	4	3	0	T

3.11. Please rate the overall effectiveness of the ad on the scale below:

Not at all effective						Very effective
1	2	3	4	5	6	7

3.12. Please provide you overall evaluation of the ad on the scale below

Bad						Good
1	2	3	4	5	6	7

3.13. The ad helped me to learn more about the product

Disagree						Agree
1	2	3	4	5	6	7

3.14. After viewing this ad, I have a better understanding of the product

Disagree						Agree
1	2	3	4	5	6	7

3.15. After reading the ad, I have a lot of unanswered questions about the product's features and the way that it works.

Disagree						Agree
1	2	3	4	5	6	7

3.16. How realistic is the ad?

Very Realistic						Not at all
1	2	3	4	5	6	Realistic
						7

3.17. How effective do you think the ad would be in influencing consumer's purchase intentions?

Not at all effective						Very Effective
1	2	3	4	5	6	7

3.18. How would you describe your attitude towards the brand 'Samsonite'

Unfavourable						Favourable
1	2	3	4	5	6	7
Dislike						Like
1	2	3	4	5	6	7
Negative						Positive
1	2	3	4	5	6	7

						<u> </u>
2.40 Diago indicat			ont or dio		ملك ملكاني عمر	
3.19. Please indicate	e your	agreem	ent or disa	igreeme	ent with tr	ie following statem
It is likely that I wil	l buy S	amsoni	te			
Strongly Disagree						Strongly Agree
1	2	3	4	5	6	7
		<u> </u>	l	l	<u>l</u>	
I will purchase Sa	msonite	e the ne	ext time I n	eed a b	aq	
,					3	
Strongly Disagree						Strongly Agree
1	2	3	4	5	6	7
I will definitely try S	Samsor	nite				
Strongly Disagree						Strongly Agree
1	2	3	4	5	6	7
20 Places indicate	o v in ti	ha saal	n provided	hotwoo	n ooob n	air of adjactives the
3.20. Please indicate that extent to which			-		-	•
	,		,			
Low quality			_	_		High quality
1	2	3	4	5	6	7
 						
Inexperienced				_		Experienced
1	2	3	4	5	6	7

Unreliable						Reliable
1	2	3	4	5	6	7
Inexpensive						Expensive
1	2	3	4	5	6	7
Lineuseseful						Cuppostul
Unsuccessful						Successful
1	2	3	4	5	6	7

3.21. You have viewed an ad for a bag. Please write down in the following space whatever you can recall concerning this ad.

Appendix 13

The 8 Ads that were pre-tested in experiment two

1) Phone Ad (Replacement Metaphor)



Illustration removed for copyright restrictions

Phone Ad 1

Phone Ad 2

2) Coffee Ad (Replacement Metaphor)



Illustration removed for copyright restrictions

Coffee Ad 1

Coffee Ad 2

3) Sweets Ad (Verbo-Pictorial Metaphor)



Illustration removed for copyright restrictions

Sweets Ad 1

Sweets Ad 2

4) Radio Ad (Verbo-pictorial Metaphor)



Illustration removed for copyright restrictions

Radio ad 1 Radio Ad 2