VISUAL RHETORIC IN ADVERTISING: HOW CONSUMERS COPE WITH A

PLEASANT EXPERIENCE

By

STEVEN J. ANDREWS

A DISSERTATION

Presented to the Department of Marketing
and the Graduate School of the University of Oregon
in partial fulfillment of the requirements
for the degree of
Doctor of Philosophy

June 2011

DISSERTATION APPROVAL PAGE

Student: Steven J. Andrews

Title: Visual Rhetoric in Advertising: How Consumers Cope With a Pleasant Experience

This dissertation has been accepted and approved in partial fulfillment of the requirements for the Doctor of Philosophy degree in the Department of Marketing by:

David M. Boush	Chair
Lynn R. Kahle	Member
Joan L. Giese	Member
Julianne H. Newton	Outside Member

and

Richard Linton	Vice President for Research and Graduate Studies/ Dean of the Graduate School

Original approval signatures are on file with the University of Oregon Graduate School.

Degree awarded June 2011

DISSERTATION ABSTRACT

Steven J. Andrews

Doctor of Philosophy

Department of Marketing

June 2011

Title: Visual Rhetoric in Advertising: How Consumers Cope With a Pleasant Experience

Approved: _____
                        Dr. David M. Boush

Rhetorical communication ("figures") in advertising are "artful deviations", analogous to **bold** or *italicized* text, which use style as their persuasive tool over message content. The present research built on theories of visual persuasion that conceive of visuals as sophisticated and nuanced systems of meaning transfer, unlike most traditional persuasion theories based on verbal processing that treat visuals as simple, non-discursive stimuli that merely evoke basic mood responses. Previous research suggests that in the context of visual persuasion the traditional components of information processing: attention, perception, elaboration, and memory retrieval are not applicable and visual information transfer depends almost entirely on the processing experience. While it was known that rhetoric is usually more well-liked and more memorable than plain language, this dissertation expanded the theoretical understanding of the mechanisms of how visual rhetoric in advertising engages the consumer and elicits more favorable judgments compared to both figurative and non-figurative verbal stimuli. Processing fluency research suggests that the brain automatically responds with positive emotion toward easy, pleasant, or novel processing experiences regardless of stimulus

content. These types of processing experiences are early signals to the brain of successful completion of a mental task.

In a series of four experiments, visual rhetorical ad stimuli elicited overall higher ratings than verbal rhetorical or verbal literal ad stimuli of equivalent message content on scales measuring mental involvement/engagement with the ad, attitude toward the ad, and perceptions of the ad's honesty/trustworthiness regardless of the processing experience as operationalized by stimulus exposure. At longer exposure durations judgments of visual rhetorical ads differed due to interactions between processing experience and sensitivity to the rhetorical figure's persuasive intent, whereas at 1-second exposure subjects exhibited universally high ratings based mostly on processing ease with relatively sparse deliberation about the stimulus content. Subjects exhibited high certainty about their attitudes toward the visuals at all exposures, but the positive experience of "processing ease" at 1-second exposure produced the most accessible favorable judgments as evidenced through reaction time measures.   Future research should examine in more depth the potential for visual persuasion with rhetoric to evade resistance particularly when processing resources are constrained.

CURRICULUM VITAE

NAME OF AUTHOR: Steven J. Andrews

GRADUATE AND UNDERGRADUATE UNIVERSITIES ATTENDED:

University of Oregon, Eugene
Fayetteville State University, Fayetteville, NC
Methodist University, Fayetteville, NC
University of North Carolina, Chapel Hill

DEGREES AWARDED:

Doctor of Philosophy, Marketing, 2011, University of Oregon
Master of Business Administration, 2005, Fayetteville State University
Bachelor of Science, Marketing, 2003, Methodist University
Master of Arts, Exercise Science, 1998, University of North Carolina at Chapel Hill
Bachelor of Science, Psychology, 1993, University of North Carolina at Chapel Hill

AREAS OF SPECIAL INTEREST:

Advertising and Visual Communication
Marketing and Public Policy

PROFESSIONAL EXPERIENCE:

Graduate Teaching Fellow, Department of Marketing, University of Oregon, Eugene, 2006-2011

Assistant Director of Professional Tennis Management Program and Instructor of Business, Reeves School of Business, Methodist University, Fayetteville, 2002-2006.

GRANTS, AWARDS, AND HONORS:

       Graduate Teaching Fellowship, Marketing, 2006-2011

       Alpha Chi National Honor Society, 2003

       Summa cum Laude, Methodist University, 2003

PUBLICATIONS:

       Andrews, Steven J. (2010) And a Child Athlete Will Save Us: Marketing Psychosocial and Physical Benefits of Sport to Children, Adolescents, Coaches, and Parents, in L.R. Kahle and A.G. Close (Eds), *Consumer Behavior Knowledge for Effective Sports and Event Marketing* (pp. 161-184). New York, NY: Taylor & Francis Group, LLC.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

CHAPTER I

INTRODUCTION

Consider an image with no words that advertises an international airline. The left side of the image contains a plane terminal in the foreground; in the background is a modern Western metropolis where many illuminated skyscraping buildings light up the cloudless night sky. An individual has one foot in the terminal on the left side of the image and the other foot on the right side of the image. The right side of the image contains an equally cloudless sky with a beautiful green Oriental landscape; a fisherman sits alertly in his boat, plying his trade. In the foreground is the other side of that terminal. Perhaps reading this description was a pleasant experience in and of itself. Now that you have read it you can construct the image in your mind and it might evoke positive feelings. But had you encountered the image visually the experience would have been instantaneous and it would have likely made a stronger, more emotional, and arguably a more lasting impact.

The image just described is a rhetorical figure in visual form: visual rhetoric. What makes this image rhetorical is the unexpected and unusual way in which it makes the implication. Rather than showing a straightforward image of an airplane coupled with a straightforward phrase such as "we fly you around the world safely and easily," the image juxtaposes scenes together that by themselves have no obvious relationship to each other and then lets the mind of the viewer experience those images together and make relevant, meaningful connections on its own (as the mind does naturally, without prompting). Rhetoric as a means of persuasion is a very old concept, far predating Aristotle although he was among the first to classify the techniques (McGuire, 2000).

But after a dark age where the teachings of the Ancients were lost, and therefore the knowledge about rhetoric and its persuasive capacity was forgotten or de-emphasized, recent studies have shown that visual rhetoric in print ads over the last 30 years has become very popular in print advertisements (Phillips and McQuarrie, 2002).

Following suit, academic research has recently begun to give visual rhetoric proper consideration for its persuasive power (Kenney and Scott, 2003; Scott, 1994b). The existing research shows that rhetoric, and especially visual rhetoric, used in a persuasive context makes a positive first impression on people. The overarching research question this dissertation pursues is: how strong is this first impression? In other words, how much substance is behind the persuasive impact of visual rhetoric? In pursuing this question the present research considers that visual processing is an instant, emotion-driven experience that occurs initially at a nonconscious level (McQuarrie and Mick, 2003a). Furthermore, this dissertation considers that visuals are a stand-alone, sophisticated language (Scott and Vargas, 2007) capable of complex information transfer (Scott, 1994a), including across cultural (i.e. verbal) language barriers (Luna and Peracchio, 2003).

The scope of a research project on consumer experiences with persuasive visual stimuli might best be conveyed through a visualization exercise. Picture a Russian Matryoska (a.k.a. Babushka) doll. These dolls are theme-based dolls constructed in layers where each inner layer is similar to the outer layer which gave birth to it but may contain some unique attributes. The outermost thematic doll which gives birth to all the dolls within is visual communication in a persuasive context, or visual persuasion. In its

relatively short history, social science research in the domain of persuasive communication has focused mostly on verbal communication.

Arguably the most prominent theory of persuasion in the social science literature over the last 30 years is the Elaboration Likelihood Model or ELM (Petty, Cacioppo and Schumann, 1983). The ELM is a verbal-based theory of persuasion that is still to this day tested almost exclusively using verbal stimuli. The ELM says in general that the key to persuasion is deep processing of the central message. This dissertation examines closely some of the potentially problematic predictions that the ELM makes when considering how visuals persuade. Most notably, traditional persuasion theory assumes that visual information is only capable of being the primary source of persuasive information transfer when an individual is either unwilling or unable to engage in deep elaboration of a central message (assumed to be delivered verbally).

In the last couple of decades the research on visual processing and visual communication has begun to assert more aggressively that the traditional conceptualization of visuals in persuasion is far too narrow and restrictive. For one thing the visual system is constructed entirely different in the brain than the verbal system (Franks, 2003). In addition, visual information is processed primarily in an experiential way (Janiszewski, 2008) rather than in a linear, step-wise fashion. Thus visual information does not transmit information and messages in the same way as verbal information (McQuarrie and Phillips, 2005). So while visuals are different, as they have always been thought to be, what is somewhat new in recent thinking is that just because visuals are different does not mean they are "peripheral"—unimportant and secondary in nature to verbals. We as a species have been visual processors for tens, if not hundreds

of thousands of years before we invented words and alphabets (Williams and Newton, 2007).

Exposing the next babushka doll, the specific kind of visual persuasion of interest in this research is visual advertising. This dissertation studies visual advertising in print form within the framework of Reader Response Theory (Scott, 1994a). An important theme from reader response theory adopted by the current research is that pure visuals (i.e. with no words) can themselves serve as a fully nuanced system of language (Scott, et al., 2007). Scott and Vargas replicated a paper in the persuasive domain from over twenty years prior (Mitchell and Olson, 1981) in which visuals in the paper were only assumed to be capable of a basic mood manipulation. Scott and Vargas' replication demonstrated in great detail the vast amount of information transfer that was actually occurring from visuals meant to be identical to those used in the original paper and in the exact same experimental design. The present research builds on this kind of conceptualization of visuals: extensive and sophisticated information transfer is assumed in advance.

The next little doll represents the specific type of information transfer studied in the present research, in the form of a specific type of visual processing experience that this project examines, communication style. The style of communication of interest here is visual rhetoric (McQuarrie and Mick, 1999; McQuarrie, 1989) in print advertising, i.e. ads like the one described at the very beginning of this chapter (see Appendix A). Rhetorical figures use style as their motivational weapon of choice more so than message content. However, not all rhetorical devices are alike; some are more engaging to the mind than others. This variance has been shown to have direct implications on

persuasive impact for verbal figures (Mothersbaugh, Huhmann and Franke, 2002; Phillips and McQuarrie, 2009), and for visual figures compared to verbal figures (McQuarrie, et al., 2003a; McQuarrie and Mick, 2003b). The implication is that rhetorical figures which engage the mind to a greater degree should also have advantages in terms of persuasive impact.   The ancient elites understood that convincing people to think and act in a desired way was best achieved by giving them a pleasant and engaging mental experience.

> …that rhetoric, or the art of speaking, is, in Plato's language, the government of the souls of men, and that her chief business is to address the affections and passions, which are as it were the strings and keys to the soul, and require a skillful and careful touch to be played on as they should be.
>
> Plutarch--*Life of Pericles*

Advertising practitioners have understood for a long time that rhetoric (and increasingly visual rhetoric) is an effective persuasive tool (Barthes, 1964; Phillips, et al., 2002).   However, marketing researchers have only been studying rhetoric systematically for a comparatively short time (McQuarrie and Mick, 1996).   The basic source of persuasive advantage with rhetorical devices is what McQuarrie et al (1996) refers to as "the pleasure of the text." Rhetorical deviations are a bit different than conventional style, enough that they encourage deeper levels of processing (Toncar and Munch, 2001).

However rhetorical communication devices are not so deviant that they are not easily understood and discernible.   Thus the pleasure of processing rhetorical communication manifests itself through solving the incongruence. McQuarrie et al (1996, p. 425) identifies two important reasons which necessitate increased efforts on the part of marketing researchers to study rhetoric in advertising: (a) rhetorical figures are pervasive in advertising (Leigh, 1994) and over the last several decades visual rhetoric in

particular has soared in popularity (Phillips, et al., 2002) and (b) increasing acceptance of studying meaning-based systems of advertising communication such as semiotics (Mick, 1986) and increasing acceptance of alternative research perspectives since the 1980s (Hirschman, 1986).

Research Objectives

With the preceding information as background, this introduction now uncovers the deepest and most intricate Babushka doll.   Our understanding is growing with respect to the kind of persuasive outcomes the pleasure of the text effect produces.   McQuarrie and Mick (1999) determined that one key persuasive outcome in their work was a measure that the authors called "elaboration." What is clear is that rhetorical ads in general and visual ads more than verbal rhetorical ads, elicited greater elaboration. The problem however is that McQuarrie and Mick never concretely defined the term nor did they elucidate its underlying processes. Higher ad attitude ratings, better ad recall and enhanced attitude toward the brand were some other consistent effects that have been found so far with respect to processing rhetorical advertising stimuli, visuals in particular (McQuarrie, et al., 2003b).

Research Objectives

The first objective of this research is to characterize more concretely what is going on in the minds of individuals as they "elaborate" on rhetorical advertising. The assumption is that the elaboration yields a positive processing experience; studies in the present work will demonstrate experimentally the concrete nature of this positive experience.   Theories about processing fluency (Alter and Oppenheimer, 2009) in the

6

domain of visual persuasion (Winkielman, Schwarz, Fazendeiro and Reber, 2003b) offer promising prospects for explaining the mechanisms of how visual rhetoric in advertising engages the consumer and elicits more favorable judgments.

Processing fluency affects the mind in distinct ways, at multiple levels of processing a stimulus (Alter, et al., 2009; Lee, 2004). Fluency occurs at a conceptual level that involves processing the semantic meaning of a stimulus, and at a perceptual level where judgments stem almost entirely from the fluent processing experience. Perceptual fluency has been repeatedly shown to be a nonconscious phenomenon (Schwarz, 2004).

Furthermore, the specific judgments processing fluency is known to influence are important judgments to study and understand in the domain of advertising and persuasion. Typically an object that is more fluent to process yields greater liking judgments, higher perceptions of truth, and higher confidence in one's judgments after processing the fluent object. The present research will examine the extent to which advertising rhetoric is highly fluent. If this connection is a robust one then that will provide important theoretical connections between positive judgments and the fact that style more than substance is the most effective tool in the domain of rhetorical communication (Phillips, et al., 2009).

The third objective of the present research is to link persuasive process (i.e. elaboration, rhetorical communication, processing fluency) with persuasive outcomes. The present research seeks to provide experimental evidence that visual communication, unlike what traditional persuasion theory would most likely predict, can in fact produce strong attitudes. Traditional persuasion theory predicts that engagement with a

7

persuasive stimulus through anything other than strong central message-based processing routes should not produce strong attitudes (Petty and Krosnick, 1995). Presently, the extent to which an individual's judgments about rhetoric in advertising are strong remains unknown and therefore subject to debate (Toncar, et al., 2001).

Organization of Dissertation

Chapter II reviews academic literature related to the nature of visual processing, rhetoric in advertising, the components of attitude durability, and processing fluency in order to establish the theoretical framework for the present research. The literature review highlights the subconscious, emotional, experiential nature of visual processing. This evidence is coupled with existing evidence of the strong persuasive potential of rhetoric and visual rhetoric: rhetoric that is increasingly figurative seems to elicit stronger persuasive outcomes. Finally, the literature reviewed in chapter II suggests that theories of processing fluency may serve to clarify contradictory predictions between classic persuasion theory and recent theories of visual persuasion regarding the durability of persuasion outcomes elicited by visual rhetorical advertising stimuli.

Chapter III discusses a detailed plan for four studies which address the objectives of this research. The first set of experiments (studies one and two) examines the detailed nature of the experiential elaboration of increasingly figurative rhetorical stimuli, and how this process links to currently known experimental results related to persuasive outcomes. The second set of experiments (studies three and four) directly examines persuasive durability of increasingly figurative visual rhetorical stimuli at different levels of personal involvement. Processing fluency is used to operationalize personal involvement.

Chapter IV presents the results of each study. Results for four studies will include detailed interpretation of qualitative data in addition to results of experimental measures including individual difference measures which pertain to experiential processing of visual information. Chapter V includes discussion and interpretation of the key findings along with discussion of the theoretical and practical implications of the findings, suggestions for future research and finally the limitations of the research.

CHAPTER II

REVIEW OF LITERATURE

Visual Processing

Approximately 75% of all the information processed in the brain is visual (Franks, 2003). Visual information that enters the brain travels first through midbrain structures such as the amygdala, a structure associated with subconscious emotional processes (Franks, 2003; LeDoux, 1996) before traveling to the visual cortex located in the higher areas of the human brain. Anne Marie Barry (Barry, 1997; Barry, 2005) has done extensive work in visual processing and the implications of how the visual system functions for people in modern times trying to navigate the visual environment. At the subconscious level our minds do not distinguish between what is real and the visual information transmitted to us from movie screens, computer screens, smartphone screens, e-readers, billboards, magazines, and newspapers. Furthermore, our minds are voracious information processors that are hungry for meaning and understanding; as such our minds tend to automatically fill in incomplete visual narratives such as commercials and movies that jump from one scene to the next while leaving behind large narrative gaps.

Barry (1997) notes that the typical high school graduate late in the 20th Century had accumulated 13,000 hours of school, about half (25,000) the number of hours that same person had spent watching TV and movies. This same individual by the age of 18 had seen approximately 350,000 commercial advertisements: in other words this individual had been exposed to 350,000 compact stories containing oversimplified problems and solutions communicated through highly idealized and highly stylized

emotion-inducing images, all of which make life seem very straightforward and linear.

Barry (1997) warns that such tremendous volume of exposure to visual advertising may

be particularly potent given what we know about how the visual system processes

information. Visual processing is rooted in experience, and visual processing mediates

between the self and the external world via these experiences. Advertising practitioners

understand that these connections exist and have increasingly attempted to flood their

communications (e.g., Phillips, et al., 2002) with positive experiences that will resonate

powerfully with our unconscious visual minds (Schroeder, 2002).

There is growing evidence that the tsunami of visual images in the marketplace is

affecting how people in the west view the world, and themselves. In the Anthropology

literature, for example, research shows that Western males and females between the ages

of 18-22 have completely different concepts of attractiveness than do males and females

in indigenous societies located in undeveloped parts of the world (Sugiyama, 2004;

2005). Specifically, Western participants consider a female body that is "pear-shaped" as

the more attractive whereas participants from indigenous societies consider a rounder

body shape to be more attractive—presumably because this kind of shape signals

reproductive health/fitness (i.e. a body that can successfully bear more offspring). Along

these same lines Michael Solomon and colleagues (e.g. Wood, Solomon and Englis,

2003) have done extensive work on how marketing images can sometimes negatively

affect self-esteem and body image.   Barry (1997) also cites research that young people

who watch a lot of TV exhibit greater desensitization to violence compared to young

people who do not watch a lot of TV.   These are just a few examples of the potential for

long-term exposure to visual advertising and other types of imagery in our modern

society to exert significant impact on attitudes, beliefs, and presumably our behaviors as well.

Schroeder (2002) describes vividly how pervasive visual imagery is in the marketplace: brands are characterized extensively through the use of images (e.g. logos, characters like the "Mac guy"), and many products are designed to communicate visually. For example, Greek column architecture on a bank building signals dominance and security. Schroeder cautions however, that the quantity of visual information we are exposed to in our lives as a consumer in no way enhances our ability to handle it competently: "…the dominance of visual imagery does not necessarily make for visually literate consumers. Visual consumption often involves mere looking without comprehension, gazing without knowledge, and watching without engagement… [11]"

Williams and Newton (2007) suggest that the above quotation from Schroeder is true in large part because people in modern Western societies are not taught to understand how the visual system works as a system of communication. Williams and Newton support this claim by citing research on drawing ability comparisons between children and adults. Evidence shows that the average adult with no artistic training cannot complete a simple line drawing with any more sophistication than a child in early adolescence. Children develop as emotional creatures that rely heavily on their visual system to navigate their world (Barry, 2005). Before kids learn to write most of their assignments in school have some sort of visual component to them. However as they age they go into the "verbal, rational" school system and unless they are taught further, drawing ability is stunted. This implies that our command of our visual system is also

stunted. Barry (1997) puts it in Socratic terms: we become "visual fools" in that our visual system becomes an unknown known.

Advantages of Visuals in Advertising

In contrast to visual processing, verbal processing is mostly localized in language centers in the higher cortex. Childers and Jiang (2008) present an eloquent graphic illustrating the structural differences between the two systems. The implication is that verbal information takes longer to process in general, whereas visual information elicits an instant response from the mind. Therefore, in advertising research situations that approximate naturalistic conditions—conditions in which participants are not willing or not able to direct all their resources to processing the persuasive stimulus-- it is reasonable to expect that because of the ease in which the brain processes visual information such stimuli will make a stronger impact on mental processing.

Wyer and colleagues have done some research in advertising contexts (Hung and Wyer, 2008) in which participants were either allowed to process the ads with full mental capacity or in situations of cognitive restrictions where they were required to memorize a 12-digit number before exposure to the ads. The advertisement stimuli presented problem-solution juxtapositions for fictitious brands comprised of either all verbal, all visual, or combinations of visual and verbal information. Participants rated the advertisement based on their own naïve theories that (a) advertising is generally informative or (b) advertising information is deliberately exaggerated.

Results showed that when the stimuli were presented entirely in visual form under conditions of reduced cognitive load, the advertisements were rated more positively (i.e., more informative) than in the other conditions. Conversely, when the ads were presented

in all-verbal format participants were more likely to rate the ads as deliberately exaggerated.   These results lend credence to the notion that under processing constraints visual information is more salient and more trustworthy, presumably because the individual is able to extract more information while expending fewer processing resources.

The research discussed to this point suggests that in modern times people may not be adequately practiced as visual processors to cope successfully with the enormous amounts of visual persuasive imagery to which they are exposed over a lifetime. Furthermore, due to differences in how visual and verbal information are processed, visual imagery has natural advantages in terms of its capacity to deliver large amounts of complex information almost instantaneously.   The implication of these advantages enjoyed by visual information is that visuals used in advertising might make a stronger persuasive impact than equivalent information transmitted in verbal form. This potential for visuals to persuade might be especially powerful in more naturalistic situations where people have less time, or face some similar constraint where it is difficult to fully deliberate on the object to which they are asked to respond.

Visual Processing, Constrained Minds and the Present Dissertation

The current research factors the special advantages that visuals enjoy over verbal information with respect to processing persuasive imagery (McQuarrie, et al., 2003b) under conditions of mental constraint (Hung, et al., 2008).   With one exception (McQuarrie, et al., 2003a), prior research in the specific domain of this research (i.e., visual rhetoric in advertising) has focused on contexts where people had plenty of time to process the ads.   The present dissertation conducts studies in which people are placed

under various levels of mental constraint (see Chapter III) in order to better understand how visual information is processed presumably with much greater effectiveness than verbal information in these kinds of situations. Traditional persuasion theory (Cacioppo, Petty and Kao, 1984; Mitchell, et al., 1981) has yet to adequately consider or acknowledge the power visuals possess as persuasive agents. The present research acknowledges this potential, in light of more recent theories about visual persuasion to be discussed next, in order to better understand it.

Reader Response Theory

This research adopts Linda Scott's (1994a) reader response theory (RRT), which attempts to account for the rich persuasive potential of visual communication. Reader Response Theory calls for several revisions to typical thinking in persuasive research (particularly in marketing) with respect to visuals: a) how consumers are conceptualized in the context of visual persuasion, b) the persuasive process and the persuasive impact of visual communication, and c) how the two interact (Kenney, et al., 2003). RRT conceptualizes consumers as sophisticated "readers" who possess a wide range of complex mental capabilities and idiosyncrasies, and who use all of these capabilities and idiosyncrasies when processing even 'simple' visual stimuli. Communicating with visual information should be thought of as a complex personal dialogue (Mick and Buhl, 1992) where the intention of the author and the response of the reader are connected by shared cultural knowledge and are transmitted through information vehicles that both the marketer and the consumer understand.

The Folly of Traditional Theory: Underestimating Visuals

Scott's research (Kenney, et al., 2003; Scott, 1994a; 1994b; Scott, et al., 2007) openly confronts a longstanding line of thought in social science research called "copy theory." Copy theory purports that images neither contain nor transmit a substantial amount of information; rather, they are merely copies of the world of which they have captured a small piece. Mitchell and Olsen (1981) is the paper Scott and Vargas (2007) holds up as the gold standard for copy theory. This paper used images to elicit a basic emotional response (e.g. a fluffy cat elicited positive mood) but little else.

Scott and Vargas (2007) replicated Mitchell and Olsen (1981) using prototypes of the images from the original paper. The results of the replication demonstrated the vast amount of rich marketing-related information that consumers are capable of processing from the original image prototypes; all of which was ignored in the original paper. For example, the same fluffy cat evoked estimations by participants of a higher quality/higher priced brand that catered to people's aesthetic senses. Furthermore, participants viewing the fluffy cat attributed greater levels of sophistication to the brand compared to control participants who viewed no such image. Scott and Vargas (2007) repeated the study again with other images that they themselves produced to illustrate how different each image was from another. In fact this paper even demonstrated that the visual elements of a verbal statement, black text and a white background, communicated information to consumers regarding marketer competence, product quality, and price.

With the preceding information as background, this literature review will now address in detail the key concepts that form the theoretical structure of the dissertation illustrated below in figure 1.   The discussion will proceed with a review of past research on visual rhetoric and processing fluency, the key independent variables.   This chapter continues with a discussion of relevant knowledge on elaboration and the components of strong attitudes used as dependent variables in the present research. The individual difference moderators in Figure 1 are then defined and discussed.   Finally the chapter concludes with a discussion of the research questions and hypotheses.

Theoretical Structure

Independent Variables:

Visual Rhetoric
*Figurativeness
*Visual vs. verbal stimuli

Processing Fluency
*Stimulus exposure conditions

Individual Differences Moderators
*Visual Processing tendencies
*Consumer creativity
*Persuasion Knowledge

Dependent Variables:

Fluency-Driven Judgments:
*Liking, Honesty

Indicators of Attitude Strength:
*Strong attitude determinants—Elaboration, Certainty
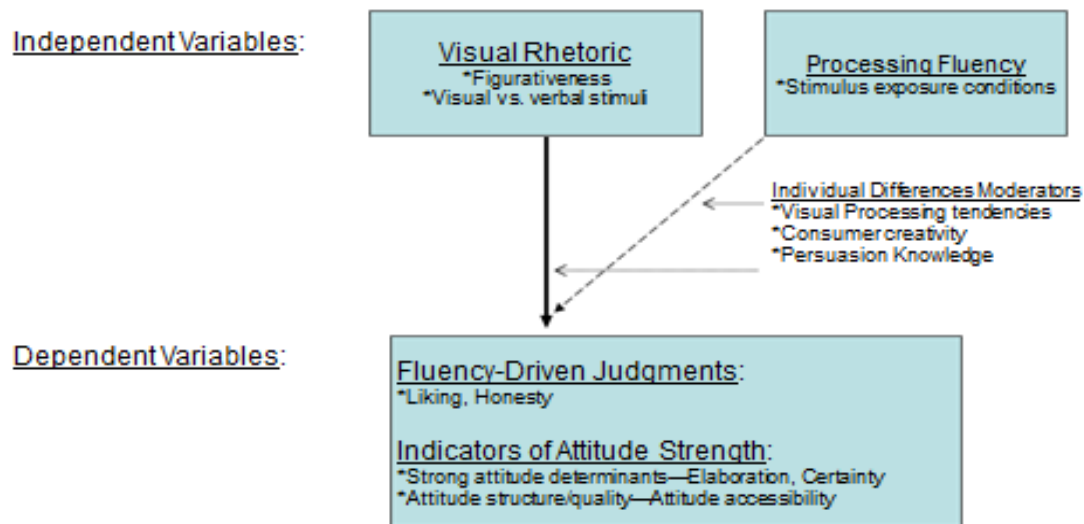*Attitude structure/quality—Attitude accessibility

Figure 1: The Theoretical Structure of This Dissertation

Definition of Key Variables

Independent Variables

Advertising Figurativeness. Regarding the independent variables in figure 1, figurativeness refers to the stylistic properties of rhetoric that engage the mind in both a sensory and a cognitive way that constitutes an unusual yet pleasant communication. Rhetoric gives the mind of the individual who engages with it a positive information processing experience. By juxtaposing independently unrelated concepts together so that the mind of the receiver is encouraged to elaborate and make relevant meaning, rhetoric is both "artful" from a sensory standpoint and "deviant" from a cognitive standpoint. The extent to which rhetoric is more or less figurative depends on its level of artfulness or cognitive deviance. A rhetorical figure can vary greatly on one or both dimensions.

Processing Fluency. Processing fluency (see figure 2) is on both sides of the theoretical structure. On the independent variable side of the equation, processing fluency refers to the extent to which a stimulus evokes a pleasant processing experience. As discussed below, processing fluency occurs at all levels of information processing. Placing the mind of the consumer under various levels of constraint is a common method for isolating fluency at different levels of processing (Reber and Schwarz, 1999).

Dependent Variables

Ad Elaboration. Regarding the dependent variables in figure 1, elaboration refers to the extent to which the mind engages with the information it is asked to process. Traditional persuasion theory says that in order for persuasive communication to make a strong, lasting impact this elaboration must be deliberate, effortful, and focused intently

on the ad message (Petty, Haugtvedt and Smith, 1995). Visual persuasion theory, however, says that elaborating on visual information is holistic and mostly experiential. That is fundamentally different than the linear, sequential way in which verbal information is processed but every bit as nuanced and complex as verbal processing (Scott, et al., 2007).

Fluency-related Judgments. As noted previously, processing fluency theory is also on the dependent variable side of the theoretical structure.   This is reflected in the measurement of judgments about ad attitude and ad honesty.   Fluency theory suggests that in response to the subjective experience of the fluency the mind responds with more favorable liking judgments and more favorable judgments about the truth and honesty of the attitude object compared to judgments about less fluent objects (Winkielman, et al., 2003b).

Attitude Strength Judgments. Attitude certainty refers to how certain and how confident people are about the judgments (such as attitude and honesty judgments) people were asked to make about a persuasive stimulus (Gross, Holtz and Miller, 1995).   In essence certainty is also an experiential variable because people are evaluating the process their minds underwent when forming their judgments.   Attitude accessibility (Fazio, 1995) refers to the ease in which judgments are retrieved from memory when requested.   High attitude certainty and high attitude accessibility have been shown to correlate with strong, durable judgments; the durability of these judgments in turn reflects a strong impact by the persuasive stimulus.

Moderators

The individual difference moderators in figure 1 examine the extent to which certain inherent differences in how people process certain information might influence judgments within the experimental context. Individual differences in persuasion knowledge (Bearden, Hardesty and Rose, 2001) reflect the natural tendency to pay attention to persuasive tactics, and to utilize personal understanding about persuasion to cope with these tactics effectively. Individual differences in visual style of processing (Childers, Houston and Heckler, 1985) is a sub-scale from the larger style of processing scale that measures whether people are more predisposed to attending to visual vs. verbal information in their environments or using visualization to solve problems. This is relevant because it could reflect the extent to which one type of information is more fluent to certain people than others. Lastly, the metaphoric thinking ability sentence completion task is a measure of consumer creativity (Burroughs and Mick, 2004). This test asks people to complete unfinished sentences and quantifies their natural tendency to do so with rhetoric (e.g. metaphors, discussed below) vs. literal statements.

Rhetoric in Advertising

McGuire (2000) laments that in the context of modern social science research, persuasive rhetoric is a lost art that was perfected by the ancients and then forgotten in the dark ages. Throughout much of the 20th Century rhetoric was stigmatized by social science researchers as little more than a cheap gimmick. In practice however, during the same period of time rhetoric became increasingly popular in print advertisements, particularly in the visual form. Phillips and McQuarrie (2002) examined continuity and change in ad styles of three widely read magazines-*Sports Illustrated*, *Time*, and *Good*

Housekeeping-from 1954-1999. The authors defined the time period as one in which product discourse was believed to be centered in mass media texts, and which was sufficient to vividly reflect changes in ad styles.   Content assessment showed that rhetorical figures had been present in ads throughout the time period across all magazines. However the last several decades of the 20th Century into present times reflected considerable increase in rhetorical ads overall and visual-only rhetorical elements in particular.

Aristotle is regarded in Western society as the father of rhetoric, a system of stylistic communication where persuasion is the primary intention. Aristotle classified hundreds of different rhetorical devices based on various levels of deviance from normal grammar. Rhetorical figures deviate from normal grammar convention along two dimensions: richness and complexity.   Rhymes are a common example of highly rich (i.e., more sensory) yet cognitively non-complex rhetorical figures: "the rain in Spain falls mainly on the plain."   Other rhetorical devices such as metaphors are less sensory yet more cognitively complex, requiring a bit more processing effort to piece together meaning.   A classic example comes from Homer's *Iliad*, where the author makes a simple point but in a way that transmits an indelible image of thought to the mind of the person who hears it or reads it: "As ravenous wolves come swooping down on lambs to snatch them away from right amidst their flock…so the Achaeans mauled the Trojans."

A TAXONOMY OF RHETORICAL FIGURES IN ADVERTISING

I. Figuration	All rhetorical figures (artful deviations)		

Scheme (excess regularity) — Trope (irregularity)

II. Figurative mode

less COMPLEX more >

III. Rhetorical operation

Repetition   Reversal   Substitution   Destabilization

— Rhyme, chime, alliteration

— Anaphora, epistrophe, epanalepsis, anadiplosis

— Parison

— Antimetabole

— Antithesis

— Hyperbole

— Ellipsis

— Epanorthosis, rhetorical question

— Metonym

— Metaphor

— Pun

— Irony

— Paradox

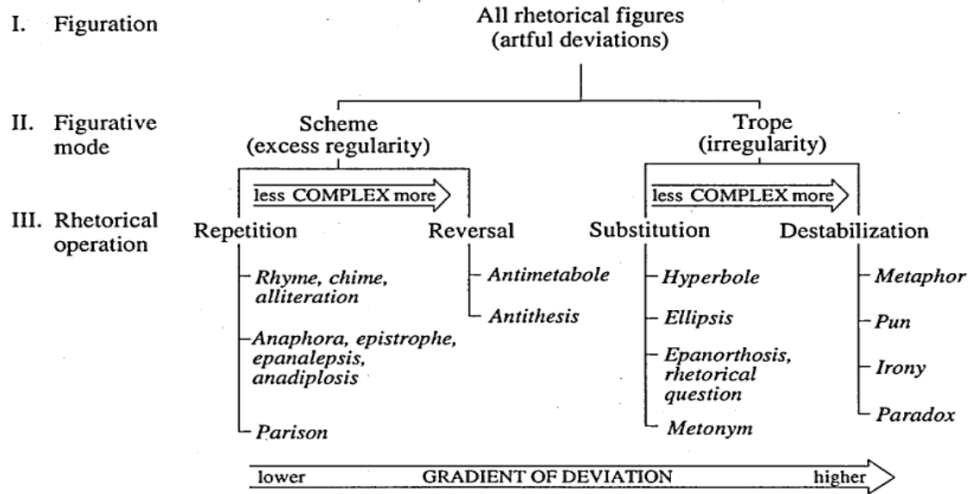lower   GRADIENT OF DEVIATION   higher >

Figure 2: Taxonomy of Rhetorical Figures in Advertising

McQuarrie and Mick (1996) was arguably the first consumer research paper to introduce a systematic program of research on the persuasive impact of rhetoric in advertising. This dissertation uses McQuarrie and Mick's definition of rhetorical figures which derives from Aristotle's core premise of deviation discussed earlier. Rhetorical figures exhibit "figuration" or "figurativeness" because they behave as "artful deviations," analogous to **bold** typing or *italicizing* text (sensory deviance), and because their cognitive deviance encourages reinterpretation or reading additional meaning (p. 425)." Figures are grounded in fundamental communication principles, but they deliver the message in unconventional ways. Figure 2 (above) shows the original taxonomy which was devised for studying verbal rhetorical devices. Level one of the taxonomy was rhetoric in advertising vs. non-rhetoric. Level two classified rhetoric into two basic categories: schemes which deviate more along the artful/sensory aspect of figurativeness, and tropes which deviate more along the cognitive deviation aspect of figurativeness. Finally, level three involves combining different types of rhetorical figures along the

22

sensory continuum (e.g. schemes) as well as the cognitive continuum (e.g. tropes) of figurativeness.

Rhetorical figures used in advertising enjoy persuasive success because their figurativeness appears to encourage some kind of deeper cognitive processing. Ang and Lim (2006) provide a list of cognitive effects that rhetorical figures may elicit: greater imaginal (as opposed to analytical) elaboration (Oliver, Robertson and Mitchell, 1993), increased interest, and multiple, positive inferences about brands. Despite their slight grammatical deviance, rhetorical devices are rooted in the familiar. Therefore the deeper processing required for full comprehension is not perceived as being laborious and unpleasant; instead the experience of solving 'rhetorical riddles' is often quite pleasant (Toncar, et al., 2001).

Gaps in Rhetoric Research

The present research is filling a need in our knowledge about advertising rhetoric by conducting broader theoretical research on the response by individuals to visual rhetoric compared to verbal rhetorical language in advertising. Most research to date on rhetoric in advertising has been with verbal ads. Rhetorical devices have been used in singularity in advertisement taglines, the body copy, or in multiple instances in ads depending on how salient the advertiser wishes to make the rhetorical communication (Ahluwalia and Burnkrant, 2004). Research also suggests that combining different rhetorical devices has additive effects in terms of persuasion outcomes (Mothersbaugh, et al., 2002). Another way to combine rhetorical devices is by using both visual and verbal rhetorical elements (McQuarrie, et al., 1999).

All of this research implies that the more figurative a rhetorical advertisement stimulus is, the more pleasant the processing experience and consequently the more positive will be the response from consumers.   McQuarrie and Mick (1999; 2003a) have conducted two studies with visual rhetoric in comparison with verbal rhetoric and non-rhetorical communication in advertising. Both studies concluded that visual rhetoric is more figurative than verbal rhetoric, based on attitude judgments and responses related to ad elaboration.   But research on visual rhetoric has yet to explain exactly why these judgments were so much more positive for visual over verbal, or how strong the reactions to rhetorical communication really are.   The present research will seek this greater understanding by applying theoretical concepts of processing fluency and attitude strength.

Metaphor

The rhetorical device of choice in this research—metaphor--is a highly common rhetorical device both in everyday life and in the marketplace (Hirschman, 2007), but one that is still relatively under-studied in marketing and advertising research (Phillips, et al., 2009).   Gerald Zaltman (Zaltman and Coulter, 1995; Zaltman and Zaltman, 2008) argues that metaphor is a fundamental thought engine in the human mind.   It is the most basic tool people use to learn new things based on knowledge that they already possess. Metaphor works by combining two concepts that by themselves might be totally unrelated or only somewhat related at best; however, the combination of these two concepts creates a richer, deeper understanding of the central message topic.   For example, "war is hell," "I'm in heaven," and "I'm on the road to recovery" are all

examples of metaphoric phrases that many people use routinely, perhaps without even realizing it.

Phillips and McQuarrie (2009) showed that metaphors vary in their levels of figurativeness in part because they are so common, meaning some metaphors are used so frequently that they elicit little to no "pleasure of the text" effect. The authors estimate that people use metaphors 6 times per minute in every day speech. Consequently, metaphor is a valuable rhetorical tool to study because in general it is only moderately deviant but highly malleable in terms of figurativeness—ranging from something as bland as "life is pain" to something a bit more incendiary like "exercise is WAR" From this point forward this dissertation will use the term "rhetoric" and "metaphor" interchangeably, but with the qualification that no two rhetorical devices share the same structural/stylistic form nor the same level of persuasive capacity.

Past Research on Rhetoric

McQuarrie and Mick (McQuarrie and Mick, 1992; McQuarrie, et al., 1996; 1999; 2003a; 2003b) operationalized their interpretive and experimental empirical framework under the theoretical umbrella of Scott's (1994a; 1994b) Reader Response Theory. The research framework synthesized elements of what McQuarrie and Mick called the human system--*central and peripheral perceptual processing and brain physiology*, with elements of what they called the ad system--*elaborate communication structures used to differentiate advertising content*.

McQuarrie and Mick's (1996) 3-tiered taxonomy, discussed previously and illustrated in figure 2 above, conceptually linked rhetorical figures to consumer information processing and subsequent persuasion-related outcomes. These persuasion

outcomes include attention, elaboration and ad liking.   Consumer-based contingencies for these cognitive processes include ability to process, opportunity to process, and motivation to process the rhetorical figures in the ad system.   The basic premise of the taxonomy is that rhetorical devices that are more figurative will be more persuasive.   As noted previously that this taxonomy was originally devised for studying verbal rhetorical figures. However, soon after devising the taxonomy McQuarrie and Mick (1999; 2003b) shifted their focus to studying visual rhetoric given its prevalence in print ads in the latter part of the 20th Century and beyond.   In the present research the relevant aspects of McQuarrie and Mick's (1996) taxonomy include level one (rhetoric in advertising is more persuasive vs. no rhetoric, all things equal), and the re-interpretation of level two offered by McQuarrie and Mick (1999) that visual rhetoric is more figurative than verbal rhetoric.

Advertising Response: Rhetoric vs. No Rhetoric

        The first level of McQuarrie & Mick's (1996) 3-tiered taxonomy involves comparing advertising that uses rhetorical figures to persuade vs. advertising that uses no rhetorical figures.   Past experimental studies (Ang, et al., 2006; McQuarrie, et al., 1999; 2003a; 2003b) have consistently demonstrated that ads containing rhetorical figures were liked more and recalled to a greater extent than ads without rhetorical figures. This is true in comparing both advertising with verbal rhetoric (vs. no rhetoric) and advertising with visual rhetoric (vs. no rhetoric).

26

Advertising Response: Visual vs. Verbal Rhetoric

McQuarrie and Mick (1999) operationalized both visual and verbal elements as equally capable of persuading. In the case of visual elements contained in the ad image, systematic style variations were expected to elicit predictable and measurable response differences.   Stylistic variations yielded significantly different responses in two very important domains important to the study of persuasion: visual figures resulted in greater elaboration than both visual elements with no rhetorical figures and verbal elements with rhetorical figures. Furthermore, based on attitude toward ad (Aad) measurements visual figures generated more positive reactions than both non-rhetorical visual elements and verbal rhetorical figures used in advertising stimuli.   In-depth reader-response analysis confirmed that the combination of greater elaboration and more positive reactions resulted in greater persuasiveness overall for visual elements containing rhetorical figures.   These results seem to confirm that visual rhetoric is more figurative than verbal rhetoric.

Visual Rhetoric: A More Powerful Persuader

McQuarrie and Mick (2003a) explored the impact of visual vs. verbal rhetorical figures in magazine ads under conditions where participants were not specifically instructed to process the ads.   This paper validated previous results that rhetorical figures invite greater elaboration and greater ad liking.   Overall, both verbal and visual ads with rhetorical figures were recalled and liked more than control ads which contained no rhetorical figures.   The overall recall rate for visual figures was 31.8% compared to just a 4.8% recall rate for verbal figures.   These data were somewhat skewed however, given that the recall rate for verbal figures was *exactly zero* in the incidental conditions.

The implications from these results are that visual figures are more persuasive overall than verbal figures, and that visual figures are capable of strong levels of persuasive impact under low-processing-ability conditions, whereas verbal figures were almost completely incapable of making an impact on the mind under naturalistic conditions.

Ang and Lim (2006) examined the influence of various combinations of ad elements--including visual and verbal metaphors--on consumer perceptions of brand personality, attitude towards the ad, and purchase intent of either affective-oriented symbolic products (e.g. jeans) or cognitive-oriented utilitarian products (e.g. toothpaste). The authors showed participants print ads with fictitious brands that contained either visual metaphors, verbal metaphors in the headline, both, or neither. In general these results agreed with previous research in demonstrating that ads containing visual rhetorical stimuli more than any other communication style showed greater persuasive potency regardless of product category.

In closing, McQuarrie and Mick (2003b) identified several advantages that visual rhetoric enjoys over verbal rhetoric in print advertising, given that visual ads persuade more tacitly (i.e., in unspoken manner). For one thing, visual rhetoric has the potential to ignite information processing at preconscious levels of processing (Childers, et al., 2008). Furthermore, visual memory is believed to be stronger (Childers, et al., 1985) which is a key aspect of persuasive impact; attitudes formed from exposure to visual rhetoric should therefore be more accessible in memory (Fazio, 1990; 1995). Lastly, in practice visual rhetoric enjoys greater prominence in high profile media such as magazines because visual print ads don't compete with regular text in magazine pages to the same extent that verbal advertising language does.

Advertising Response: Visual Metaphors

There is some research specific to visual metaphor that augments current understanding of the persuasive impact of visual rhetoric. Visual metaphor structure essentially involves juxtaposing images of objects that are literally very different. As noted, the primary benefits of using visual metaphor in ads include increased attention, elaboration, recall, and comprehension relative to not using any figurative language devices. Phillips and McQuarrie (2004) created a two-dimensional typology designed to account specifically for how visual rhetorical figures are structured and how they are processed by the consumer.

Consistent with McQuarrie and Mick's (1996) definition of a rhetorical figure, visual figures vary along two dimensions: richness and complexity. Visual rhetorical figures in the Phillips and McQuarrie (2004) typology are structured along three levels of increasing richness depending on how the two visual elements are combined: juxtaposition (two side by side images), fusion (two combined images), and replacement (visible image represents an image not seen). Returning to the visual metaphor described in the opening paragraph of chapter one, that image was moderately rich because it consisted of two image concepts fused together. Furthermore the three meaning operations deliberated on by consumers in increasing order of complexity include connection (A is associated with B) and two increasingly complex forms of cognitive comparison: similarity (A is like B), and opposition (A is not like B). On the cognitive dimension the image described in chapter one is moderately complex and most approximates the similarity dimension. Overall then the image is moderately rich and

moderately complex and therefore belongs somewhere in the mid-range of the nine-cell typology of visual figurativeness.

Thus, crossing each dimension of the typology yielded a parsimonious yet exhaustive grid of 9 different categories of purely visual rhetorical advertising images representing varying levels of figurativeness.   Phillips and McQuarrie (2004) offered some research propositions regarding how these figures might influence consumer response, including moderating factors such as consumer competency for processing rhetoric and typical processing contingencies (e.g. ability to process) associated with standard persuasive theory (Petty, et al., 1983). This dissertation will explore in detail how the figurativeness of visual rhetoric influences persuasion.

Gaps in the Rhetoric Literature

Summary of the Known. The previous sections talked about what is known with regards to advertising rhetoric, including visual rhetoric.   The present dissertation assumes and incorporates this past knowledge into the theoretical structure of the research that will seek to fill in gaps in our knowledge about advertising rhetoric. Briefly, based largely on the research of McQuarrie and his colleagues, we know that visual rhetoric is more figurative than verbal rhetoric. More figurative ads elicit greater elaboration and more positive attitudes.

The Unknown. The present dissertation addresses specific gaps in our understanding of advertising rhetoric. In particular, McQuarrie and Mick (1996; 1999; 2003b) did not define or describe the specific nature of their term 'elaboration'. This gap will be discussed in greater detail below. For now the essence of the issue with elaboration is that we currently do not have a clear idea of exactly how visual rhetoric

impacts the mind. We know the result is positive, but it is important to better understand

the process that produces these positive results to have a better understanding of how

substantive the positive responses really are.

Building on this gap in understanding, the present research will identify the extent

to which elaboration is message-based vs. experiential in nature. The study will also

broaden the use of theory to link the nature of the elaboration to judgment strength to an

extent that has not been done in the past.   As noted the technique has become more and

more popular for practitioners (Phillips, et al., 2002).   While this would lead to a safe

assumption that practitioners use the technique a lot because they think it works really

well, it remains an important undertaking to confirm these assumptions with rigorous

research techniques. In the big picture this is a crucial early step towards understanding

the extent to which the use of advertising rhetoric is a viable tool towards maximizing

brand equity.

Processing Fluency

The essence of the present research revolves around people forming judgments

about advertising based not on the information exchanged but on the experience people

engage in upon encountering the advertisement.   Janiszewski (2008) states clearly what

this literature review has outlined up to this point: the information processed by people

encountering visual stimuli should not be evaluated in the same way as information

processing with verbal stimuli, despite what the copy theorists (Mitchell, et al., 1981)

have said for decades.   The reason is because visual processing is less uniform than

verbal processing; much of the fine details of information exchange measured in

traditional persuasion studies where participants read verbal stimuli very closely and then

participate in evaluative tests gets lost when processing visual stimuli. If one tries to evaluate apples (visuals) using the same criteria for evaluating oranges (verbals) then it makes sense that the true nature of visual information exchange would get discounted in exactly the way it has historically given that the academic literature for the most part has defined persuasive outcomes using the verbal-based criteria.

Janiszewski (2008) proposes re-framing how visual information exchange is studied in a wide variety of contexts, advertising included. As a result in the case of advertising concepts like attention, perception, and comprehension should necessarily mean/represent different processes and outcomes than they would with verbal stimuli. Attention for example is a necessary starting point for information processing with verbal stimuli. But for visual stimuli the experience of forming an orienting response to an object (Lang, 2000) such as an 'artful deviation' communicated through visual rhetoric is valuable information in and of itself. If this experience is positive/pleasant that will have vastly different consequences when judgments are formed compared to if the experience is difficult or unpleasant. Janiszewski also notes that perception in a visual information exchange concept is far more significant and complex than just "selecting information to elaborate on further." With visuals, perception is itself a meaning-production process for the person who is encountering the visual object.

Finally, Janiszewski (2008) suggests that comprehending visual communication is primarily a subjective experiential phenomenon (Mick, et al., 1992). Given this, the context of the task in relation to the processing environment is an important dependent variable of interest when studying visuals. This is more the case if you accept that much of the evaluative consequences of visual persuasion are tied into the processing

experience as opposed to the specific nature of the information.   With this discussion of

the importance of processing experience as background the chapter will now move into a

deeper discussion of processing fluency theory which addresses how experiences

influence judgments.

Fluency Definition

This paper adopts a metacognitive definition of processing fluency (Lee, 2004;

Schwarz, 2001; 2004; Schwarz and Clore, 2006; Winkielman, Schwarz, Reber and

Fazendeiro, 2003a) as an evaluative phenomenon in which people take into account not

just the content of the evaluation object (e.g. a visual rhetorical advertisement) but also

the subjective processing experience when making evaluative judgments. In cases where

processing resources are constrained individuals may rely solely on the subjective

experiential information for judgments.
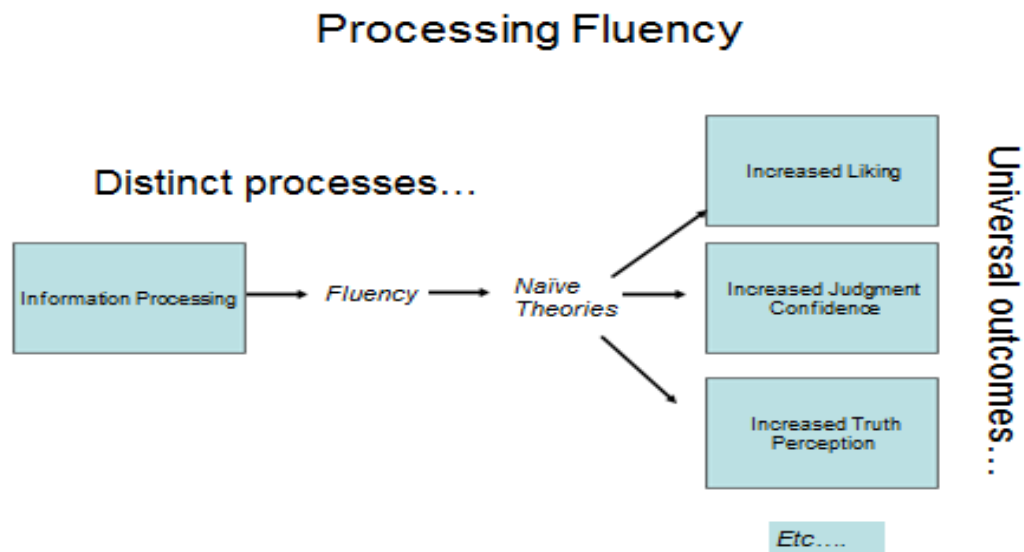
Figure 3: How Processing Fluency Influences Judgments

33

Alter and Oppenheimer (2009) note that fluency occurs at all levels of information processing.   Alter and Oppenheimer diagrammed a 3-stage process (see figure 3) which results in an evaluative judgment that stems from the subjective experience of processing fluency.   Once an individual encounters an attitude object, the three stages include (1) the brain detects a pleasant processing experience, (2) the mind applies appropriate contextual naïve theories about the object, using the reaction to the fluency as important information in the judgment process, and (3) the judgments are made.

Stage One: Distinct Fluency Detection Mechanisms

An important theoretical consideration for the present research is that at the first stage the mechanism by which people ultimately perceive a fluent experience is highly divergent and nuanced (Lee and Labroo, 2004).   For example, people can perceive fluency at a pre-conscious perceptual level (Janiszewski, 1988; 1993), a phenomenon called *perceptual fluency*.   Zajonc's (1980) mere exposure phenomenon is an example of perceptual fluency at an unconscious level: people like stimuli that they have encountered previously even if they are unaware of the prior exposure.   Alter and Oppenheimer (2009) cited other evidence that processing fluency can also manifest at deeper, more semantic levels of processing in which fluency signals greater elaboration at the time of exposure, a phenomenon called *conceptual fluency* (Lee, 2004).

The deeper elaboration is not the same message-based elaboration as defined by the ELM..   Deeper elaboration from processing fluency is thought to work through greater activation of related concepts in associative memory (Schwarz, 2004; Shapiro,

34

1999). From this standpoint the deeper elaboration is more subjective, and experiential.

This type of subjective experience of processing fluency has been shown to result from

exposure to sensory rhetorical devices such as rhyme (McGlone and Tofighbakhsh,

2000), from increased white space in advertisements (Pracejus, Olsen and O'Guinn,

2006), from pairing incomplete sentences with words that make conceptual sense

(Whittlesea, 1993), and in a marketing context from pairing an image of a product with

the image of a contextual scene in which people would logically expect to see the product

(Lee, et al., 2004; Shapiro, 1999).

Stage Two: Fluency Experience is Information to the Mind

      Alter and Oppenheimer (2009) suggest that the bridge between the subconscious

perception of fluency by the brain and the judgments that result is an interaction between

fluency and domain-specific naïve theories about what this perception means in the

context of the current judgment task.   A full discussion of naïve theories is beyond the

scope of this work, but some examples that pertain to the current research are warranted.

Schwarz (2004) cites several examples in detail of naïve theories relating to Kahneman

and Tversky's (1982) availability heuristic that signal processing ease. One of these is

readily available (i.e. accessible) task-specific memories and how it relates to one's own

beliefs about their knowledge and expertise. Schwarz (2004) cites a study in which

participants were asked to recall either three or 12 types of automobiles in a specific

category. Those that could recall three items, an easier and more accessible amount of

information to draw from memory, later rated themselves as more knowledgeable about

that specific brand of automobile.

In the context of naïve theories about coping with persuasion, the persuasion knowledge model or PKM (Friestad and Wright, 1994) takes into account people's knowledge and beliefs about psychological mediators that affect successful persuasion (e.g. emotion, desires, and goals), beliefs about marketing tactics, beliefs about one's own ability to cope with persuasion, beliefs about the effectiveness and appropriateness of marketers' tactics, and beliefs about the marketer's persuasion goals. Persuasion knowledge is socially and culturally constructed and develops throughout an individual's lifetime. So for example people who are more self-confident about their level of persuasion knowledge (Bearden, et al., 2001) might be more confident in their ability to resist persuasive attempts and therefore might be more receptive to, and pay more attention to persuasive attempts (Wegener, Petty, Smoak and Fabrigar, 2004).

Stage Three: Universal Judgments

The final stage in the 3-step process diagramed by Alter and Oppenheimer (2009) are the context specific judgments that result from the interaction of the perception of processing fluency and context-specific naïve theories. Regardless of the specific naïve theories people employ depending on the context, the common link between these naïve theories and between all the distinct information processing channels by which fluency might be perceived is the perception of a positive processing experience. Despite highly distinct and additive processes by which people perceive a fluent processing experience, Whittlesea & Williams (Whittlesea and Williams, 2001a; 2001b) noted that the judgment outcome stage is universal and the psychological process is comparatively quite crude and simplistic. Essentially, no matter what distinct and nuanced process an individual goes through which results in the perception of processing fluency, the judgments are

essentially identical.   Numerous studies have shown, in a variety of experimental contexts, that if an attitude object is perceived as "fluent" it is liked more, it is perceived as more honest, and people are more confident of their evaluations.

Fluency is Innate

Reber, Schwarz, and Winkielman (2004) cite evidence from a study demonstrating near universal preference for the same type of music with a cohort of infants. Furthermore, infants were able to detect and react differentially to subtle changes in the basic harmonic tone of the music after repeated exposure. These results implied that there is some innate mechanism for 'processing fluency' that is built into our psychological functioning at birth.   Whittlesea & Williams (2001a; 2001b) also suggested that the fluency signal might have an evolutionary basis, given the innate and insatiable need for the mind to make meaning of the stimuli it encounters in its environment.   Whittlesea et al conjectured that processing fluency is a signal of impending success in understanding and making meaning of an evaluation object; this signal gets rewarded with a strong positive emotional reaction, and this reaction gets attributed to the evaluation object.

Winkielman, Schwarz, Fazendeiro, and Reber (2003) cite abundant evidence to support the idea that processing fluency is fundamentally an affect-positive information processing phenomenon.   One key line of evidence comes from Schwarz and his colleagues (Schwarz, 1997; 2001; 2004; Schwarz, et al., 2006) regarding misattribution of the reaction to the subjective perception of processing fluency. These studies all demonstrate the same phenomenon: people who are made aware that their affective

37

feelings are influencing their judgments subsequently adjust for the affective influence, and ratings that were previously high return back to baseline.

Other definitive evidence about the affective nature of fluency includes psychophysiological reactions to viewing common, everyday pictures manipulated for processing ease (Winkielman and Cacioppo, 2001). EMG electrodes measured facial muscle relaxation when viewing pictures of everyday objects that were blurry or clear (study 1) and pictures of everyday objects that were exposed for increasing durations (study 2) ranging from 300ms to 900ms. In all cases the pictures that were clearer and that were presented for longer durations resulted in greater relaxation of facial muscles, signaling processing ease. These EMG results correlated strongly with increased liking of the object.

Beyond Processing Ease

One interesting boundary condition mentioned that has received ample support from both Whittlesea & Williams (2001a; 2001b) and Shapiro (1999) involves a distinction between objective processing ease and subjective processing fluency. Specifically, although a stimulus might be objectively easier to process because it is familiar, some people might rate novel stimuli more positive than the familiar ones. Whittlesea et al and Shapiro showed this in several studies. The feeling of familiarity in this case manifests itself because of the "surprise fluency" in a situation where the individual does not expect to be able to process the relatively unfamiliar stimulus so easily. Whittlesea and Williams explain this phenomenon metaphorically: it is analogous to the feeling one might experience when you encounter your dentist at the mall, as opposed to a more familiar context.

Linking Figurativeness and Fluency. This example seems to link the concepts of figurativeness with the subjective experience of fluency. Specifically, it is possible that the "pleasure of the text" effect from McQuarrie and Mick's (1996) definition of rhetoric in advertising refers to this pleasant reaction by the brain to the "surprise" associated with solving the moderate incongruence with such unexpected ease. Note that this is a form of conceptual fluency given that it involves elaboration upon exposure of semantic concepts related to the stimulus.

Fluency and Involvement

Schwarz (2004) believed that using thoughts about a processing experience as evaluation-relevant information only occurred under conditions where processing resources were constrained and no other relevant sources of information were immediately accessible. At this lower level of processing Schwarz suggests that the process is akin to Kahneman and Tversky's (1982) availability heuristic. The awareness of positive feelings associated with processing ease is the most readily available information and therefore gets used most prominently in the judgment.

But Lee (2004) argued convincingly that processing fluency can and does occur under "high involvement" conditions also. This is more prominent with the semantic-based conceptual forms of processing fluency that occur farther down the information processing chain of events. Lee says that essentially the same metacognitive outcome occurs as discussed by Schwarz (2004) but through a more complex, higher-order affective process. Instead of using a heuristic to form the judgment, deeper deliberations about the positive experience related to processing the attitude object are used to form the

judgments. This supports the idea that fluency can have similar judgment outcomes despite working through highly distinct mental processing channels.

Isolating Fluency Experimentally

Reber and colleagues (Reber, et al., 1999; Reber, Winkielman and Schwarz, 1998; Reber, Schwarz and Winkielman, 2004) have demonstrated processing fluency effects for incidental exposure to simple visual objects by limiting exposure times. Results showed that as exposure time decreased all the way down to just 50ms, the objects that were easier to process were repeatedly liked more at each level of exposure. Reber et al (1998) reasoned that with limited exposure time when other sources of information were not accessible, the experience of processing fluency was the most salient information available upon which to base a judgment.

Several studies in the marketing literature have examined how fluency affects consumer memory (Lee, 2004; Shapiro, 1999), but these studies used repeated exposure designs. One study (Nordhielm, 2002) relevant to the present work demonstrated perceptual fluency effects with brand logos by limiting stimulus exposure to one-second. Given that all past research to date on visual rhetoric in advertising has been conducted using incidental exposure to the stimulus, it makes sense in the present work to vary processing experience—and in doing so isolate any processing fluency effects that may be affecting judgments—by limiting exposure time to the stimulus. In essence this experimental technique seems to be a reasonable way to simulate naturalistic conditions where the person is under some level of cognitive constraint and must therefore rely on experiential-based information on which to base judgments.

40

Attitude Formation and Attitude Strength

The literature reviewed to this point shows that visual rhetorical communication devices used in advertising contexts makes a strong first impression, for example in the form of highly positive attitudes and substantial ad recall relative to controls. In order to better understand the persuasive strength of increasingly figurative ad stimuli the present research focuses more intently on the substantive quality of this first impression. Specifically this work examines some of the components of attitudes that have been shown in the literature to contribute to attitude strength (Petty, et al., 1995): elaboration, attitude certainty, and attitude accessibility in memory. Furthermore, as a proponent of reader response theory of visual persuasion another objective of this research is to provide some insights regarding the extent to which the most popular attitude/ persuasion theories in marketing and psychology research adequately explain and predict the persuasive strength of visual rhetoric.

At the heart of this dissertation's empirical focus on attitudes is a longstanding debate on whether or attitude formation and/or attitude change resulting from non-cognitive processes can produce valid attitudes. Fazio, Chen, McDonel, and Sherman (1982) defined an attitude as "associations in memory between an object and one's evaluation of that object." Fishbein and Middlestadt (1995) argue that valid attitudes can only form[1] through a process in which an "appropriate attitude object" triggers a belief system, a cognitive structure, and the evaluative aspects of that belief system with respect

---

[1] Note that for purposes of this dissertation "attitude change" refers to the formation of an attitude from a previous lack of any existing evaluative associations in memory with respect to the specific advertising stimuli (Wegener, et al., 2004).

to the attitude object. Presumably, attitudes that are not "valid" attitudes are not likely to be very lasting attitudes, and therefore are not associated with strong persuasive stimuli.

Other theories propose that valid attitudes can form without triggering a cognitive structure of belief system. Specifically, attitudes formed through the kind of emotional and experiential mental processes that typify visual processing are widely believed to be valid attitudes. Priester, Joseph, and Fleming (1997) and Schwarz (1997) provide strong evidence for attitude formation from many different non-belief-based processes: mere unreinforced exposure, priming with affective stimuli, classical conditioning, and facial expression feedback to name a few. Priester, et. al. demonstrated that "the different attitude change processes were shown to result in consistent, predictable, and consequential differences in the properties of the resulting attitudes…these arguments provide a strong case for the existence and differential consequences of both belief-based and nonbelief-based attitude change processes (p. 73)."

Schwarz (1997) focused specifically on purely affective mental processes such as mood/feelings and effects on judgments. Schwarz showed that mood effects on judgments are more robust when people are aware that their mood constitutes relevant information to be factored into a judgment. This "feelings as information" notion of attitude formation is not necessarily compatible with Fishbein, et al's (1995) restriction that attitudes must have an underlying cognitive-based belief structure. Overall Priester et al (1997) and Schwarz (1997) suggested that Fishbein et al's (1995) model is too narrow and restrictive in terms of what it considers "valid" attitudes to be. Certainly the more recent neuroscience evidence reviewed in this chapter (Damasio, 1994; Franks, 2003; LeDoux, 1996) regarding the growing understanding that the human brain (and the

42

visual system in particular) functions extensively through non-rational mental processes lends strong support to Priester et al's (1997) and Schwarz's (1997) position in this debate. Furthermore, these recent studies highlight the prominence of emotional processing in the human mind when making decisions (Pham and Avnet, 2004; Slovic, Finucane, Peters and MacGregor, 2007) and forming judgments (Damasio, 1994) in the context of routine, every-day tasks.

<div align="center">Persuasion Theory and Attitude Strength</div>

The present research adopts Petty & Krosnick's (1995) viewpoint that attitudes are not latent constructs where the components of attitude strength would be imperfect manifestations (effect indicators) of the underlying strength construct. Under that type of classification the indicators (e.g. elaboration, certainty, accessibility, resistance) would be expected to have a well-put together covariance structure. Petty and Krosnick state that such a structure does not manifest based on a large body of past research on attitude strength. This shows that the various components of strength manifest themselves to varying degrees and in varying combinations depending on the context. Attitude strength is instead characterized by Petty and Krosnick as a "phantom variable," and the various components are causal indicators of "strength" but they do not possess inherent covariance with each other (i.e. one is present therefore so must the other one be). Thus an attitude has 'strength' to the extent that the most well-established causal indicators manifest themselves consistently and lead to outcomes associated with strength on a consistent basis.

Krosnick and Petty (1995) conceptualize attitude strength along a continuum ranging from complete lack of strength to complete strength. Attitudes farther up the

continuum toward strength are more likely to consistently exhibit most of the characteristics of two primary characteristics –durability (strength indicators) and impact (e.g. influences preferences and/or behavior). Attitude durability has three subcomponents which typically reflect antecedents of a strong attitude and the qualities that make the attitude strong: elaboration (attitude formation processes), attitude certainty (antecedent), and. attitude accessibility in memory (attitude structure) which reflects the quality of the attitude (Fazio, 1990).   Attitude impact is represented by characteristics that reflect the consequences of having a strong attitude. Common persuasive consequences of strong attitudes measured in the literature include persistence of the strong attitude when measured over time, resistance to change against counter-persuasion, and exhibited preference for the attitude object (Haugtvedt, Shakarchi, Samuelsen and Liu, 2004).   The present research will focus only on experiments that wish to establish the durability subcomponents of attitude strength manifest themselves in the domain of visual persuasion with rhetorical figures.

Elaboration

The Elaboration Likelihood Model or "ELM" (Petty, et al., 1983) is one of the most popular theories about persuasion over the last 30 years.   The ELM is a theory that specifically considers the strength of the persuasive outcomes as a function of the processes by which people engage with the persuasive stimulus. The ELM proposes dual routes to persuasion (i.e. attitude change): a "central" and a "peripheral" route based on elaboration of the persuasive message and the personal involvement of the individual (Petty, et al., 1995).   High involvement can be a chronic state of the individual, such as people who are high in Need for Cognition (Cacioppo, et al., 1984). High involvement

can also be situational and manipulated experimentally (Petty, et al., 1995). Petty et al define elaboration as "the degree of thinking one does or has done about an attitude object's attributes, its merits, and its drawbacks" (pg 287).

ELM theory suggests that central route attitude change can only occur if an individual is highly involved and elaborates deeply on the relevant, message-based elements of an attitude object. It is only under these processing conditions that "valid" attitudes are formed in the way that Fishbein & Middltestadt (1995) characterize them. Furthermore, the ELM suggests that attitudes formed through central route attitude change processes are most likely to exhibit a broad array of characteristics of strong attitudes (Petty, et al., 1995).

In contrast, attitude changes occur via the peripheral route to persuasion in situations where extensive issue-relevant elaboration is unlikely. Attitude change results because the consumer perceives a relation between the attitude object and some kind of non-issue related positive or negative cue—or because a person makes a simple inference about the cue in the persuasion context. Thought processes are based more on secondary cues, such as pictures and/or is the likeability and attractiveness of the product endorser (Kahle and Homer, 1985), as opposed to being based more on source-related content (Wright, 1974). In low involvement conditions attitude formation tends to be more heuristic-based (Chaiken and Maheswaran, 1994; Petty, et al., 1995) featuring the use of simple accept/reject rules. The ELM postulates that attitudes formed under low involvement tend to be less enduring, and relatively non-predictive of attitude-related behaviors (Petty, et al., 1995). A strict interpretation of the ELM, therefore, would lead

to the conclusion that attitudes that are non-cognitively based will not consistently and persistently exhibit characteristics of attitude strength.

Attitude Certainty

An antecedent to attitude strength (Petty, et al., 1995), attitude certainty (Gross, et al., 1995) is a subjective, metacognitive assessment of people's beliefs about how successfully they have coped with the persuasion attempt. In the case of attitude formation about an advertising stimulus this belief is about the accuracy of the judgments they formed about the attitude object.   Synonyms of attitude certainty include confidence, conviction, surety, and commitment.

Attitude certainty can come from either direct experience (e.g. a person has been a Republican for their entire life so therefore they are highly certain about their attitudes about Republican issues) or from deliberative thought.   With respect to the thought-based derivation of certainty, the ELM says that certainty manifests as a consequence of elaboration and therefore it should exist before the attitude can have a quality that would lead to conclusions about its existing strength. Attitude certainty correlates strongly with accessibility (Tormala and Petty, 2004) because as accessible attitudes are more easily generated from memory so should be people's thoughts about their judgment process in relation to those attitudes. Again a strict interpretation of the ELM might lead to a conclusion that people should not show strong attitude certainty from non-cognitive based attitudes generated from central route message-based elaborative processes.

Attitude Accessibility

Attitude accessibility (Fazio, 1995) is a term that represents the structure or quality of an attitude as it resides in memory. Attitude accessibility has two components which directly relate to attitude formation as a result of incidental exposure to an attitude object—perceived diagnosticity (Lynch-JR., 2006) and direct experience. Perceived diagnosticity is the extent to which an individual believes that the attitude that is formed is relevant or pertinent to the judgment. There is a processing fluency connection with attitude accessibility and perceived diagnosticity that has to do with the ease in which the attitude is retrieved from memory. Typically if an attitude is more accessible, i.e. more easily generated from memory it gets perceived as being more diagnostic to the judgment task at hand.

Fazio's definition of "direct experience" typically means "doing" rather than "contemplating." So for example attitudes about something having to do with playing tennis will be much more accessible and easily retrieved from professional tennis players or long-time tennis coaches compared to novice players or those with only little coaching experience. In the context of the present research direct experience can also just mean the experience associated with processing the stimuli. This is particularly true in a situation where the attitude change being measured is a change from no attitude at all (having never experienced the stimulus before) to having and expressing an existing attitude.

This research adopts Janiszewski's (2008) viewpoint discussed earlier in this chapter. From that standpoint the direct experience of processing a visual should relate strongly to attitude accessibility if the processing experience is highly salient to

47

encountering the stimulus and forming a judgment.   Putting the ideas of perceived

diagnosticity together with direct experience, it might be reasonable to expect that a

highly salient, pleasant processing experience associated with a certain stimulus will

make a stronger psychological impact. Attitudes about such a stimulus should therefore

be more accessible in memory when the individual is asked to use them to form

judgments.

<div align="center">Individual Difference Measures</div>

The individual difference measures broadly assess three inherent differences in

how individuals process information, all of which pertain to studying visual vs. verbal

processing and rhetorical figuration in a persuasive context. The individual difference

measures used in the different studies depend on the nature of the hypotheses and on the

study design.   The processing differences expected to have a relevant impact on the

present research include individual differences in visual processing (Childers, et al.,

1985), individual differences in ability to process and extract information from rhetorical

figures (Burroughs, et al., 2004; Dimofte and Yalch, 2007; 2007), and individual

differences in people's tendencies to notice and attempt to cope successfully with

advertising/persuasion tactics (Bearden, et al., 2001).

Visual Style of Processing

A recent study (DeRosia & McQuarrie, in press) has shown that the 11-item

subscale of visual processing style based on the original Style of Processing scale

(Childers, et al., 1985) might be effective in research projects that measure processing of

rich and complex visuals like the ones under investigation in this research. The items are

<div align="center">48</div>

not specific to persuasion or to rhetoric. They measure general tendencies to be a "visual person/thinker" as opposed to a "verbal thinker."   Example items for visual processing include: "I like to daydream," "My thinking often consists of mental 'pictures' or 'images'," and "When I'm trying to learn something new I'd rather watch a demonstration than read how to do it." Similar to studies by Wyer and colleagues (Hung, et al., 2008), DeRosia and McQuarrie found that visual processing style moderated the extent to which visual stimuli elicited more powerful persuasive effects than verbal stimuli. However the studies reviewed by DeRosia et al are either non-conclusive or found negative effects under naturalistic exposure conditions. The present research will examine visual style of processing in experimental situations that approximate naturalistic settings (e.g. when stimulus exposure is limited).   See Appendix F for a complete list of the eleven items.

Metaphoric Thinking Ability

The next individual difference measure is the metaphoric thinking sentence completion test (MTA-SC) designed and validated by Burroughs and Mick (2004) to assess differences in people's ability to process and extract information from rhetorical figures.   This test will be exclusively used in study two primarily due to how it is assessed: study two is a paper-and-pencil study and that is how the MTA-SC measure is assessed. Participants are encouraged to fill out nine analogies in the form of sentences in long hand. In doing so participants are encouraged to be as descriptive and creative as possible in their answers.   For each sentence/analogy only the first few words are provided while the subject must fill in the rest.   An example of what is provided would be: "Love is like…."

This test is part of Burroughs and Mick's (2004) methods of categorizing different aspects of consumer creativity. Highly creative consumers are highly intelligent, have high levels of general and/or domain specific knowledge, and high levels of analogical reasoning skills. Analogical reasoning is the foundation of metaphoric thinking (Zaltman, et al., 2008), which involves the ability to juxtapose knowledge from different domains to form new knowledge structures. The assumption that Burroughs and Mick (2004) makes, and the assumption adopted by the present research, is that high levels of metaphoric thinking ability will represent general high levels of skill in processing rhetoric of all kinds, including visual rhetoric. As noted in previous research on rhetoric (Toncar, et al., 2001) rhetoric tends to have the strongest impact on those who are most inclined to process it fully. See Appendix C for more details about the MTA-SC test.

Persuasion Knowledge

The Persuasion Knowledge Model (Friestad, et al., 1994), informally known as the schemer's schema and/or the "PKM", considers people's knowledge about tactics, about the psychology of persuasion, and about how marketers attempt to utilize specific tactics to take advantage of the psychology of persuasion in order to get people to think, feel, or act in a certain way. According to the PKM persuasion knowledge (PK) is a cultural knowledge construct that people develop through personal experience as well as through people such as parents and friends and other members of an individual's social world. Children have been shown to develop advanced levels of PK as early as their adolescent years (Boush, Friestad and Rose, 1994). The schemer's schema includes beliefs about psychological mediators that affect successful persuasion (e.g. emotion, desires, and goals), beliefs about marketing tactics, beliefs about one's own ability to

cope, beliefs about the effectiveness and appropriateness of marketers' tactics, and beliefs about the marketer's persuasion goals. This is where the world 'cope' comes from in the title of the present dissertation. It refers to coping with persuasion attempts in a way in which the optimal outcome is achieved for both the marketer and especially the target of the persuasion attempt.

In the context of the present research people who are high in persuasion knowledge are people who believe they have a lot of knowledge about persuasion, and about their own abilities to detect tactics and cope with the persuasion attempts successfully. Historically in the marketing literature there are two ways to measure persuasion knowledge (Campbell and Kirmani, 2008)—activate it in the context of specific scenarios, or measure natural tendencies to use PK. The present dissertation does the latter.

One recent study (Ahluwalia, et al., 2004) with rhetorical questions established the PK scale as a differential measure of tactical salience. This study found that high volumes of rhetorical questions (e.g. "do you know exactly how much you pay for gas?") in both the headlines and the body copy of verbal ads yielded higher persuasion outcomes for participants that were high in PK based on median splits. However, rhetorical questions are verbal stimuli, and non-sensory compared to metaphors. No past research has used persuasion knowledge in a visual context so use of the scale in the present research context is potentially groundbreaking.

Example items of the published scale by Bearden et al (2001) include: "I can tell when an offer has strings," "I know when a marketer is pressuring me to buy," and "I can separate fact from fantasy in advertising." In addition to the published items five other

items specific to the context of the present research were inserted and tested along with the original items. Example items include: "I can detect techniques advertisers use to gain favorable impressions of their advertisements," "I typically notice persuasion tactics before I notice anything else in marketing situations," and "I am usually aware of non-verbal signals marketers send during marketing situations." See Appendix F for a complete list of scale items.

Research Questions and Hypotheses

Building on the literature review to this point, this dissertation considers a broad range of theoretical concepts: visual persuasion theory (Scott 1994a), traditional persuasion theory/attitude theory (Petty, et al., 1983), persuasion knowledge (Friestad, et al., 1994), consumer creativity (Burroughs, et al., 2004), and finally processing fluency (Winkielman, et al., 2003a; Winkielman, et al., 2003b) in order to study visual persuasion in a way that makes sense based on how visual information is actually processed and exchanged between the marketing agent (e.g. the visual ad) and the consumer (Janiszewski, 2008). In discussing the research questions and hypotheses below, this work starts from the premise that there will be discrepancies between what traditional persuasion theories predict about visuals and what more recent and focused theories about visual processing and visual persuasion predict. By acknowledging and, when necessary, directly addressing these differences in opinion this research hopes to explain more clearly and more accurately how visuals really persuade. The research questions will focus on what this research expects to find with respect to the dependent variables (and individual difference moderators) in light of the manipulations of the independent variables.

Research Question #1: How does the experience of processing increasingly figurative ads impact elaboration?

H1: Increased (decreased) levels of figuration based on communication style will generate increased (decreased) levels of elaboration.

The foundation of the persuasive success McQuarrie and Mick (1996; 1999; 2003a) found with rhetoric is rooted in their concept of elaboration, as measured with 7-point Likert scale items that asked subjects essentially to report the extent to which they considered things about the ad which could only be considered if they beyond what they saw on the surface. Clearly more figurative ads engage the mind to a greater extent, as has long been suspected with rhetoric (Toncar, et al., 2001). What remains however is to explain in more detail what kind of engagement processes the mind is undertaking, and more importantly how that might link to judgments and behaviors. While the current research does not explore the link between judgments and behaviors, a primary objective is to explore the link between the information processing experience (e.g. elaboration) of figurative language in advertising and both the nature and quality of judgments that result from that experience.

Essentially, the present dissertation seeks to establish the extent to which visual rhetoric in advertising has the capacity to make more than just a good first impression on those who experience it as it addresses perhaps the biggest discrepancy between traditional persuasion theory (e.g. the ELM) and theories about visual persuasion (Janiszewski, 2008; Scott, et al., 2007). Traditional persuasion theory says the strongest and most potent elaboration occurs when highly involved individuals are processing a central message. Furthermore, strong messages produce the deepest elaboration,

ultimately laying foundation for the highest possible persuasive impact of the message (Petty, et al., 1995). Furthermore, traditional persuasion theory in the marketing literature says that because visuals are "non-essential information" that people only pay attention to when unwilling or unable to process a central message, visuals are not the type of information that gets elaborated on deeply or centrally. This contradicts Reader Response Theory (Scott, 1994a) which says that visuals are every bit as capable of sophisticated and substantial message transfer as verbals. In addition, theories about elaboration and rhetoric contend that the elaboration is deep from the standpoint that it is rooted in personal relevance (Zaltman, et al., 2008) and subjective meaning (Mick, et al., 1992) and not rooted in a "strong central argument" (McQuarrie, et al., 2005).

One study from the *Journal of Consumer Research* (Peracchio and Meyers-Levy, 2005) involving visual ads illustrates the concept of personal relevance and subjective meaning creation as an inherent part of the processing experience. This study asked participants to draw the ads from memory following approximately sixty seconds of exposure. This study was not a rhetorical study, but it did find that the visual ad with the more creative ad elements resulted in the reproduction of more idiosyncratic elements that had nothing to do with the actual ad. Furthermore participants' reproduction of the more creative ads were larger than scale compared to the less creative ads suggesting that these ads were indeed more prominent in people's memory, presumably due to not just more elaboration but elaboration that was more personal in nature. This leads to the following sub-hypothesis based on the overall expectation of increased elaboration as a function of increased figuration:

H1a: More figurative ads will elicit more idiosyncratic/personal associations in an elaboration task than less figurative ads.

Implicit in McQuarrie and Mick's (1996) definition of "pleasure of the text" as an outcome of engaging with figurative ads is the idea is the potential for two types of "pleasure" in processing the ad. The first equates to conceptual fluency as defined earlier: elaboration upon impact of the semantic concepts relayed in the communication. This would be tied to the true definition of 'pleasure of the text' that McQuarrie and Mick (1996) originally intended: pleasure from solving the 'artful deviation'. The fluency aspect of this pleasure, as Whittlesea (1993) might suggest, might come from unexpected surprise of being able to solve the incongruence with such little effort.

The second type of 'pleasure' from processing the visual ads comes from the fact that visual information is easier to process, particularly when the mind is under heavy constraints (Hung, et al., 2008; Winkielman, et al., 2003a; Winkielman, et al., 2003b). This type of pleasure equates to perceptual fluency as defined earlier in the chapter. Thus, this leads to the conclusion that the more figurative visual ads should exhibit both conceptual fluency benefits and perceptual fluency benefits depending on the specific nature of the processing experience (explained in chapter III). This is feasible, given the nature of processing fluency as noted previously (Alter, et al., 2009; Lee, 2004; Reber, et al., 2004): processing fluency works through distinct information processing channels from pre-conscious to fully-conscious, yet all channels lead to the same basic judgment outcomes (greater preference for the more fluent object). Thus the following:

H1b: There will be more positive emotional thoughts for visual rhetoric compared to verbal rhetoric; rhetorical ads will generate more positive emotional thoughts than non-figurative control stimuli.

Finally, the present research expects to show a link between increased figurativeness and increased reliance on experiential information when forming

judgments.   Given this expectation, and given the research reviewed regarding the holistic, experiential nature of how visual information is processed (e.g. Barry 1997; Janiszewski 2008) it leads to the conclusion that elaboration of purely visual communication should contain fewer message-related thoughts than elaboration of a less figurative verbal message of equivalent meaning.   Thus:

H1c: There will be more message-related thoughts for the non-figurative verbal ads than there will be for the more figurative verbal metaphor and visual metaphor ad types, respectively.

Research Question #2: Is visual rhetoric more fluent—conceptually and perceptually--than verbal rhetoric and verbal literal controls, respectively?

H2: There is a direct relationship between figurative language and advertising and processing fluency. More (less) figurative ads are more (less) fluent, both perceptually and conceptually.

The basic definition of conceptual fluency is elaboration upon impact of the semantic aspects of a stimulus.   In addition, research has confirmed that fluency is by nature affect-positive (Winkielman, et al 2004), meaning that it predisposes people who experience it to make positive judgments about an object unless they are made aware of the influence of their affective reaction to the processing experience (Schwarz 2004). The combination of elaboration on impact and positive judgments of a positive experience suggests a theoretical link between conceptual fluency and McQuarrie and Mick's (1996) pleasure of the text effect regarding figurativeness.   While much research about processing fluency focuses on ease of processing at low involvement (Schwarz, 2004; Winkielman, et al., 2003a), a great deal of research on processing fluency considers the subjective nature of the reaction to fluency and that it could mean something beyond just processing ease (Alter, et al., 2009).

The hypotheses based on research question #1 seek to link more figurative ads, i.e. visual rhetorical ads in the context of the present research, with greater levels of engagement with the ad that produces a more personal and consequently a more positive processing experience. If this is true as expected then it is likely that more figurative ads will trigger judgments that suggest a linkage between elaboration of increasingly figurative ads and increased levels of processing fluency.   One study linked a rhetorical device to increased processing fluency (McGlone, et al., 2000) using verbal stimuli with a repeated exposure paradigm to prime processing fluency. The results showed that messages formatted as rhymes were rated as more accurate (i.e. honest) than messages formatted in regular prose.   McGlone et al.'s (2000) results fit with previous research (Reber, et al., 1999; Winkielman, et al., 2003b) that has consistently demonstrated strong influence of processing fluency on liking judgments and truth/honesty judgments. This is true for both verbal stimuli as the McGlone et al. (2000) study showed as well as visual stimuli (e.g. Reber 1999).

Regarding perceptual fluency, there is research to suggest that objects viewed visually are judged more positively when they are easier to process (Reber, et al., 1999; Reber, et al., 1998; Winkielman, et al., 2003b).   These studies were done on simple objects such as patterns and shapes. Often the manipulation of fluency was done with figure-ground contrast manipulations or clarity manipulations, but Reber et al. (1998) showed that limiting stimulus exposure could also isolate perceptual fluency.   One study in the marketing literature on brand logos (Nordheilm 2002) isolated perceptual fluency by manipulating stimulus exposure. Finally, the research reviewed earlier showing that visual information is by nature easier to process than verbal information suggests that

57

visual information should be inherently more fluent perceptually than verbal information

(Barry, 2005; Hung, et al., 2008). The preceding discussion leads to the following

hypotheses regarding research question #2:

H2a: The positive link between figurativeness and fluency leads to higher ad
attitude ratings for the visual rhetoric ads compared to the verbal rhetoric ads;
rhetorical ads will show higher ad attitude rating than non-figurative control ads.

H2b: The more fluent visual rhetoric ads will elicit higher perceptions of truth than the
verbal rhetorical ads; rhetorical ads will be perceived as more honest than non-figurative
control ads.

Research Question #3: How does processing fluency interact with figurativeness in the
formation of more durable attitudes?

H3: More (less) figurative ad stimuli will produce responses consistent with more (less)
durable attitudes.

A key objective of the present research is to demonstrate that visual rhetoric in

advertising is capable of making more than just a positive first impression on people who

encounter this persuasive communication technique.   This claim is somewhat

contradictory to what traditional persuasion research would predict about visual

communication.   Traditional persuasion research would not predict that visual

communication could make a strong persuasive impact.   Contemporary theories about

visuals however (Janiszewski, 2008; Scott, et al., 2007) predict that visual information

can make a strong impact if the processing experience is salient enough.

The research questions and hypotheses up to this point expect to find that visual

rhetoric engages consumers in elaboration that is not message-based but is still deeply

engaging, and produces more personal connections in the mind.   Based on Janiszewski's

(2008) framework of studying visual persuasion in the context of analyzing the

processing experience and how that experience informs judgments, the present research

also expects to find that the experience of elaborating on figurative ads should be more positive and therefore more fluent. As a result visual rhetoric should make a stronger psychological impact on the individual.   The stronger psychological impact from the more engaging pleasant experience should therefore lead to responses that give consistent evidence that the persuasive impact of visual rhetoric is durable (i.e. "strong").

Building on the discussion about the differences between conceptual fluency (elaboration of semantic concepts on impact) which happens at a deeper level of processing and perceptual fluency (e.g. "easy to process") which occurs at a more automatic nonconscious level, it seems reasonable to expect that the more figurative ads can make a strong impact at the conceptual fluency level. This is both because of the deeper engagement with the ad and because of the ability of visuals to transmit a lot of information instantaneously (Barry 2005) even when the mind is under some constraint (Hung, et al., 2008).   However, the expectation is that the visual metaphors will also exhibit characteristics of strong attitudes in the perceptual fluency condition because of this ease of processing.   In this condition the information transfer with the visual ads is expected to be almost entirely experiential but the experience should be highly positive and substantive enough the participants will exhibit high judgment confidence and high accessibility of attitudes.   The expectations of high indication of strong attitudes with the visual ads in the perceptual fluency condition is particularly contrary to what the ELM would predict about visuals in persuasion, because isolating perceptual fluency essentially simulates peripheral persuasion conditions (Petty, et al., 1983) because this kind of manipulation severely limits an individual's ability to process the persuasive stimulus.

As discussed previously, attitude certainty (Gross, et al., 1995) reflects a person's assessment of the experience of forming an attitude. If the experience of attitude formation was salient enough, then attitude certainty should consequently be high. It follows then that visual rhetoric should produce high attitude certainty because of the highly engaging, positive, fluent processing experience that results following incidental exposure to the ad stimulus. Less engaging, less fluent communication styles should in turn yield lower attitude certainty.

Attitude accessibility reflects the ease in which an attitude can be retrieved from memory when called upon to access it for purposes of forming a judgment (Fazio 1995). A stronger attitude will be more easily retrieved because of the salient impact it makes on the mind. Naturally, given that highly figurative visual rhetoric is expected to elicit engaging, personal elaboration which in turn yields high liking and truth judgments, these kinds of responses lead to the conclusion that the experience of processing the stimuli should make a strong impact on memory. Furthermore, evidence that visual information penetrates the mind more easily (Barry 1997) and even when the mind is under heavier constraints (Hung, et al., 2008) all lend credence to the idea that visual rhetoric should yield attitudes that are more easily retrieved when people are called upon to do so. Thus, with respect the research question #3 the present research expects the following:

H3a: The more fluent visual rhetoric ads will exhibit greater attitude certainty than all verbal ads in both conceptual and perceptual fluency conditions; rhetorical ads will exhibit greater attitude certainty than non-figurative control ads in the conceptual fluency condition.

H3b: The more fluent visual rhetorical ads will make a stronger impact on memory due to more personal elaboration of a highly positive processing experience; therefore, these ads will demonstrate higher accessibility in memory when called upon to form judgments in both conceptual and perceptual fluency conditions.

Research Question #4: How do individual differences moderate the effects of processing fluency on judgments about figurative advertising stimuli?

There are two important considerations worth mentioning regarding the implementation of the individual difference measures in the theoretical structure of the present research. First, each of the individual difference measures under consideration in the present dissertation is appropriate for use in different experimental contexts. Different measures are used in different studies depending on that context; therefore, in Chapter III the discussion of each separate study will discuss the experimental context and why the specific individual difference measure(s) was chosen. Secondly, use of each one of these individual difference measures in experiments that measure the influence of processing experience on judgments of advertising stimuli is unprecedented. As such this aspect of the dissertation has a chance to break new theoretical ground to the extent to which established theoretical measurements might contribute a greater understanding about the persuasive acumen of figurative advertising.

More specifically, no studies to date have used Visual Style of Processing or the MTA-SC in the context of visual rhetoric and/or processing fluency, while just one study (Ahluwalia, et al., 2004) successfully used the PK subscale to moderate judgments in the context of rhetorical communication and persuasion. In terms of what kind of experimental context makes sense for examining these three moderators, it is noteworthy that all three individual difference measures seem to work best when the subject is consciously aware of how his or her mind is processing information. In a fluency context, it seems prudent to propose that the individual difference measures will not be effective when participants are not consciously aware of how their minds are being

influenced towards judgments. By definition this rules out any expectation of individual

difference moderators functioning in the perceptual fluency condition where the influence

of processing experience on judgment functions at an automatic, nonconscious level

(Schwarz 2004).   Thus:

H4: Individual differences in (PK, Visual style of processing, Metaphoric Thinking
Ability) moderate judgments under conceptual fluency-related processing conditions but
not perceptual fluency-related processing conditions.   Participants scoring high (low) in
the individual difference measures will rate increasingly figurative ads more (less)
favorably.

Chapter III presents the methodology used for testing these hypotheses in a series

of four studies (with two pre-tests), the results of which are outlined in Chapter IV.

Discussions of the results, limitations, marketing implications, and opportunities for

future research are presented in Chapter V.

CHAPTER III

METHODOLOGY

Overview

Chapter III addressed the research questions in three ways. First, the present studies examined in detail the nature of elaboration on increasingly figurative rhetorical stimuli in advertising. Specifically, the studies measured the extent to which positive vs. negative emotional thoughts and experiential thoughts (easy and/or pleasant to process) influence judgments more than message-based thoughts. The studies also measured the extent to which participants engaged in more personal thoughts as the ads increased in figurativeness.

Secondly, the studies measured the link between ad figurativeness and processing fluency. Conceptual and perceptual fluency processing conditions were manipulated on the independent variable side of the equation (explained below), whereas common fluency judgments (ad liking and ad honesty perceptions) were used as dependent variables. Third, the studies examined the link between ad figurativeness, conceptual and perceptual fluency, and indicators of attitude strength. Individual difference measures were used in all studies to examine how basic differences in how the mind processes certain contextual information (persuasive tactics, visual information, rhetorical communication style) influenced judgments.

Operationalizing Communication Style

The ad stimuli served as the manipulation for communication style for all studies conducted in the present research. The specific ads are a subset of the 12 ad stimuli used

in previous research (McQuarrie, et al., 2005) examining processing differences between print ads with visual rhetoric (metaphor), verbal rhetoric (metaphor) and print ads with only literal text. One ad representing each communication style was created for four different fictitious brands in the same product category—everyday household products. One set of ads was for a fabric softener, one for a window cleaner, one for dishwashing liquid, and another for sandwich storage bags. A complete set of the stimuli referred to in chapter III are available in Appendix B. In all studies the verbal literal ads are used as baseline or control responses relative to the responses to the ads with verbal and visual rhetorical figures. This is justified considering the substantial body of existing research (McQuarrie, et al., 1996; 1999; 2003a; 2003b; McQuarrie, et al., 2005; Mothersbaugh, et al., 2002; Phillips, et al., 2009) that demonstrates these types of ads are non-figurative and elicit consistently low responses on the attitude and elaboration metrics used throughout the present research.

The stimuli were all professionally manipulated print advertisements derived from real advertisements but changed to reflect fictitious brand names and to control for the effects under investigation. Aesthetically, for each brand every ad contains the same bland background, the same basic product picture with the brand name presented in the same font size and style. Furthermore, the product picture and brand name for each ad type are located in approximately the same location within each brand set with only minor variations depending on the space requirements for the manipulated elements of interest.

The only difference between the stimuli within each brand category is the communication style used to convey a specific implicature about the product. Verbal

literal ads use a literal tagline such as "removes the scratchy feel from your clothing" for the fabric softener. Verbal metaphor ads contain a tagline in the same location as the verbal literal ads only the tagline is metaphoric—"removes the cactus feel from your clothing."

The visual metaphor ads contain no verbal language, only a visual rhetorical figure in the area where the taglines are placed for the verbal ads. For the fabric softener the visual figure contains two images—the image on the left is a set of feet that are replaced with cacti and the image on the right is a set of actual feet wearing soft and comfortable socks—juxtaposed together to signify the before and after effect on a person's laundry as a result of using the fabric softener pictured in the ad. Past pretests (McQuarrie, et al., 2005) have shown there to be no differences in the shared implicature of either ad within its respective brand category. However both the verbal metaphor and visual rhetorical ads registered increasing numbers of weak implicatures, respectively, signifying increasingly less constraint on unshared interpretations between the different ad types due to increasing indirectness with respect to information transfer (see McQuarrie et al., 2005 for an in-depth discussion on implicature and indirect persuasion).

Operationalizing Processing Fluency

The processing experience participants encountered was operationalized on three levels: a non-fluency processing environment in which participants had unlimited time to view the ad stimuli and use all available information to form judgments as requested in the specific research task, a conceptual fluency processing environment and a perceptual fluency processing environment. As noted in Chapter II, past research particularly in the domain of visual fluency has established that limiting exposure to the stimulus is

sufficient to isolate fluency effects (Reber, et al., 1998; Winkielman, et al., 2003a). This is particularly useful in the context of the present research where judgments were measured based on incidental exposure to the manipulated communication style (e.g. figurativeness). The pre-test to determine adequate exposure time for isolating conceptual fluency is described below.

Pre-test to confirm stimulus exposure durations

Twenty-five undergraduates participated in this pre-test in exchange for extra credit in undergraduate marketing courses. Students came to the experimenter's office one at a time and sat down at a workstation running Empirisoft DirectRT software. Students saw eight ads, including two filler ads and two different versions of the three ad styles of interest from the set of test ads: a verbal literal, verbal metaphor, and visual metaphor ad. Ads were presented randomly. Participants were asked to push the spacebar on the keyboard the instant they felt that they had taken in and understood the ad. Response times were analyzed using the reverse transformation of the raw latencies (Van-Zandt, 2002). Results showed no differences between any of the three test ads. The mean response latency was 2.96 seconds, with a standard deviation of 1.67 seconds.

Based on the results of this pre-test, the exposure duration for conceptual fluency was set at one standard deviation above the mean, five seconds, and as noted above the exposure duration for perceptual fluency was set at one standard deviation below the mean which was one second. As noted in chapter II, the perceptual fluency condition duration matched that seen in a previous study (Nordhielm, 2002) with complex marketing-related visual stimuli (brand logos) in which perceptual fluency effects were successfully isolated.

66

Study 1

The first study tested all hypotheses from research question #1.   Study one

adopted an empirical tool from the communications discipline (Williams, et al., 2007)

called the personal impact assessment (PIA). This analysis tool was designed to take

participants beyond immediate rational associations with images into the deeper

associations elicited by exposure to images.   The PIA was derived from a technique

designed for Jungian dream analysis.   The PIA is designed to extract the deeper

meanings and associations elicited on the mind by visual persuasive imagery.

Pre-test to Assess Basis for Judgment

Prior to performing the main study a pre-test was conducted to confirm that

judgments about the ads in this research relied more heavily on emotional and

experiential-based thoughts compared to message-based thoughts (H1b, H1c).   One

hundred twenty-seven undergraduate business administration students completed the

study in conjunction with other studies in exchange for course credit.   Participants saw a

verbal literal advertisement, a verbal metaphor advertisement, and a visual metaphor

advertisement for the same fictitious brand side by side, followed by a single question.

The question asked them to pick which ad they liked better and then expound on the

reasons for their choice.   As in study one participants were given unlimited time to view

the ads before providing their answer. The stimuli were chosen from the same set of

experimental stimuli described earlier in the chapter.

The pre-test results showed that overall 59% of the participants chose either the

visual or the verbal rhetorical ad over the verbal literal ad (p<.05).   There were no

differences in terms of thought patterns for either the visual metaphor or the verbal

metaphor ad so these results were collapsed into a single "rhetorical ad" measure. Furthermore, 67% of the participants who chose the rhetorical ad mentioned the rhetorical figure using words conveying appreciation/liking of the ad tactic. This suggests that communication style was salient in the minds of most participants. Thus, H1c was fully supported.

With regards to focusing on the ad message, only 35% of the participants who chose the rhetorical ad mentioned any kind of interpretation of the ad meaning compared to 27% for those who chose the verbal ad, lending moderate support for H1c. It is important to note however, that even within experimental conditions that gave the participants unlimited time to extract all available information about the ads for purposes of forming judgments, the most prevalent thought processes involved when choosing the most preferred ad were predominately experiential and not message-based in nature.

General Method

Study 1 involved a three-stage process. In stage one each subject examined the ads for a minimum of 60 seconds and up to two minutes before being instructed to proceed. Participants were randomly assigned to view the verbal literal ad, verbal metaphor ad, or the visual metaphor ad. Immediately after examining the ad, participants executed each of the PIA steps, which are summarized below (see Appendix C for the detailed survey instrument). Finally, after completing the PIA participants completed the metaphoric thinking ability-sentence completion test designed by Burroughs and Mick (2004) to assess the impact of high vs. low levels of consumer creativity on ad elaboration (H4). See Appendix C also for more detail about the metaphoric thinking ability-sentence completion test.

PIA Method

After viewing the image and completing the elaboration scale, participants completed the six-stage PIA procedure (see Appendix C). Participants used pencil and paper to complete the stages, and were encouraged to take their time throughout the process. In the first step participants were asked to write down the "primary words" that immediately come to mind regarding the physical features of the ad: things in the ad, colors or other ad features, feelings, whatever seems to have the most top-of-mind relevance. Participants were asked to leave enough space around each word to write other words requested in future steps. Next, participants were asked to write at least three "associative words" that immediately come to mind around each of the "primary words." Participants should complete the set of associative words for only one primary word at a time before moving on.

The next set of steps derived from the associative words. Participants circled the most significant associative word drawn around each primary word. This was done fairly quickly to minimize over-thinking. Participants made a list of the associative words that they circled. In considering the list of the most salient associative words, participants wrote down which parts of their inner self these words relate to the most. For example one of the circled associative words might be "fresh," and a subject might state that this word might relate to that subject's inner "pure" self. Participants were asked to consider these "inner symbols" to see if there was a connection or a story that emerged. In the final step participants were asked to write the story that emerged from the list of inner self related words, considering how the story linked back to the image they originally viewed.

Measures. The dependent measures assessed both the quantitative differences in the amount of associative activity and the qualitative differences in associative activity that people demonstrated while answering the tasks of the PIA. Quantitative differences in associative activity were measured as (a) the total number of primary associative words listed at the beginning of the PIA, and (b) the average word total of the story at the end of the PIA procedure. Qualitative differences in associations were measured using four variables which addressed different aspects of the story the participants wrote for the final step of the PIA procedure.

The first coded variable was emotional tone (positive/negative), the second variable was the extent to which the story mentioned features of the ad image, the third was the extent to which the story mentioned the ad message, and the fourth variable was the extent to which the story revealed deep, personal information about the respondent or information that was far removed from the ad. All of the qualitative variables were rated on a scale from 1-7 by two independent coders (average r=.85). For the emotional tone variable a '1' meant highly negative tone, whereas a '7' meant highly positive emotional tone. For the second variable a '1' meant that the response was not deeply personal and the content of the response was closely related to the ad message, whereas a '7' meant that the response either revealed personal/idiosyncratic information about the individual (Peracchio, et al., 2005) and/or the content of the story deviated broadly from the ad message. These measures tested H1a, H1b, and H1c.

<div align="center">Study 2</div>

Study two tested hypotheses from research questions #1, #2, and #4. Study two replicated measurements of ad elaboration and ad liking (e.g. ad attitude) from previous

<div align="center">70</div>

research.   Furthermore, the present study introduced advertising figurativeness to fluency-based judgments (ad honesty scale) and to the domains of persuasion knowledge and visual style of processing.   The expectation was that more figurative ads would elicit more positive engagement, greater ad liking, and more positive ratings for ad honesty.   It was expected that subjects high in persuasion knowledge would rate the ads higher on the persuasion knowledge variables (discussed below); furthermore, it was expected that high-PK subjects would rate the more figurative ads more highly in terms of both liking and truth perceptions

Method

   Participants and Procedure. Five hundred and five undergraduate business students completed the study as one of several studies completed together in exchange for course credit.   Participants took the study online at their leisure.   Participants were told they would see a single ad and then answer some follow-up questions.   Each participant examined a visual metaphor ad, a verbal metaphor ad, or a non-figurative verbal literal advertisement for as long as they wanted. When participants finished viewing the ad they next completed the dependent measures, some persuasion knowledge process measures, and finally the 6-item persuasion knowledge (PK) component of the consumer self-confidence scale (Bearden, et al., 2001) followed by the 11-item visual style of processing scale (Childers, et al., 1985). Participants were grouped into "high" and "low" processing groups with respect to each individual difference measure based on median splits for the overall average response across each scale.   Lastly, participants were thanked and debriefed. Some demographic information was then collected in order to insure that all those who finished the study would receive the promised course credit.

71

Design and Measures.   The study used a 3 (ad type: visual metaphor, verbal metaphor, verbal literal) x 2 (individual difference: high, low) between groups design. The first dependent measure was a 3-item ad attitude scale with 7-point items assessing overall attitude ("negative/positive"), ad liking ("unpleasant/pleasant") and enjoyment of the ad ("not at all/very much").   The second dependent measure was 3-item ad honesty scale assessing the extent to which participants perceived the ad stimulus as "dishonest/honest," "untrustworthy/trustworthy," and "insincere/sincere."   The other dependent measure was a 3-item elaboration scale, measuring the individual's engagement with the experience of processing the ad.   The questions referred to the ad and the endpoints were: "plain/clever," "boring/interesting," and "dull/vivid."

Study two looked at how different participants used persuasion knowledge to evaluate figurative advertising in multiple ways. The first way was of course to give them the 6-item PK scale as noted already. This scale measured consumer's self-confidence with respect to their ability to be highly aware of persuasion tactics and to essentially not get taken advantage of them.   In addition, participants rated three single-item process measures (all items were 7-point scale items) related to persuasion knowledge which assessed people's real-time evaluation of not themselves (like with the PK scale) in the context of dealing with persuasion but with the marketing agent. One question asked participants to rate the extent to which they noticed the tactical intentions of the ad.   Another item asked participants to rate the ad's appropriateness and a third item asked participants to rate how effective they thought the ad was.   According to Friestad and Wright (1994) consumers' ratings of the effectiveness of a persuasion attempt relate to perceptions of how successful the persuasion attempt will be at moving

them psychologically using whatever tactic may be employed.   Consumer ratings of the persuasion attempt's appropriateness relates to perceptions about the marketer/brand itself in relation to the content and/or tactic employed by the persuasion vehicle.

Study 3

Study three tested the hypotheses for research questions #1, #2, and #4. The present study tested H1b and H1c in the context of perceptual vs. conceptual fluency processing conditions. It was expected that the more figurative ads would be more fluent in both conditions and therefore exhibit more positive engagement with the ad (H1b) and also less message-related thoughts (H1c) relative to the non-figurative verbal literal ad.

Furthermore, study three sought to establish an experimental paradigm to measure the persuasive effects of figurative communication in a conceptual fluency vs. a perceptual fluency processing environment. It was expected that more figurative ads would be more fluent and would therefore result in higher ratings for both ad liking (H2a) and ad honesty (H2b).   Finally, it was expected that subjects who rated themselves as high (vs. low) in consumer persuasion knowledge and visual style of processing would judge the more figurative—and therefore more fluent—ad stimuli more favorably (H4). The present dissertation hypothesized that participants in the perceptual fluency condition would not have enough time to discern differences in marketing tactics for any of the ads and therefore ratings would not differ according to PK. A similar hypothesis is reasonable for the visual style of processing scale given that these items also portend some level of conscious awareness of how the mind is interacting with the information in its task environment.

Participants in the conceptual fluency condition, however, should have ample time to process the rhetorical figures which should lead to differential ratings based on pleasure of the text effects discussed in Chapter II.   The study hypothesized that participants in this condition would exhibit differential effects based on awareness and sensitivity to persuasion tactics (PK). A similar hypothesis is put forth for the visual style of processing scale in a purely exploratory fashion given that there currently is no theoretical justification in the literature.

Method

Participants and procedures.   One hundred twenty-nine undergraduate students at a major university in the Pacific Northwest participated in the study in exchange for course credit.   Participants reported to the research lab in groups of 15-30 over the course of several days. All participants began the study at the same time and left the room together after the study was finished. Completion times averaged between 20-25 minutes counting instructions and filler tasks.   Participants were asked at the end of the study to guess the hypotheses.   No participants guessed sufficiently well to warrant exclusion from the analyses.

Participants sat at a workstation running the Empirisoft MediaLab (v. 2006) and DirectRT (v. 2008) data collection programs.   Once they began the study participants moved at their own pace through the instructions, the ads, and the filler tasks with no further prompting from the room moderator.   Immediately following the practice ad, participants saw, reacted to and subjectively rated the test ads.

The test ads consisted of two verbal literal ads presented as bookends at the beginning and end of the experiment sandwiched around one verbal metaphor ad and one

visual metaphor ad presented in randomized order. All test ads were separated by filler

tasks designed to clear short-term memory.   Across the different exposure duration (5-

second, 1-second) conditions participants saw the test ads in the structure discussed

above, but depending on the exposure conditions different fictitious product ads were

used for the different rhetorical ads. Filler ads were the same across all exposure duration

conditions but were presented in different order half the time (i.e. filler ad "A" was first

half the time and last the other half of the time and vice versa).

Measures.   The study used a 2 (conceptual/perceptual fluency processing

condition) by 2 (Individual differences: high/low) x 3 (ad type: verbal literal filler, verbal

metaphor, visual metaphor) mixed design.   Exposure duration approximating the

processing fluency conditions was a between-subjects variable and ad type was a within-

subjects variable.   Participants were divided into high/low individual difference

processing groups based scores above and below the median for each scale

All dependent measures were randomized for each ad.   Participants rated the ads

with the same 3-item ad attitude scale, the same 3-item experiential elaboration scale, and

the same 3-item ad honesty scale used in study two.   One manipulation check variable

asked participants to rate subjective ease of processing on a scale from one to seven.

Also, a single-item process measure asked the same question about tactical awareness

used in study two.   After completing all of the scale-item dependent measures and

process measures participants listed all thoughts going through their minds as they had

rated the ads. Lastly, participants completed the 6-item PK scale and the 11-item sub-

scale of the 22-item style of processing scale (Childers, et al., 1985).

Study 4

Using a 3 (ad types) x 2 (conceptual vs. perceptual fluency conditions) mixed

design study four tested hypotheses from research question #3 regarding the extent to

which figurative ads can elicit strong attitudes across different processing fluency

conditions.   Study four looked to examine the effects of the stimulus exposure duration

on (a) consumers' subjective beliefs about how confident they are in their judgments

(attitude certainty) and (b) on the impact the ad stimulus makes on consumer memory

(attitude accessibility). Overall it was expected that more figurative visual metaphoric

ads would exhibit stronger attitudes than the less fluent visual ads in both the conceptual

and perceptual fluency conditions. In the conceptual fluency condition, however, it was

expected that attitudes for the visual and verbal rhetorical ads should exhibit greater

strength characteristics than attitudes for the non-figurative verbal literal ad.

Method

Participants and Procedures. One hundred thirty-three undergraduate students at

a major university in the Pacific Northwest participated in the study in exchange for

course credit.   Participants reported to the research lab in groups of 15-30 over the

course of several days. All participants began the study at the same time and were not

allowed to leave until every person had completely finished the study. Completion times

averaged between 20-25 minutes counting instructions and filler tasks.   Participants were

asked at the end of the study to guess the hypotheses.   No participants guessed

sufficiently well to warrant exclusion from the analyses.

The participants used the same software as described in study three. In addition

however, given that response times were collected in this experiment, participants were

encouraged in the preliminary instructions to answer as accurately as possible but to keep their fingers on the keyboard so that they could also answer as quickly as possible. These prompts were repeated in written instructions before each ad was shown in order to minimize noise in the response time collection process (Fazio, 1990).

All participants first saw a practice ad for five seconds regardless of the processing fluency condition and were asked to record their reaction to the ad. The response time question asked them to record whether they thought the ad was appropriate ('Z' key) or not ('/' key). These data were not recorded; this exercise merely provided participants with some practice answering a response time question in the same manner (although the question was different) as they would in the actual experiment. This is standard practice in order to minimize the variability in response times during the actual experiment due to lack of familiarity with the procedure (Fazio, 1990).

Measures. For the real experiment participants first saw a verbal literal ad for either five seconds or one second. After a short filler task they responded to the question to record either a positive ('Z' key on the keyboard) or a negative ('/' key on the keyboard) reaction to the ad as quickly and as accurately as they could. See Appendix F for the exact instructions which all participants saw during each instance of the reaction time task. Next, participants answered two questions assessing attitude certainty adapted from prior research in the attitude strength and certainty literature (Wegener, Downing, Krosnick and Petty, 1995). Following the administration of the verbal literal ad, participants repeated the exact same procedure for random presentations of the verbal metaphor ad and the visual metaphor ad across both the conceptual fluency and perceptual fluency conditions.

Summary of Studies Three and Four

Study three and study four examined consumer response to verbal literal, verbal metaphor, and visual metaphor taglines in advertisements under experimental conditions where participants had either five seconds or one second to process the ad before forming judgments or listing thoughts about the ad. These studies were specifically meant to limit the information participants could draw upon when forming judgments to mostly (and exclusively in the case of the perceptual fluency condition) information related to the experience of processing the stimulus. For the most part participants were unable to deliberate on the ad message or on information of a similar level of depth and/or specificity.

Study three focused on understanding how the processing experience informed judgments about the ad's likeability and trustworthiness. Study four examined evidence of two components of what traditional persuasion theory (e.g. the ELM) links to strong attitudes. Specifically, high attitude accessibility and high attitude certainty are two common characteristics of strong attitudes. Study four would therefore provide some evidence as to the potential for a salient and positive processing experience leading to strong attitudes based on different communication styles used in print advertisements. Table 1 (below) includes a summary of all hypotheses tested in each of the four studies.

Table 1: Hypotheses Tested by Study

Hypothesis Tested	S 1	S 2	S 3	S 4
• **H1-**elaboration x figurativeness x fluency conditions				
o **H1a:** more (less) figurative ads→ more (less) personal/idiosyncratic elaborations and associations	X			
o **H1b:** more (less) figurative ads→ more (less) positive emotional thought content	X	X	X	
o **H1c:** more (less) figurative ads→ less (more) message-based thought content	X	X		
• **H2-**fluency judgments x figurativeness x fluency conditions				
o **H2a:** more (less) figurative ads→ higher (lower) ad attitude ratings		X	X	
o **H2b:** more (less) figurative ads → higher (lower) ad honesty ratings		X	X	
• **H3**—attitude durability x figurativeness x fluency conditions				
o **H3a:**more (less) figurative ads → higher (lower) attitude certainty				X
o **H3b:** more (less) figurative ads → higher (lower) attitude accessibility				X
H4—individual differences x figurativeness x fluency conditions	X	X	X	X

CHAPTER IV

RESULTS

Overview

The following chapter presents results for each of four studies. Each study examined the extent to which figurative language in print advertisements influenced judgments about the ad stimulus in different experimental contexts. Study one focused on a deeper examination of how ad figurativeness influenced mental engagement with the ad (i.e. elaboration), moderated by metaphoric thinking ability. Studies two and three focused on how ad figurativeness and the experience of processing the ad impacted key persuasive outcomes, moderated by visual processing style and consumer self-confidence in persuasion knowledge. Study four focused on how ad figurativeness and processing experience impacted indicators of attitude strength. Before presenting the results in detail for each study, table two (below) summarizes key findings for each hypothesis according to the study in which it was tested.

Table 2: Results by Hypotheses and by Studies:

Hypothesis Tested	Results
H1-elaboration: figurativeness x fluency conditions	
H1a: more (less) figurative ads→ more (less) personal/idiosyncratic elaborations and associations	<u>Study 1</u>: Partial support—visual metaphor vs. all other ads. <u>Study 3</u>: Full support for visual metaphor ads vs. all other ads in the perceptual fluency condition only (e.g. famous brand references)
H1b: more (less) figurative ads→ more (less) positive emotional thought content	<u>Study 1-2</u>: Partial support: figurative vs. non-figurative ads <u>Study 3</u>: Partial support in conceptual fluency condition figurative vs. non-figurative ads; partial support in perceptual fluency condition—visual metaphor vs. verbal ads
H1c: more (less) figurative ads→ less (more) message-based thought content	<u>Study 2--3</u>: Low percentage of message-based thoughts for all ads; hypothesis not supported
H2-fluency judgments: figurativeness x fluency conditions	
H2a: more (less) figurative ads→ higher (lower) ad attitude ratings	<u>Study3</u>: Full support in conceptual fluency condition, partial support for visual vs. both verbal ads in perceptual fluency condition.
H2b: more (less) figurative ads → higher (lower) ad honesty ratings	<u>Study3</u>: Partial support: metaphor ads vs. non-metaphor ad in conceptual fluency condition. Partial support for visual vs. both verbal ads in perceptual fluency condition.
H3—attitude durability: figurativeness x fluency conditions	
H3a:more (less) figurative ads → higher (lower) attitude certainty	<u>Study 4</u>: Partial support—greater certainty for visual metaphor vs. both verbal ads in perceptual fluency condition only.
H3b: more (less) figurative ads → higher (lower) attitude accessibility	<u>Study 4</u>: Partial support—lower reaction times (suggesting higher attitude accessibility) for visual metaphor ad in perceptual fluency condition only.
H4— Individual differences moderate judgments under conceptual fluency-related processing conditions only. Participants scoring high (low) in the difference measures will rate increasingly figurative ads more (less) favorably.	<u>Study 3</u>: PK scale—partial support for visual metaphor ad only, for both ad attitude and ad honesty judgments. No effects for any other scale in any other study.

Study 1

Study one examined the impact of communication style (e.g. figurativeness) on elaboration using the personal impact assessment (PIA) developed by Williams and Newton (2007). The complete set of instructions for the procedure is available in Appendix C. Briefly, participants examined only one ad stimulus for approximately 60 seconds before completing the six steps of the PIA. In these six steps participants listed associative words based on what they saw in the ad; from there they listed two more levels of associative words based on their output from the previous step. Each step asked them to dig deeper and extract words that were increasingly personal and unique to the individual. The final step asked participants to write a story based on the 3rd-level associative words.

The story was coded for emotional tone, for how closely it adhered to surface level features of the ad, how closely the story adhered to the ad message, and lastly the extent to which the story reflected personal and/or idiosyncratic information that had little to do with the ad in any way. Hypotheses from research questions #1 and #4 were tested. The expectation was that as ads grew more figurative, elaboration would reveal more positive emotional thoughts in addition to more thoughts that were personal and idiosyncratic relative to the basic ad message. Lastly, it was expected that more figurative ads would generate fewer message-related thoughts compared to less figurative ads. Overall, the more figurative ads were expected to take the mind of the person engaging with the ad on a deeper, broader mental journey.

The present study used the metaphoric thinking ability test (MTA-SC) developed by Burroughs and Mick (2004) to examine the extent to which natural tendencies to use

82

rhetoric in a descriptive manner moderated elaboration with figurative vs. non-figurative ads. By implication if an individual is inherently skilled in the use of rhetoric that individual should be skilled at a similar level with processing rhetorical information. Toncar and Munch (2001) noted that rhetoric tends to be most effective for people who are more skilled in processing the communication style. Thus, it was expected that high more than low levels of metaphoric thinking ability would result in greater elaboration on increasingly figurative ads.

Quantitative Analyses: Number of Words Generated

Note that results for the verbal ads did not differ from each other; therefore, results were collapsed into visual vs. verbal ad stimuli. Step one of the PIA was the only step in which participants were not given any prompts regarding the number of associative words to list. Other steps asked for "at least three" words, for example. Therefore as a manipulation check to assure that the ad stimuli were quite similar in terms of surface-level information, the total number of primary associative words were compared across the two ad stimulus categories. There were no differences in the number of primary associative words listed for either ad type.

Furthermore, another manipulation check analyzed the total number of words in the final story to see if there were any differences in the amount of information extracted from the full PIA procedure based on ad type. Once again there were no differences. Taken together it appears that on the surface the figurative vs. non-figurative ads did not produce a larger quantity of words in the response. Therefore any differences in the PIA results would be based on qualitative differences in how the individual engaged with the different ad communication styles.

	Emotional Tone	Response links to physical elements of ad (colors, words, pictures)	Response links to ad message	Deep, personal, idiosyncratic story
Low/Negative	1	1	1	1
	2	2	2	2
	3	3	3	3
	4	4	4	4
	5	5	5	5
	6	6	6	6
High/Positive	7	7	7	7

Figure 4: Coding Sheet for PIA Story Qualitative Assessments

Coding PIA Stories

Figure four is the sheet that two judges used to assess the qualitative differences between the stories produced by participants as they went through the entire PIA procedure. The author was one judge and the other judge was a colleague from the Communications discipline who was highly familiar with the procedure and had past experience coding PIA data. Each judge coded the data separately. Once finished the author entered the data and assessed the level of agreement.

There were no issues regarding agreement between the judges with the three variables other than emotional tone. Average correlation for these three variables was very high (R=.85, ranged from .82-.92). However there was initially a somewhat low level of agreement regarding emotional tone of the stories (R=.76). The judges met and determined that this was because of confusion regarding what a low number meant

compared to a high number with respect to "emotional tone". Once this discrepancy was
resolved agreement returned to a high level (R=.86).

There were no significant differences in positive vs. negative emotional tone of
the story based on visual and verbal ad types. This result failed to support H1b.
Similarly, there were no differences based on ad type regarding the extent to which
stories mentioned either features of the ad or the message the ad was trying to convey. It
was expected that the verbal literal ad type would evoke more associations with ad
message than the figurative ads; therefore, these results failed to support H1c.   However,
regarding coding of the variable which measured the extent to which the stories evoked
personal or idiosyncratic associations that diverged from any literal content of the ad,
there was a notable significant difference according to modality.   The visual metaphor
ads evoked significantly more personal, idiosyncratic associations than the verbal ad
types ($F_{(1, 81)} = 3.689$, p<.01). This lent partial support for H1a (see Figure 5).
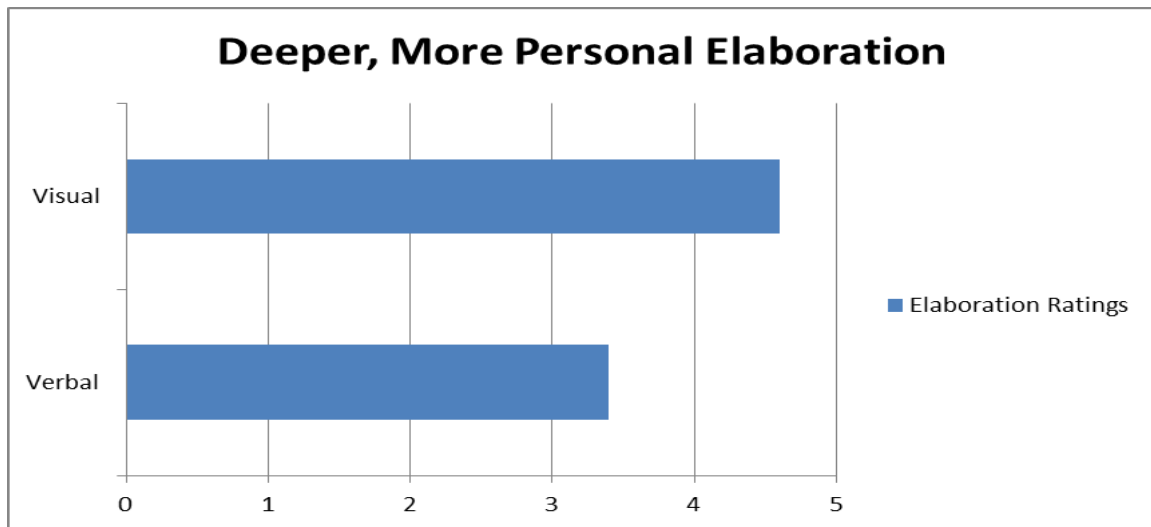
Figure 5: PIA Stories—Frequency of Personal, Idiosyncratic Statements

Following are examples of an idiosyncratic story and a more literal story that stayed relatively close to the literal message of the advertisement. An example of an idiosyncratic personal story triggered by the visual metaphor ad: "I think of a date with a girl during the summer. My main thought is of the grapes, and we are eating them along with other things." An example of a more literal personal story triggered by the verbal literal ad: "I feel that this product would be a good way to keep my appetite happy through clean, fresh, food."

Finally, the metaphoric thinking ability test failed to moderate the results. In fact the data from the test were unusable. Regardless of ad type subjects scored extremely low on the test. The maximum score possible is 18. Subjects examining the visual metaphor ad scored on average 7.5, while subjects examining the visual ads averaged a combined 4.2. With scores this surprisingly low on the test it was impossible to break the groups into meaningful "high ability" vs. "low ability" experimental groups.

Overall, the qualitative coding results seemed to corroborate several things about the ad stimuli. First, the lack of difference in: (a) the total number of primary associative words, (b) the total number of words generated in the story at the end of the PIA procedure, and (c) the emotional tone of the story seemed to confirm that surface level ad characteristics were similar as intended. The other intention behind the ad stimuli design was that the communication styles (visual vs. verbal; figurative vs. non-figurative) would affect the mind in different ways. This intention was confirmed as shown in Figure 5-- the visual metaphor stimulated the mind of the participants in much richer ways deeper below the surface.

Study 2

   Study two replicated previous findings (McQuarrie, et al., 2003a) regarding the

impact of ad figurativeness on ad liking and ad elaboration. Furthermore the present

study sought to extend previous work in the domain of advertising rhetoric to include

judgments about ad honesty and judgments which relate to persuasion knowledge.   The

present study tested hypotheses from research questions #1, #2 and #4. It was expected

that more figurative ads would exhibit more positive engagement with the ads (H1b), as

well as more positive fluency-related judgments: increased ad liking (H2a) and increased

ratings for ad honesty (H2b).   Finally, individual differences in persuasion knowledge

and visual style of processing were expected to moderate fluency judgments on

increasingly figurative ads so that high PK individuals and high visual processors would

rate more figurative ads more favorably.

Process Measures

   The process measure regarding tactical awareness revealed a strong main effect

for ad type (F $_{(2,497)}$ = 20.092, p<.001) and a strong main effect for consumer persuasion

knowledge (F $_{(1,497)}$ = 16.098, p<.001) but no interaction.   The differences across ad

type were entirely driven by the visual ad (M=4.29) compared to both the verbal

metaphor (M=3.24) or the verbal literal ad (M=3.5). As expected (Ahluwalia, et al.,

2004) the high PK consumers were significantly more aware of the tactical intentions of

the ad overall.

   Another process measure asked participants to rate from 1-7 the effectiveness of

each ad. As noted in Chapter III this measure assessed people's beliefs about how

effective the ad will be against their ability to cope with the persuasive tactic. Results

showed a strong main effect for ad type ($F_{(2,496)} = 27.89$, p<.001), but there was no main effect for PK level and there was no interaction. Participants rated the visual metaphor ad (M=3.67) as much more effective than both the verbal metaphor (M=2.96) or the verbal literal (M=2.90) ads. Lastly, participants rated from 1-7 the appropriateness of each ad, which according to persuasion knowledge literature (Friestad, et al., 1994) is a measure of brand trustworthiness in relation to the persuasive tactics used in the persuasive attempt. Results showed no differences in appropriateness based on ad type. However, there was a strong main effect for PK level ($F_{(1,497)} = 66.45$, p <.001) as participants high in PK rated all the ads as much more appropriate than participants low in PK.

In summary, the results for these single-item process measures suggested that for participants who were high in persuasion knowledge (based on the PK scale) the visual metaphor was more evident as a communication tactic and it was expected to make a stronger persuasive impact. Furthermore, the fact that participants high in persuasion knowledge rated all three ads as more appropriate than participants who were low in persuasion knowledge reaffirmed that the persuasion tactics were (a) highly evident to those people who were predisposed to paying attention and (b) the tactics were all equally perceived as being benign and non-controversial.

Dependent Measures

Ad Elaboration. Table 3 in Appendix C (non-fluency condition) shows the results for the dependent measures. The first dependent measure was the 3-item ad elaboration scale (α=.880) adapted from McQuarrie and Mick (1999) to assess the extent to which participants notice the deviation in the communication style and/or the extent to which

participants mark out the text and make extra effort necessary to interpret it correctly as was presumably the intention of the originator of the communication. Therefore, in essence, the scale measured the depth of processing experience elicited by each ad communication style. In partial support of H1b participants demonstrated large differences (F (2,496) = 68.387, p <.001) in ad elaboration for the visual metaphor ad (M=3.43) compared to the verbal metaphor (M=2.12) and verbal literal (2.42) ad types. However, unlike results from previous studies (McQuarrie, et al., 1999) the results showed no difference in elaboration between the verbal metaphor and the verbal literal ad. Finally, there was no main effect based on persuasion knowledge and no interactions between persuasion knowledge and ad elaboration ratings.

Ad Attitude (Liking). The next dependent measure analyzed was the 3-item Ad liking/Ad attitude scale (α=914). Factorial ANOVA confirmed a main effect for ad type (F $_{(2,490)}$ = 4.182, p = .016) driven primarily by the difference between the visual ads (M=3.516) and the verbal literal ads (M=3.115). Thus there was partial support for H2a which expected that attitude judgments for the visual ads would also be greater than attitude judgments for the verbal literal ads. Although close, there was no main effect (F $_{(1,490)}$ = 3.715, p=.06) and no interaction between ad type and persuasion knowledge. Given that (a) participants had unlimited time to extract all available information to from their judgments, and given that (b) all stimuli used in these experiments were intentionally produced to be aesthetically bland and information poor in order to isolate only the differences in communication style, it was not surprising that the ad attitude ratings were below the midpoint for each ad type (see Table 3 below).

Ad Honesty. The final dependent measure examined in this study was the 3-item scale ($\alpha=.918$) measuring perceptions of honesty, sincerity, and trustworthiness of each advertising stimulus as a function of self-confidence in persuasion knowledge (PK). Factorial ANOVA revealed a large main effect for ad type ($F_{(2,490)} = 23.262$, $p < .001$) driven entirely by the ratings for the visual metaphor stimulus. Participants rated the visual metaphor ad very high in honesty (M=4.05) while the verbal metaphor (M=2.4) and the verbal literal ad (M=1.9) scored very low and no different from each other. These results partially supported H2b, which expected that ad honesty ratings would also differ between the verbal metaphor and verbal literal ads.

Individual Difference Moderators

Results for the 6-item PK scale ($\alpha=.911$) were mixed. As noted above PK moderated tactical awareness and feelings about the appropriateness of the advertisement, but PK failed to moderate judgments about the ad in terms of elaboration, attitude, or ad honesty. This was unexpected based on previous studies (Ahluwalia, et al., 2004) that found high PK participants rated ads that had a high concentration (i.e. in both the tagline and body copy) of rhetoricals more favorably. Furthermore, the visual style of processing scale showed poor internal consistency ($\alpha=.622$) and subsequently failed to moderate judgments. So both individual different measures failed to lend support to H4.
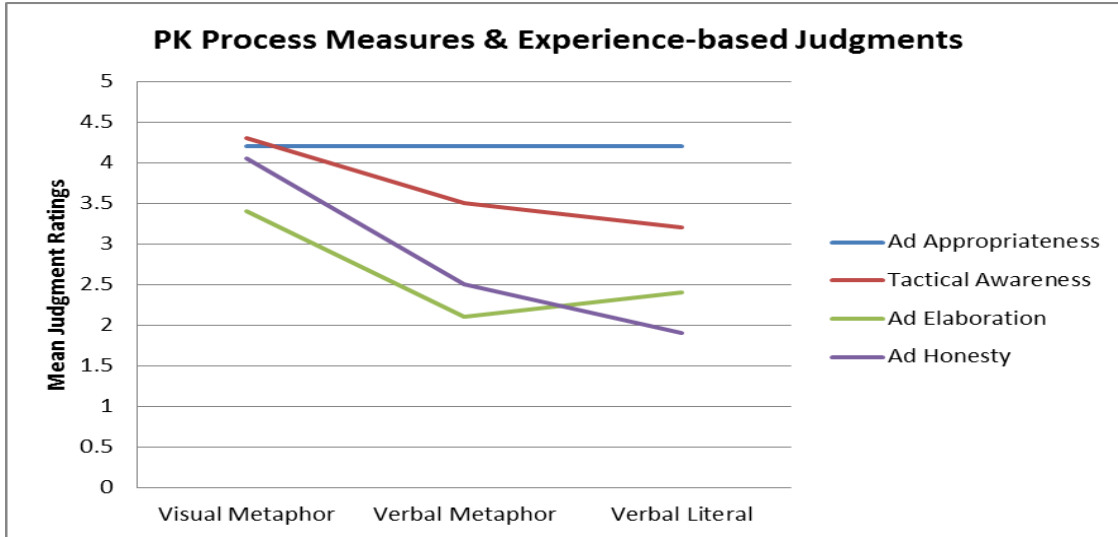
Figure 6: Comparison of PK measures vs. Fluency-based Judgments

Figure 6 shows the PK process measures and the elaboration and honesty dependent measures together. There are a couple of interesting bits of information from these data. First of all, the process measures showed strong PK effects whereas the dependent measures showed no PK effects. This is particularly interesting when comparing the 'appropriateness' process measure with the 'honesty' scale ratings. On the surface these variables appear to be measuring something similar: trust in the marketing agent. But it seems that different mental processes were taking place for the different measures. Honesty is a common judgment in the fluency literature (Reber, et al., 1999; Reber, et al., 2004; Winkielman, et al., 2003b) that is linked to the positive experience of fluency. Appropriateness, on the other hand, suggests a more rational evaluative set of thought processes that encompasses the entire persuasion setting: marketer, tactic, persuasion target, and the extent to which all of these are optimally interacting in this particular persuasion context (Friestad, et al., 1994). Essentially then, these results

91

provide some more validity about PK as an evaluative based judgment process and elaboration and honesty as experiential based judgment processes.

In summary, in an experimental condition where participants saw only one advertisement between-groups, and had unlimited time to view the ad prior to making the requested judgments, the results established a foundation of strong effects for experiential processing based judgments in favor of the visual metaphors ads over the verbal metaphors. This translated into higher levels of experiential engagement along with more positive judgments in terms of attitude toward the ad and perceptions of the ad's trustworthiness. Hypothesis 1b was fully supported while there was only partial support for Hypotheses 2a and 2b given that there was no difference between verbal metaphors and verbal literal ads with respect to elaboration, attitude, and honesty judgments.

Study 3

The purpose of study 3 was to examine the impact of ad figuration on fluency judgments—ad elaboration, ad liking, and ad honesty—in both a conceptual fluency and perceptual fluency processing context. The present study tested hypotheses from research questions #1, #2, and #4. It was expected that even as processing conditions changed the more figurative ads would be more fluent; therefore, engagement with the ads would be more positive (H1b) and would contain fewer message-related thoughts (H1c) relative to the non-figurative/non-fluent ads. As for the interaction between figurativeness and fluency and its influence on judgments, it was expected that more figurative ads would be more fluent in both processing contexts, and would elicit more positive judgments. Finally, it was expected that individual differences in persuasion

knowledge and visual style of processing would moderate judgments across the different

stimulus processing contexts such that individuals high in both difference measures

would rate the more fluent ads more favorably in the conceptual fluency condition only

where participants had enough time to engage in semantic processing of the ads.

Process Measures

Tactical Awareness. The persuasion knowledge process variable about tactical

awareness produced different response patterns than study two as a result of reduced ad

exposure duration. There was a strong main effect for ad type ($F_{(2,130)}$ = 35.508, p<.001)

as in study one but in contrast to study one there was no main effect for consumer

persuasion knowledge and no interaction. The differences across ad type were entirely

driven by the visual ad (M=4.93) compared to both the verbal metaphor (M=3.61) or the

verbal literal ad (M=3.39). Lastly, there was no difference in ratings of any of the ads

with respect to processing fluency condition.

Processing Ease. The other single-item process variable asked participants to rate

from one to seven the extent to which each ad was easy to process. Overall, collapsed

across both processing conditions and level of persuasion knowledge there was only a

marginal main effect at best ($F_{(1.78,130)}$ = 2.963, p=.06) driven by the difference between

the visual metaphor ads (M=5.04) and the verbal literal ads (M=4.62). There was a

strong main effect for participants grouped according to persuasion knowledge ($F_{(1,131)}$ =

7.385, p<.01) and there was a strong main effect for fluency condition ($F_{(1,131)}$ = 12.313,

p<.01) and there was a significant ad type x condition interaction ($F_{(2,130)}$ = 5.836,

p<.01). Participants found both the verbal metaphor (M=5.5) and the verbal literal ad

(M=4.96) in the conceptual fluency condition easier to process than the verbal metaphor

93

ad (M=4.22) and the verbal literal ad (4.29) in the perceptual fluency condition, respectively. There was no difference in processing ease manipulation check ratings for the visual ads with respect to either processing condition or individual differences in PK level. Finally, while there was no ad type x PK interaction the main effect for PK was driven by the difference between the high-PK (M=5.01) and low-PK (M=4.32) participants for the verbal literal ads ($F_{(1,70.)} = 6.276$, p=.02) in the conceptual fluency condition.

In summary, the visual metaphor ad type was equally perceived as a much more salient marketing tactic than either verbal ad regardless of any of the experimental conditions participants were placed in (i.e. exposure duration or persuasion knowledge self-confidence). Similar to tactical awareness, processing fluency condition and persuasion knowledge had no influence on participants' perception of how easy the visual metaphor ad was to process again in contrast to the verbal ads. Overall, and in especially in the perceptual fluency condition, when forming judgments participants viewing the verbal ads were particularly aware of the processing constraints being placed on them but not when viewing the visual ads.

Table 3: Means for Ad Attitude, Ad Elaboration, and Ad Honesty

	Visual Metaphor	Verbal Metaphor	Verbal Literal
Ad Elaboration			
Non-fluency	3.393^a	2.112^b	2.457^b
Conceptual fluency	4.65^a	3.18^a	2.49^a
Perceptual fluency	4.62^a	3.03^b	2.70^b
Ad Attitude			
Non-fluency	3.52^c	3.14^b	3.29
Conceptual fluency	4.53^a (PK Hi>Lo; p=.03)	4.21^a	3.42^a
Perceptual fluency	4.53^a	3.78^b (PK Lo>Hi; p=.04)	3.52^b
Ad Honesty			
Non-fluency	4.05^a	2.49^b	1.90^b
Conceptual fluency	4.53^d (PK Hi>Lo; p<.01)	4.58^d	4.02^a
Perceptual fluency	4.55^a	4.19^b	4.27^b

Legend: a = different from all other ads, b = different from visual ad, c = different from verbal metaphor ad, d= different from verbal literal ad
PK: Participants high in persuasion knowledge differ in ratings from participants low in persuasion knowledge

Dependent Measures

Ad Elaboration. With respect to the 3-item ad elaboration scale (α=.837) ratings a repeated measures ANOVA confirmed a strong main effect for ad type ($F_{(1.77,230.31)}$ = 103.681, p < .001). There were no main effects for exposure condition or persuasion knowledge, and there were no interactions. As Table 3 shows, when exposure was limited in the conceptual fluency and the perceptual fluency conditions ratings for ad elaboration spiked up above the midpoint for the visual ads and they climbed above three (out of seven) for the verbal metaphor ads. This seemed to confirm that in the reduced exposure conditions participants were less inclined to take in all available information about the ad and instead focus more on the processing experience to inform judgments. Finally, although there was not a significant ad type by fluency condition interaction, it is

worth noting that in the conceptual fluency condition elaboration increased significantly as ad type grew more figurative from the verbal literal to the verbal metaphor to the visual metaphor ad. However, in the perceptual fluency condition elaboration for the verbal metaphor dropped so that it was significantly lower than the visual metaphor yet not significantly higher than the verbal literal ad. Thus, full replication of previous work by McQuarrie and Mick (1996; 1999) was not achieved; H1b was fully supported in the conceptual fluency condition but only partially supported in the perceptual fluency condition.

Ad Attitude. The next dependent measure was the same 3-item ad liking/ad attitude scale (α=.916) used in study one. The means for ad attitude broken down by ad type, exposure condition, and persuasion knowledge level are available in Table 3. Repeated measures ANOVA showed a strong main effect for ad type ($F_{(1.64,213.73)}$ = 23.742, $p < .001$) and no main effects for either stimulus exposure condition or consumer persuasion knowledge. In the conceptual fluency condition, post hoc tests confirmed that ad attitude ratings for the visual metaphor ad (M=4.53) differed from ratings for both sets of verbal ads. Furthermore ad attitude ratings for the verbal metaphor ad (M=4.00) differed from the ratings for the verbal literal ad (M=3.47). This result lent full support to hypothesis 2a.

This pattern of results differed somewhat from the pattern of results for ad attitude ratings in study two, where participants had unlimited time to view the ads. It seems that limiting the exposure to the stimulus heightened participants' sensitivity to their stimulus processing experience—in particular encouraging them to focus a great deal more on the communication style. As a result this heightened experiential awareness yielded

96

considerably higher ad attitude ratings overall (global M=4.0 for study three vs. M=2.63 for study two) along with greater sensitivity in terms of differential ad attitude ratings across the different ad types.

Ad Attitude Interactions. There were some interesting and complex interactions with the ad attitude scale, as illustrated in figure 7 below. First, although there was no main effect for condition and no overall ad type x condition interaction, post-hoc tests showed that there was a difference between the verbal metaphors and the verbal literal ads as fluency condition went from conceptual to perceptual fluency ($F_{(1131)} = 5.997$, $p < .001$). This interaction was driven by a pronounced decrease in ad attitude for the verbal metaphors from the conceptual fluency (M=4.3) to the perceptual fluency condition (M=3.8), coupled with a slight but non-significant increase in attitude ratings for the verbal literal from conceptual fluency condition (3.42) to perceptual fluency condition (3.52). Thus, thanks to consistent high attitudes for the visual ads along with attitude ratings that dipped quite a bit for the verbal ads across conditions, H2a was fully supported in the conceptual fluency condition but only partially supported in the perceptual fluency condition.

Second, although there was no overall 3-way interaction there were some interesting interactions between ad type, exposure condition, and PK. Overall, ad attitude ratings for the visual metaphor ad were identical across exposure conditions. However, there was a pronounced PK interaction (high PK > low PK) for the visual metaphor ad in the conceptual fluency condition ($F_{(1,70)} = 13.265$, $p < .03$) that completely disappeared in the perceptual fluency condition. Furthermore, building on the interaction between the verbal metaphor ad and exposure condition, there was no effect for PK in the

conceptual fluency condition but there was a notable reverse PK effect (i.e. low PK > high PK) in the perceptual fluency condition ($F_{(1,63)} = 9.706$, $p < .04$).
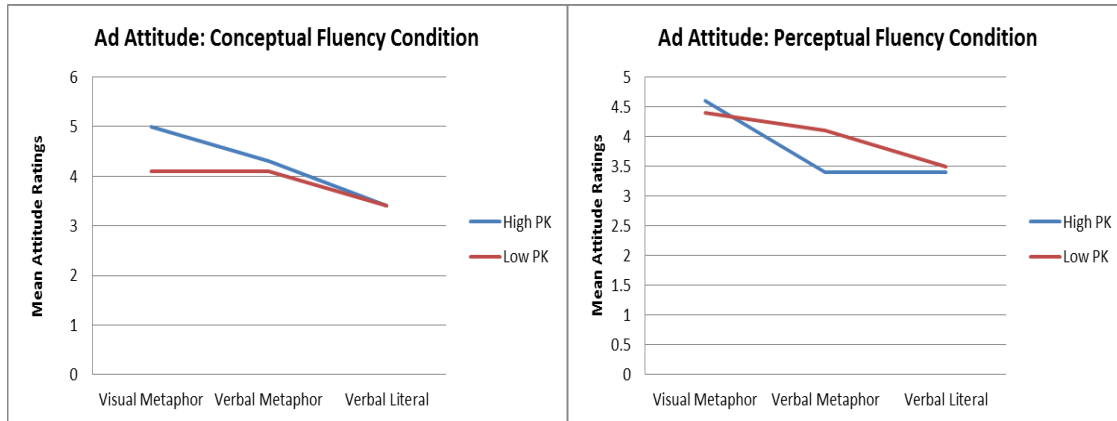

Figure 7: Ad Attitude Interactions

Ad Honesty. The means for ad honesty scale ratings ($\alpha = .916$) by ad type, exposure condition, and persuasion knowledge level are available in Table 3 above. Repeated measures ANOVA showed a strong main effect for ad type ($F_{(2,130)} = 6.889$, $p < .001$) and a notable ad type x condition interaction ($F_{(2,130)} = 4.075$, $p < .02$). H2b was partially supported in both the conceptual fluency and perceptual fluency conditions, but for different reasons. Overall collapsed across fluency condition and PK level, honesty scale ratings for the visual metaphor (M=4.55) were similar to the honesty ratings for the verbal metaphor ads (M=4.40). Both ads demonstrated significantly higher ratings than the verbal literal ads (M=4.1). As for the ad type x condition interaction, this was marked in a similar way as the ad attitude ratings by a pronounced decrease in honesty ratings in the verbal metaphors from the conceptual fluency condition (M=4.6) to the perceptual fluency condition (M=4.2) while the verbal literal ads showed a slight increase

in honesty ratings from the conceptual fluency condition (M=4.0) to the perceptual

fluency condition (M=4.2).

     Ad Honesty Interactions. Furthermore, the honesty ratings for the visual metaphor

ad were identical collapsed across condition and PK level and there was no overall 3-way

interaction. However, the honesty ratings for the visual metaphor ads varied considerably

with PK level according to exposure condition.   The high PK participants rated the visual

metaphor ad much higher on the honesty scale (M=5.04) than the low PK participants

(M=4.2) in the conceptual fluency condition (F $_{(1,70)}$ = 13.93, p < .001) whereas there was

no difference in ratings according to PK level in the perceptual fluency condition.   There

were no effects based on PK level for any other ad in any of the exposure conditions.

The charts of these interactions are available in figure 8 below. Furthermore, the results

for the thought-listing questions (discussed below) provided some deeper insights into

these interactions.

     As with the ad attitude ratings ad honesty ratings spiked up for the fluency

exposure conditions in study three (global M = 4.33) relative to ad honesty ratings in

study one (M = 2.81). Clearly limiting exposure and forcing participants to rely on

experiential information for judgment formation affected ratings for honesty, as predicted

by the processing fluency literature (Reber, et al., 2004). Response patterns for both the

ad attitude and ad honesty scales tracked ratings for experiential elaboration in all

experimental conditions for study three with the exception of ad honesty for the verbal

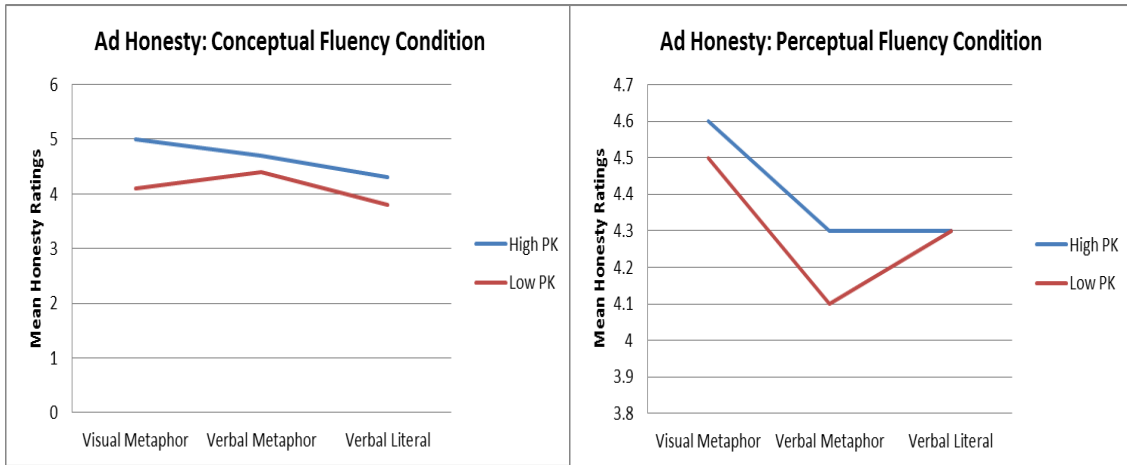metaphors in the conceptual fluency condition.

Figure 8: Ad Honesty Interactions

Thought Listing Results

After participants completed all scale ratings they listed in essay form all thoughts going through their minds while viewing each ad stimulus. Two independent judges blind to the experimental design and hypotheses coded all thought responses. Overall, agreement between judges was sound; the average R was 0.85, with a range of 0.77 to 0.96. The judges coded eight categories in total, listed and illustrated with examples in Table 4 below.

Message vs. Experience-based Thoughts. Similarly to thought coding results from study two, there were no meaningful differences in the frequency with which participants mentioned ad features or the ad message. There were several meaningful differences however with respect to thoughts related to the experience of processing the stimuli. First of all, 64% of all participants mentioned something about the experience of processing the visual metaphor ad in the conceptual fluency condition compared to 53% for the verbal metaphor ad and 39% for the verbal literal ad. In the perceptual fluency

condition 69% mentioned processing experience for the visual metaphor compared to only 35% for each of the verbal ads.

Building on this figure 9 shows the difference in the emotional tone of the experiential thoughts collapsed across condition. The thought patterns were fairly simple for the visual ads across condition but changed much more for the verbal ads. Positive mentions of processing experience stayed consistent for the visual ads across conditions: in the conceptual fluency condition participants relayed a positive processing experience 42% of the time, and said negative comments 22% of the time. In the perceptual fluency condition positive processing experience comments increased to 50% (vs. 19% negative comments) for the visual metaphor ad. In contrast, for the verbal metaphor ad positive processing experience comments dropped from about 30% in the 5-second condition to about 18% in the 1-second conditions ($p<.05$). Negative processing experience related comments for the verbal metaphor ad were consistent (~25%) across both exposure conditions. Lastly, processing experience related comments were overwhelmingly negative ($p<.001$) for the verbal literal ad in both conditions.
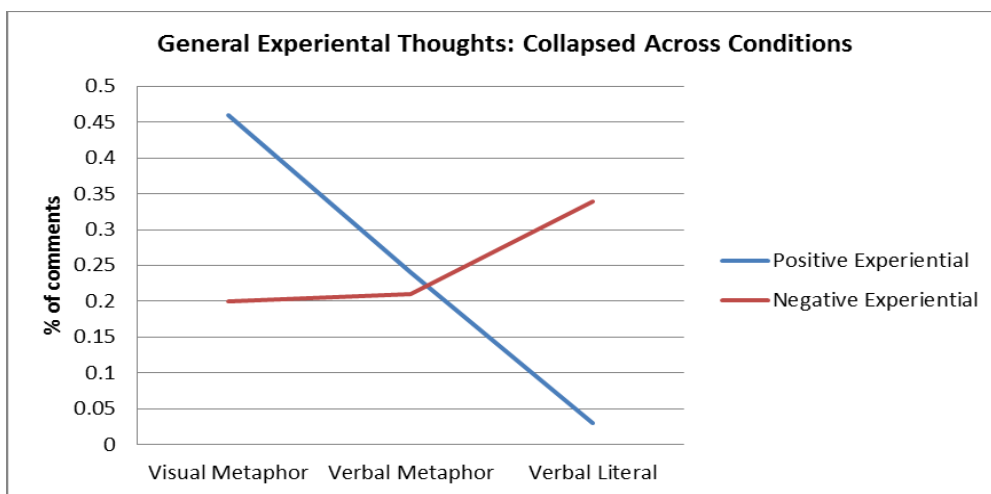

Figure 9: Positive vs. Negative Experiential Thoughts

Trust Related Thoughts. The second set of response categories of interest were positive and negative mentions of trust with respect to the marketer and/or the persuasive tactic used in the ad stimuli, illustrated in figure 10 below.   Positive vs. negative mentions of marketer trust were statistically identical for both the verbal metaphor and verbal literal ads across both exposure conditions but these response patterns varied for the visual metaphor ad depending on stimulus exposure.   In the conceptual fluency condition participants made positive trust-related comments at an equal rate for both the verbal metaphor and visual metaphor ads. Interestingly, negative trust comments for the visual metaphor ad (31%) were actually more frequent (p<.05) for the visual metaphor than for any other ads (10% and 16% for the verbal literal and verbal metaphor ads, respectively).   It seems that participants in the conceptual fluency condition were really able to process and deliberate on the visual metaphor tactic and were willing to verbalize these deliberations.   Perhaps these response patterns reflect the significant PK effect seen in the attitude scale and honesty scale ratings for the visual metaphor ad (but not the other ads) at 5-seconds exposure.

A different pattern of responses manifested in the perceptual fluency condition, where positive trust comments increased dramatically for the visual metaphor ad so that they were much more frequent (p<.01) than for the other ad types.   Furthermore, negative trust comments for the visual metaphor decreased dramatically from 31% in the conceptual fluency down to 11% in the perceptual fluency condition so that they were no more or less frequent for the visual metaphor than for any other ad type.   In summary, positive/negative trust comments were statistically equal in the conceptual fluency condition except for somewhat higher negative trust-related comments for the visual

metaphor ad.   From the conceptual fluency condition to the perceptual fluency condition however, the combination of large increases in positive trust comments and dramatic decreases in negative trust comments signaled a very high level of acceptance of both the marketer behind the ad and the persuasive tactic used in the ad for the visual metaphor compared to the other ad types.
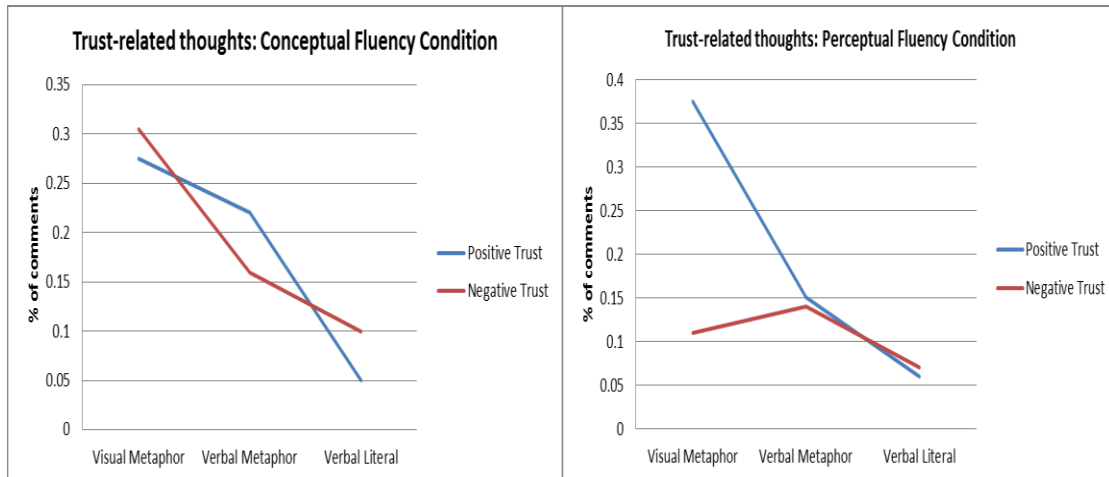

Figure 10: Trust-related Thoughts

Unique Thoughts—Perceptual Fluency Condition. Two response patterns illustrated in figure 11 might shed some light on the trust related comments with respect to the visual metaphors in the perceptual fluency condition. These are complaints about lack of time to fully view the ad, and mentions of thoughts about a well-known brand that the ad triggered.   In the conceptual fluency condition there only a few trace complaints about lack of time to fully view the ad scattered across the three ad types. However, in the perceptual fluency condition participants complained about lack of processing time 39% of the time for the verbal literal ad compared to 24% for the verbal metaphor ad and 15% for the visual metaphor ad.   The difference in complaints about processing time between the verbal literal ad and the visual metaphor ad was significant (p<.01).   It is worth noting that while the difference in processing time complaints between the verbal

103

metaphor and the visual metaphor ads was non-significant, participants still complained 50% more for the verbal metaphor. These processing time complaints correlated strongly with negative mentions of trust (r=.89) in the perceptual fluency condition, suggesting a linkage between processing experience and judgments.

Furthermore, in the conceptual fluency condition there were only trace mentions by participants of well-known brands triggered by viewing the ad stimuli. In the perceptual fluency condition however, participants mentioned a well-known brand 25% of the time for the visual metaphor ad compared to 0% of the time for the other ad types. These responses correlated strongly (p<.01) with positive mentions of trust for the visual metaphor ad in the perceptual fluency condition.
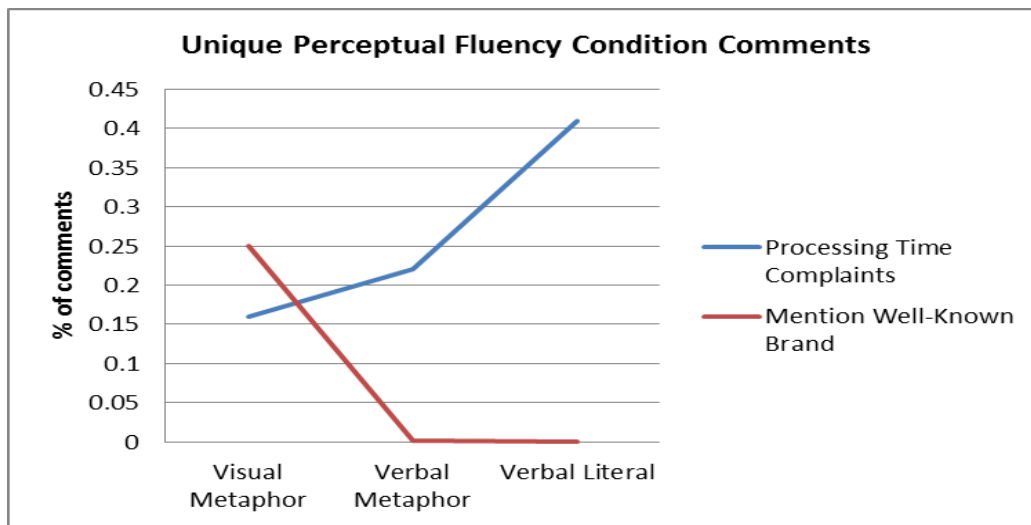

Figure 11: Thought Responses Unique to the Perceptual Fluency Condition

Taken together it seems that at the perceptual fluency condition processing of the visual metaphor remained robust because participants could still process enough information from the ad not to feel as though their processing experience was constrained. Finally, for 25% of these participants the information they processed seemed sufficient to remind them of well-known trusted brands. These results together

could support why ratings for ad attitude and honesty remained so robust from the

conceptual fluency to the perceptual fluency condition for the visual metaphor ads.

These response patterns also suggest that even though the ratings for the visual ad were

consistent, the thought processes behind these ratings were quite different depending on

exposure condition.

Table 5: Thought Listing Categories with Examples

Thought-Listing Category	Total Thoughts	Example
Positive Processing Experience		Creative. Fun. Colorful. Thoughtful.
Negative Processing Experience		Very plain. Boring colors. Not creative.
Mention Ad Features		I saw a purple bottle that looked like a cleaning product.
Mention Ad Message		The first thing the ad makes you think about is when people have a scratchy feeling on their clothing.
Mention Style/Tactics—positive trust		The ad depicts the product and made the product look visually appealing. It is very clear in showing what the product is and is truthful.
Mention Style/Tactics—negative trust		The slogan provided felt misleading.
Complain: Lack of Processing Time		This ad did not give me enough time to read it or to even get what they were trying to sell me
Familiar Brand Memory Trigger		The Ziploc bag with the chain lock was a quality advertisement

Individual Difference Moderators

Results for the 6-item PK scale were discussed above in context of how it

interacted with both ad attitude and ad honesty ratings. Results with the PK scale lent

full support to H4 for the ad attitude and ad honesty ratings. As with study two the visual

style of processing scale again showed poor internal consistency ($\alpha=.672$) and

subsequently failed to moderate judgments.

The purpose of study four was to examine the impact of ad figuration on common indicators of attitude durability—attitude certainty and attitude accessibility—in both a conceptual fluency and perceptual fluency processing context.   The present study tested hypotheses from research questions #3.   Overall it was expected that more figurative ads would exhibit greater durability in both processing contexts, and would therefore exhibit higher attitude certainty ratings and faster reaction times toward the ad stimuli as communication style increased in figuration from verbal non-figurative to verbal figurative to the most figurative visual rhetorical ads.

Dependent Measures

Attitude Certainty.   Repeated measures ANOVA for the 2-item attitude certainty scale (r=.78) showed a strong main effect ($F_{(2,284)} = 7.22$, p<.01) for ad type, a strong main effect for condition ($F_{(1,142)} = 22.182$, p<.001) and a strong ad type x condition interaction ($F_{(2,284)} = 5.003$, p<.01).   There were no main effects or interactions involving persuasion knowledge.   Post hoc tests showed that when collapsed across condition attitude certainty ratings for the visual metaphor ad were higher ($F_{(1,142)} = 14.893$, p<.001) than corresponding ratings for both the verbal ads (which did not differ from each other).   Regarding the ad type x condition interaction illustrated below in figure 12, attitude certainty remained practically identical for the visual metaphor ads across both stimulus exposure conditions. In contrast for both the verbal metaphor ($F_{(1,144)} = 19.964$, p<.001) and verbal literal ($F_{(1,144)} = 23.483$, p<.001) ads, attitude certainty ratings dropped dramatically from the conceptual fluency condition to the perceptual fluency

condition.   With the exception of the verbal metaphors these results lent full support to H3a.
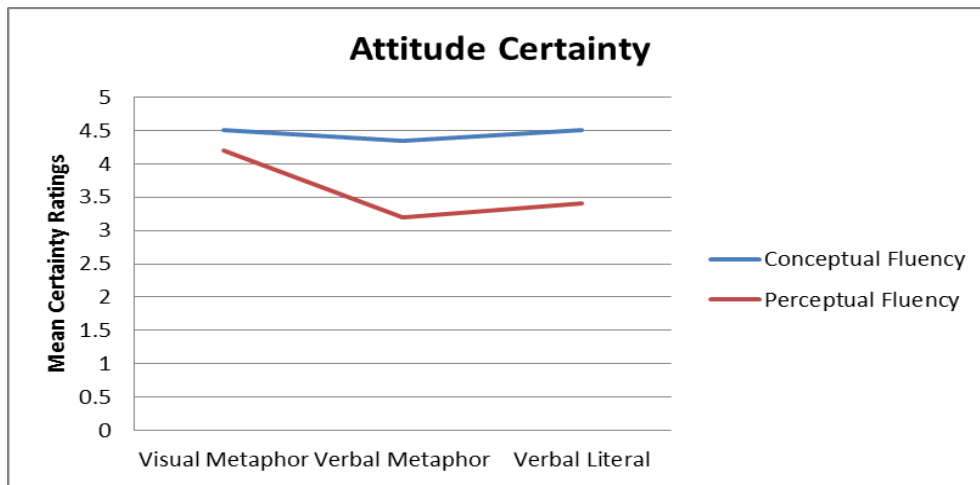

Figure 12: Attitude Certainty by Processing Condition

Attitude Accessibility.   Recall that after viewing the ad for either five seconds or one second participants completed an unrelated filler task to clear short-term memory. Participants were then asked to rate the ad they had seen as either positive or negative as quickly as they could. Fazio (1990; 1995) noted that the speed in which people are able to generate answers to attitude-related questions can be an indicator of how strong of an impact on memory that an attitude object (and subsequent formation of the attitude itself) makes. If an attitude is strong then it should make a lasting impact, and therefore should be more easily and more quickly retrieved from memory when called upon.

The reaction time manipulation in study four provided two sets of insights with respect to the delayed impact each ad stimulus had on participants.   First of all the results indicated the positive vs. negative reaction to the ad that persisted through short-term memory across different exposure times.   Overall there was no significant main effect for ad type, no main effect for condition, and no ad type x condition interaction.

However, post-hoc comparisons revealed that across the two exposure conditions participants responded positively to the visual metaphor ad more often (67%) than they did (55%) to the verbal literal ad ($F_{(1,138)} = 4.499$, p<.04). This choice pattern supplemented the pre-test results from study two, where more participants said they liked the visual metaphor ad more than the verbal literal ad, using a limited-exposure duration design in study four compared to an unlimited-exposure duration design in the pretest for study two.

With respect to the time it took participants to answer whether they viewed the ad positively or negatively, there was an overall effect for ad type collapsed across stimulus exposure condition ($F_{(2,268)} = 4.475$, p<.02). Planned Helmert contrasts revealed that reaction times for the verbal metaphor ad were marginally slower than reaction times for the verbal literal ad ($F_{(1,134)} = 3.009$, p<.10), and reaction times for the verbal metaphor ad were considerably slower than reaction times for the visual ad ($F_{(1,134)} = 6.239$, p=.013). There were no differences in reaction time between the verbal literal ad and the visual metaphor ad. Clearly under conditions of reduced exposure participants were having a little harder time sorting out their attitude memories for the figurative ad delivered in verbal form compared to visual form. These results lent full support for H3b with respect to the visual metaphor ad; for the other ads H3b was not supported and in some cases (e.g verbal literal ad reactions the same as visual metaphor and vaster than verbal metaphor) results were the opposite of what was expected.

Furthermore, there was a significant main effect for exposure condition ($F_{(1,134)} = 4.139$, p<.05). There were several components to this main effect. First and foremost, reaction times for the verbal literal ads were essentially flat across both exposure

conditions. In addition, in the conceptual fluency condition the reaction times for the verbal literal ad were faster than reaction times for the verbal metaphor ad ($F_{(1,131)} = 7.168$, $p<.01$). In contrast, in the perceptual fluency condition there was no difference in reaction times between both verbal ads but the reaction times for the visual metaphor ad were almost an entire second faster than they were for the visual ad in the conceptual fluency condition ($F_{(1,131)} = 14.33$, $p<.001$). These results in general were as expected for the visual metaphor ad but once again for the other ads results were the opposite of what H3b predicted.

Another important phenomenon driving the overall fluency condition effect was the rate of increase in reaction time speed for both the verbal metaphor ($F_{(1,135)} = 3.053$, $p<.10$) and the visual metaphor ad ($F_{(1,135)} = 3.056$, $p<.10$) from the 5-second to the perceptual fluency condition. While reaction times for both the metaphor ads may have decreased as stimulus exposure time decreased the rate of decrease for the visual metaphors (25%) was nearly twice the rate of decrease for the verbal metaphors (14%).
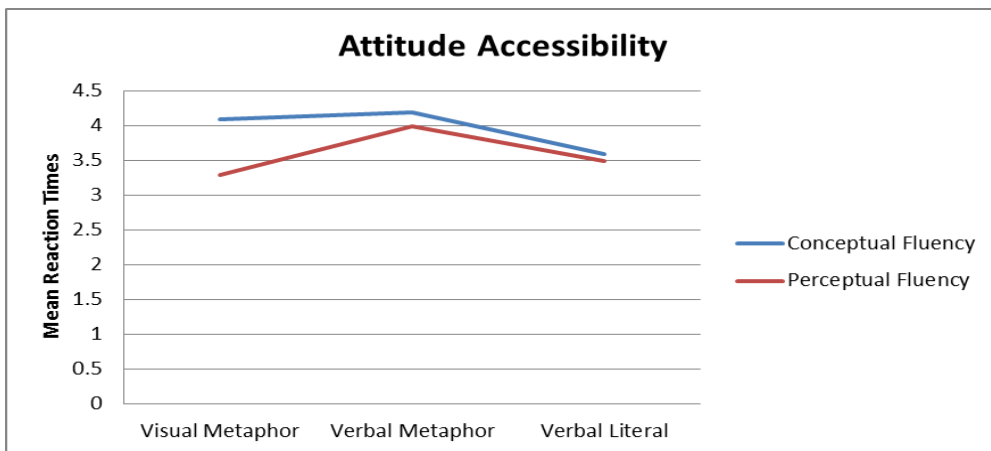

Figure 13: Attitude Accessibility by Fluency Condition

CHAPTER V

DISCUSSION

In conclusion, the present work expanded the theoretical basis available to marketing scholars for explaining how visual persuasion works at the deepest as well as at the most shallow (e.g. perceptual) levels of information processing. The findings showed that visual metaphors used in advertising stimulated thoughts and connections in the mind that were more personal and that deviated farther from the surface features and meaning of the ad relative to the nonfigurative stimuli. This created a more positive processing experience on two levels: enjoyment of processing the communication style when the individual had enough time to discern that style, and appreciation for the relative ease in extracting enough information under considerable mental strain to make salient meaning of the stimulus. The mind's response to this positive and pleasant experience triggered positive judgments, a high level of confidence in those positive judgments, and easier access to these judgments from memory compared to both figurative and non-figurative verbal stimuli of equivalent meaning. The key findings are discussed in detail, followed by a discussion of the implications, some opportunities for future research that builds on the knowledge produced in the present research, and finally some limitations.

Key Findings

Deep Experience-based Elaboration

Building on past research that has consistently shown that visual rhetoric elicits greater ad elaboration (McQuarrie, et al., 2003b), and that people can instantly perceive

that visual rhetoric has "multiple meanings" (McQuarrie, et al., 2005), study one looked

deeper into the nature of how people engage with an ad as the communication style

becomes more figurative.   Specifically, study one looked at the affective

(positive/negative emotional content) nature of the processing experience and the extent

to which figurative ads triggered thoughts and responses that deviated substantially from

anything specifically related to ad content.   One recent paper in the marketing literature

(Peracchio, et al., 2005) asked participants to reproduce a drawing of an image that was

manipulated for figurativeness.   The image contained a picture of an arm with a watch.

The less figurative arm had the watch on straight across the wrist while the figurative arm

wore the watch slanted at an angle. Just this slight modification of picture properties

caused participants in the figurative condition to reproduce both (a) larger images and (b)

images with things in them that had nothing to do with the original test image.   Thus, the

speculation was that more figurative visual images are more salient in memory overall

and specifically these types of images seem to trigger memories and associations that

deviate from the more literal meaning or intention of the ad.

As expected study one found a very similar response pattern for the more

figurative ad stimuli which used communication style rather than ad features as a

manipulation of figurativeness.   In the spirit of Peracchio, et al. (2005) study one did

more than just elicit top-of-mind responses/thoughts about the ads.   Instead, the personal

impact assessment procedure guided the participants through a deeper type of elaboration

process after extensive exposure to either figurative or the non-figurative ads.

Participants were asked to start with top-of-mind thoughts but then with each successive

stage of the task they were encouraged to look deeper into those thoughts and the personal relevance that the images were tapping into.

The PIA gave a more detailed understanding of the non-obvious differences between the experiences of processing the figurative stimuli compared to the experiences of processing the verbal literal ad.   For instance, the emotional tone of the responses was no more or less positive regardless of which ad stimulus a subject viewed.   While this result was unexpected, it confirms just how similar each ad was on the surface. As noted all the ads were deliberately information-poor, with features that were as bland as possible so that only the style of the communication stood out.   Therefore it is with confidence that one can conclude from the results of study one that communication style influenced to a meaningful degree the depth and breadth of connections stimulated in participants' minds.

The stories participants wrote in the final step of the PIA, based on 3rd-level associations triggered by ad exposure, carried the individuals' deeper thoughts and feelings farther away from ad meaning into their own world. While on the surface this was obviously not a more pleasant experience, the implication is that at a later point when the subject is asked to make judgments about the ad—liking judgments and truth judgments, for example—the true appreciation for this more personal and relevant experience will manifest itself and lead to more favorable responses.

Finally, it is worth noting that the metaphoric thinking ability test, an assessment of consumer creativity based on inherent tendencies to use metaphors on command when asked to complete unfinished sentences, had no effect on processing the ads and the responses that were generated.   The potential limitations which come from how the test

is measured are discussed at the end of this section.   Besides the measurement issues the lack of effectiveness of the test could also suggest that creativity—a form of intelligence according to Burroughs and Mick (2004), had no effect because the brain was not responding to the substance of the ad but to the experience of processing the information. Intelligence of any kind requires a high skill with information processing, to include synthesizing information across multiple domains. Thought listing patterns in study two (pretest) and study three gave strong indication that this level of information processing/information synthesis was not taking place when processing the current ad stimuli.   As noted in the results most thoughts were generic and experiential in nature.

Positive Judgments

As expected based on past research in advertising rhetoric, participants in study two reported a great deal more engagement and elaboration of the visual metaphor ad compared to both verbal ad stimuli.   The pretest established that, in a non-fluency processing context, elaboration about ad message constituted around 32% of all thoughts. Virtually all other thoughts were either thoughts about communication style and/or general emotion-laden thoughts about the experience of processing the ad. Overwhelmingly these thoughts were positive in tone with regards to the visual metaphor ad and they were neutral-to mostly negative in tone with regards to the verbal ads.   In fact, the majority of the participants who spoke positively about the verbal literal ad did so because specifically had negative feelings toward the visual metaphor ad. So in a sense most of the positive judgments for the verbal literal ad were in fact negative judgments against the visual metaphor ad.   Clearly the visual figures were making a

113

strong emotional impact—overwhelmingly to the positive, but for some people the negative response was strong and propelled them to choose the only other option.

Regarding the dependent variables, participants demonstrated clear differences in their attitude judgments of the visual metaphor ad compared to the verbal ads. However, despite the fact that high PK participants were more aware of communication tactics overall—and with the visual metaphor ad specifically—compared to low PK participants there was no difference in judgments in study two based on level of persuasion knowledge. Therefore in the non-fluency context persuasive outcomes as judged by elaboration and attitude seemed to be primarily attributable to differences in communication style. In support of Janiszewski's (2008) concept of experience-driven visual information processing, the differences in the experience of processing each communication style drove judgments regardless of how sensitive participants were to the persuasion tactics embedded within that communication style.

The appropriateness process measure used in study two was in part a judgment about how forthright participants perceived the marketer behind the persuasion attempt to be. Clearly high PK participants perceived the marketer as more forthright than low PK participants. With respect to ad honesty ratings, however, there were no differences in honesty perceptions with respect to PK self-confidence. Interestingly, the response patterns for ad honesty mirrored the patterns for ad elaboration but not ad attitude. Once again it was arguably the experience of processing the communication style driving honesty perceptions about the ad and not sensitivity to persuasive intent. This is consistent with past literature which established honesty ratings as a processing fluency-driven judgment (Winkielman, et al., 2003b).

114

Processing Fluency-driven Judgments

Studies three and four addressed the current dissertation's questions and hypotheses concerning the influence of processing fluency on judgments and on the lasting strength of the judgments formed from incidental exposure to verbal literal, verbal metaphor, and visual metaphoric ad stimuli. Study three used the same measures as study two, again grouping participants according to PK levels, and added the manipulation of processing experience by limiting exposure to the stimuli to either five seconds or one second. Thus participants most likely had to rely heavily and in the case of the perceptual fluency condition almost exclusively on their subjective reaction to the experience of processing the stimulus in order to access information pertinent to forming judgments about the stimulus.

A closer examination of the means in table 3 reveals a pattern of responses that strongly suggests the influence of processing fluency on judgments. It seems that when exposure time to the stimulus was limited and participants were prevented from fully and completely extracting all available information about the stimuli, aggregate ratings on the ad elaboration, ad attitude, and ad honesty scales went up overall. These response patterns are consistent with the kind of response patterns predicted by theories of processing fluency in the sense that at limited exposure times, with strain on the mind, the experience of successfully being able to process the stimuli and extract enough meaning to complete the required task generated positive affect and that positive affect contributed to higher ratings, particularly for ad attitude and especially for participants' perceptions of ad honesty and truthfulness (Winkielman, et al., 2003b).

115

Most studies on which theories of visual fluency (Winkielman, et al., 2003a) derive were done using simple visual objects such as triangles or circles (Reber, et al., 1999; Reber, et al., 1998; Reber, et al., 2004). One study in the marketing literature (Nordheilm 2002) showed fluency-related effects on judgments for brand logos. Other marketing-related studies have demonstrated fluency effects related to memory (Lee, 2004; Shapiro, 1999). But to date no studies have demonstrated the interaction between processing experience and communication style with people's liking and truth judgments about a complex information vehicle such as a print advertisement.

There were three key themes in the response patterns for study three. First, the non-figurative verbal literal ad showed lower ratings than the figurative ads in all experimental conditions. Conversely, the visual metaphoric ads showed consistently higher ratings regardless of the experimental condition with the exception of an equivalent honesty rating with the verbal metaphors in the conceptual fluency condition. Third, verbal rhetoric ads enjoyed some processing advantages over the verbal literal ads in the conceptual but not the perceptual fluency condition. Thought listing responses seemed to indicate that participants were indeed able to derive the 'pleasure of the text' (McQuarrie, et al., 1996) benefits from verbal metaphors in the conceptual fluency condition, but once exposure was limited further there was a drop-off so that the verbal metaphors were rated no differently than the verbal literal ads. The clearest indicator of this strain was the increase from about 1% to 24% in complaints about lack of processing time for the verbal metaphor ad when going from the conceptual to the perceptual fluency processing condition.

116

Visual Metaphors and Processing Fluency

As noted, the ratings for the visual metaphor ads across all studies and in all experimental contexts remained consistently high. In fact if one were to examine the graphs for ad elaboration, ad attitude, and ad honesty for the visual metaphors across the conceptual fluency and the perceptual fluency conditions it is evident that the global means (controlled for individual differences) are almost identical. This is in contrast to the statistically significant drop-offs in ratings of all the dependent measures for the verbal metaphoric ads discussed above. This pattern of responses speaks to the power of the brain to process visual information even in situations where processing resources are somewhat highly constrained. However, a closer examination of the responses for the visual metaphors across the two stimulus exposure conditions reveals some rich differences in mental processes that strongly suggested the influence of processing fluency.

In the conceptual fluency condition there were strong PK effects for ad attitude and ad honesty ratings that were not present at either the non-fluency or the perceptual fluency condition, but for seemingly different reasons. The high PK participants who claimed to be more sensitive to persuasion tactics and more confident in their persuasion coping abilities rated the visual metaphors more highly than the low PK participants in both cases. This PK effect in the conceptual fluency condition did not occur at the non-fluency condition despite the fact that high PK participants rated the ads as more "tactical" and they rated the ads as more appropriate than the low PK participants. Thought listing responses in study three seemed to suggest that processing experience was driving the ad honesty effects more-so than sensitivity to persuasion tactics.

117

In the perceptual fluency condition, the overall means were nearly identical for ad elaboration, ad attitude, and ad honesty ratings. This suggests that, as with the conceptual fluency condition, participants were more sensitive to the processing experience and this experiential information was contributing to their judgments. However, thought-listing patterns suggested that the underlying mental processes were vastly different at this exposure condition compared to the conceptual fluency condition. It seems that the ratings were almost entirely driven by perceptual fluency related to ease of processing as opposed to thorough processing of the visual figure. The visual ads were easy enough for participants to process despite intense constraints on their mental resources that they were able to discern some meaning from the ads. This general "visual fluency" experience (Winkielman, et al., 2003a) resulted in tremendous drops in negative trust-related thoughts about the visual ads coupled with increases in positive trust-related thoughts. The PK effect that was present and strong in the conceptual fluency condition completely disappeared.

Further evidence that the positive thoughts were more about "general fluency" and less about the experience of the visual figure came from the fact that 25% of the participants processing the visual ad mentioned that it reminded them of a well-known brand. For example one of the visual metaphor ads was for a fictitious brand of sandwich bags (see Appendix A). The ad was actually created from a real ad for Ziploc storage bags, modified by the artist to change the brand name. Within this 25% mention of trusted brands numerous participants used the brand term Ziploc. It is worth noting that not one single subject viewing the visual metaphor ad in the conceptual fluency condition mentioned a thought about a well-known brand. As noted previously participants were

118

able to get just enough information from the visual ad to make this connection, and their subjective response to this feeling of successful meaning creation resulted in the high ratings with no meaningful deliberation about the persuasive tactic and very few negative thoughts at all about the ad.

Thought Listing Responses and Processing Fluency

General experiential thoughts were positive in both conditions for the most figurative visual ad, and they were equally skewed toward negative experiential thoughts for the non-figurative verbal literal ad across both exposure conditions.   General experiential thoughts were divided about equally between positive and negative for the verbal metaphor ads in both conditions, although they were slightly more negative in the perceptual fluency condition.   This thought pattern mirrored ratings for ad elaboration almost perfectly with respect to all the ad stimuli.   Furthermore, as noted ease of processing was not an issue at all for the visual ads in either condition, but there were large numbers of complaints about lack of time to process the ads for both verbal ads in the perceptual fluency condition.   This corresponded to a much greater number of negative trust-related comments about the verbal ads in the perceptual fluency condition while negative trust-related thoughts about the visual ad decreased dramatically as exposure time decreased.

Attitude Durability: Visuals as a Central Message

Attitude Certainty. Attitude certainty is often associated closely with attitude accessibility (Fazio, 1995; Petty, et al., 1995).   Stronger attitudes are more easily retrieved from memory—more accessible—and so participants tend to be more certain

119

about these attitudes than they might be about attitudes with respect to attitude objects that made less of an impact on memory. Attitude certainty results from study four provided more support to the evidence amassed in the first three studies regarding the potential for a highly salient and pleasant processing experience to produce strong attitudes.

Attitude certainty basically measures participants' subjective evaluations of the mental experience they had when forming (and subsequently retrieving) judgments about the stimuli they encounter. Thus, low attitude certainty ratings for the verbal ads lend credence to the evidence that the experience of processing the stimuli and then forming judgments about them was either unpleasant or not sufficiently memorable to produce high levels of certainty about the attitudes that the stimuli elicited. Based on thought listing in study three it seems likely that the lack of certainty for the verbal ads in study four resulted from a combination of both an unpleasant (lack of figuration, lack of time to sufficiently process the ads) and somewhat incomplete processing experience (lack of time to process the ads).

Visuals: Central Information Transfer. As noted in Chapter II purely visual stimuli ads do not "argue" in the way that traditional persuasion theories define the idea (McQuarrie, et al., 2005). Visuals certainly do transmit information, as has been argued before (Scott, et al., 2007) and has been shown clearly in the present work. The important distinction however is that this information does not come in the form of 'strong arguments' and 'weak arguments' the way theories such as the ELM prefer to characterize verbal 'messages.' The information transmitted by the visuals is highly experiential in nature; in fact the present study did provide evidence that the experience

120

of processing the visual was information in and of itself (Janiszewski 2008).

Examination of the results for study four combined with previous studies in the present

dissertation seemed to accentuate this subtle yet important difference between what

constitutes a visual "message" compared to the traditional meaning of the word

"message" in persuasion theory.

A collective look at all of the results for the visual metaphors across the four

studies could make a strong case for visual metaphors serving as a "strong central

message" in the non-fluency and conceptual fluency conditions.   The evidence reveals

deeper elaboration (study one), honesty ratings that equaled appropriateness ratings

(study two), extensive deliberation about ad tactics and their trustworthiness coupled with

strong differences based on persuasion knowledge (study three) capped off by high

attitude certainty and evidence of an equal amount of attitude accessibility as other ads

(study four).   This is an interesting set of results worthy of future exploration because

traditional persuasion theories such as the ELM (Petty, et al., 1983) characterize visuals

as non-central information that either supplement that central ad message or get evaluated

as relevant information when a person either cannot or chooses not to elaborate deeply on

the central message.

Same Outcomes with Different Process. The most glaring omission of traditional

theories about persuasion is that they do not give visual information credit for having the

capability to serve itself as the "central meaning agent" in persuasive communication

(Scott, et al., 2007).   Scott and Vargas point out very clearly that this omission may

very well stem from a lack of trying. The so-called lack of effort on the part of

traditional theories to validate visuals as a central persuasion agent mostly stemmed from

121

not giving visuals enough credit conceptually or theoretically (Kenney, et al., 2003).

Study four results, along with results for ratings scales and elaboration measurements in study one (e.g. PIA) seemed to corroborate that visuals are in fact cable of outcomes that equate to central processing outcomes. However, the thought-listing analyses also confirm Janiszewski's (2008) conceptualization of visual processing in that the "central information" processed from a visual stimulus is to a large degree experiential and not semantic. Most of the thoughts were either general experiential thoughts or positive emotional thoughts about the communication device that equated to "pleasure of the text" semantic processing (McQuarrie, et al., 1996).

Attitude Durability: Strong 'Peripheral' Persuasion

Building on the discussion about the persuasive ability demonstrated by the visual ads in the present dissertation, the most surprising result was the fast reaction times for the positive/negative reaction to the visual ads in study four. This was unexpected going into the study, but examining this result in conjunction with thought listing results from study three this seems to provide conclusive evidence that the visual metaphor ad stimuli enjoyed some very powerful perceptual fluency advantages. The fluency advantages of the visual penetrated PK filters in study three, demonstrated a very large decrease in negative thoughts about trust, and lastly revealed a thought process that linked information accessed from the visual device to prominent existing memories such as well-known brands that came to mind.

The last piece of evidence discussed above—frequent mentions of well-known brands triggered in memory—was the piece of evidence that, when linked to the fast reaction times in study four, suggests strong peripheral persuasion. In the perceptual

fluency condition a large percentage of thoughts listed from study three were complaints about lack of processing time.   Lack of processing time complaints are equivalent to complaints about lack of meaning transfer.   Given that there almost literally no complaints about lack of processing time for the visual ads in the perceptual fluency condition, combined with the evidence of rather sophisticated meaning transfer necessary to trigger memories of familiar brands, the case is strong that even under heavy mental constraint visuals can still persuade strongly.   This is especially contrary to what traditional persuasion theories believed about the capacity of visuals as persuasion tools.

<center>Marketing Implications and Future Research</center>

The present research improved our understanding of an important question regarding visual persuasion with rhetorical communication: "how do people respond to increasingly figurative advertising as the processing experience changes"?   The results discovered a highly nuanced pattern of responses with respect to visual rhetoric: the nature of the (positive/pleasant) processing experience for the visual ads compared to verbal rhetoric and verbal literal ads resulted in equally positive judgments even as the processing experience changed.   As participants' minds were put under more and more strain, and even as their acceptance of verbal persuasive communication styles withered away under this strain the acceptance of visual information stayed strong but based on very different mental functioning. Some compelling implications for marketers present themselves in light of these response patterns.

Ethics Considerations.   An important study that the present dissertation anchored on was McQuarrie et al.'s (2005) study showing that based on reaction time analyses individuals could instantly tell that a visual metaphor had multiple meanings.   Building

<center>123</center>

on that study, as noted in Chapter II visuals penetrate the mind instantaneously and the information is processed below the level of conscious awareness (Barry, 1997; Barry, 2005).   Furthermore, individuals in modern society are not as adept at understanding their own visual systems as humans were in the past (Williams, et al., 2007).   This is in large part because modern society rewards "rational processing" and "verbal processing". The result is that people become 'visual fools' in that they are not even aware of the power of their own mind to process information and make judgments about the information in a manner in which they are not necessarily aware.   This is an important point to keep in mind in light of: (a) the aforementioned nature of visual processing, (b) the fact that 75% of the information processed in the brain is visual (Franks 2003) and (c) the fact that the use of visuals as a persuasion tool is pervasive in the modern marketplace (Phillips, et al., 2002; Schroeder, 2002).

The fact that participants continued to rate the visual ads high in liking and honesty judgments as exposure time decreased—despite the fact that they were unable to fully detect and substantively deliberate the marketing tactic—has direct implications regarding the deceptive potential of visuals.   Recall from the thought listing results in study three that negative comments relating the marketing tactic to marketer trust dropped by nearly 67% from the conceptual fluency condition to the perceptual fluency condition while positive comments to the same effect remained consistent or increased slightly.   In the experimental ratings the low PK participants who did not trust the ad as much in the conceptual fluency condition trusted the ad the same as high PK participants in the perceptual fluency condition.   Furthermore, study four showed that the positive reactions to the visual ad in the perceptual fluency condition were highly salient in

124

memory as evidenced by considerably fast reaction times.   It seems that the participants in this condition were pre-disposed to positive judgments almost instantaneously all because their minds appreciated that some kind of successful meaning was transferred.

Such an implication brings to mind the potential to use fleeting visual images in advertising to predispose participants to positive acceptance perhaps without them fully realizing it.   A real-world example of this might be the ads for pharmaceuticals.   There are lots of fleeting images of the product/logo, coupled with fleeting images of happy people in serene settings. Semantically these fleeting images have absolutely no relationship to the substantive nature of the drug and what it proposes to do for the body. Furthermore, these fleeting images are accompanied by voice-overs that quickly explain side effects and contra-indications. These results of the present study suggest that a busy person will be under too much constraint to process the verbal information, but their busy minds will appreciate being able to discern meaning from the fleeting visuals and therefore these people will subconsciously move towards acceptance assuming they can remember key brand-related information from the ad.

Future research should explore more deeply the extent to which visual advertising shown under high mental constraint might predispose individuals to judge harmful products more positively based on processing experience-influenced judgments rather than semantic based judgments.   It seems unlikely that individuals would rate every product more favorably based solely on experience alone. It seems more reasonable to expect that product category considerations would moderate the extent to which individuals ignored substance in favor of communication style when forming judgments. This seems the case given that in the perceptual fluency condition participants were able

to process enough of the visual ads to trigger associations with well-known brands in the same product category as the ad they were viewing.

Fluency, Figuration and Memory. Studies in the marketing literature have shown that ads which are more fluent make a salient impact on implicit memory for the brands (Lee, 2004; Shapiro, 1999). Specifically, ads that are conceptually fluent improve explicit memory for the brand whereas ads which were high in perceptual fluency improved implicit memory for the brands. It is important to note that both of these studies which measured consumer memory for the brand used real brands whereas the present research used fictitious brands in order to minimize any spurious effects that ads with real brands might cause regarding participants' ratings of the different communication styles.

The results from study three and study four fit conceptually with the idea that perceptual fluency improves memory for a well-known brand. Recall that in the perceptual fluency condition in study three, thought listing results showed that one of the reasons participants' rated the visual metaphor ads as more trustworthy was because what little information they could discern reminded them of a well-known brand. For example the fictitious visual metaphor ad for sandwich bags reminded participants of Ziploc 25% of the time whereas the verbal ads did not remind participants of any well-known brands in any of the fluency conditions. This suggests that perhaps well-known brands who utilize visual metaphors in their advertising might be able to supplement or improve consumers' subconscious memory for their brands. Future research should examine the extent to which visual metaphors impact brand equity for well-established brands.

126

Certainly a study like this makes sense given how popular the technique has been for print ads in major magazines over the last 30-40 years (Phillips, et al., 2002).

Fluency, Figuration and Different Levels of Processing

As noted in chapter II processing fluency occurs at all levels of information processing (Alter, et al., 2009) not just subconscious (Schwarz 2004) or pre-conscious levels.   And while the end results of fluency are consistent, the ways in which people come to these judgments are distinct depending on the context in which people process the information/stimuli.   This section has already introduced implications regarding how perceptual fluency might improve consumer memory for well-known brands.

It would be interesting then to see how memory for well-known vs. new brands is impacted in conceptual fluency conditions where participants can discern substantive ad content more fully.   Might a new brand gain some advantage over well-known brands if the new brand uses visual rhetoric in its ads while the well-known brand does not? There was clearly more deliberation going on with the visual figures in studies three and four, as evidenced by slower reaction times in study four (despite equal attitude certainty) and as evidenced by the PK effect for attitude and honesty ratings in the conceptual fluency condition but not in the perceptual fluency condition in study three.   If participants in the conceptual fluency condition were directing their heightened awareness of processing experience onto communication style as was suggested earlier in this chapter, then manipulating how the figure is processed conceptually/semantically would be one way to confirm this supposition.

Levels of Visual Figuration

Building on the discussion above, there is ample research that can be done that might add to the improved understanding of how participants process visual rhetoric that varies in figurativeness.   The visual rhetoric typology (Phillips, et al., 2004) referred to in Chapter II is a comprehensive framework for all known constructions of visual rhetoric that ranges from low levels to very high levels of figurativeness along the two dimensions: sensory ("artful") and cognitive ("deviation").   Research within the Reader Response Theory of visual persuasion (Scott, 1994a; 1994b; Scott, et al., 2007) believes that visuals are highly capable of tremendous nuances in complexity that one might see with verbal information. If judgments about visuals are based on both figurativeness and on the nature of the processing experience as suggested in the present research then one might expect to see meaningful differences in judgments as the ad stimuli move from lower to higher ends of figurativeness along the visual typology.

Moderators

A final possibility for future research involves the moderators: persuasion knowledge (studies one, three, and four), visual style of processing (study three) and metaphoric thinking ability (study two).   Only the PK scale showed any effects and when you look at the results and the research context in aggregate it makes sense why. Participants were keenly aware of the context in which their processing experience was occurring: persuasion.   Future research is needed to validate and expand upon the conclusions regarding the PK scale discussed earlier in the key findings.   The PK literature suggests that in order for persuasion knowledge to be effective it must be activated (Campbell, et al., 2008).   The question that still needs answering was whether

or not that was what happened in the conceptual fluency condition with study three: did the hypersensitivity to processing experience combined with intense attention to the communication figure activate PK, and is that what drove the effects in the conceptual fluency condition? It seems plausible given that those same effects were not present in the perceptual fluency condition when participants were unable to process the ads fully enough to discern the substantive nature of the visual figure.

<center>Limitations and Potential Confounds</center>

Ad Stimuli Design

One limitation of note is that the ad stimuli were designed for a specific study (McQuarrie, et al., 2005) in which subjects had plenty of time to look at the ad. While in general the kind of experimental differences between the communication styles represented by the ad stimuli were achieved, most of the hypotheses in the present research were at best only partially supported. In particular the verbal metaphor ads in the present study rarely separated themselves from both the visual metaphors and verbal literal ads as expected in conditions where subjects had plenty of time to examine the ads. This lack of separation failed to replicate past results from McQuarrie et al. (1996; 1999) when using verbal and visual metaphors in the same experiment. One possible reason is that in past research verbal language was not always used in a print ad; instead, the verbal stimuli were just in sentence form so that the verbal words were more prominent.

A closer examination of the ad stimuli (Appendix B) shows that the visual images in the print ads are actually more prominent in size than the verbal taglines in the corresponding verbal ads. Thus even in the "verbal ads" visual stimuli are more prominent to the eye than the verbal aspects of the ad. It is possible, therefore, that if the

<center>129</center>

font size of the verbal print ads was increased so that the verbal language in the ads were as prominent as in those ads as the visual images were in the visual metaphor ads then a bit more separation between verbal metaphors and other ad stimuli might have been achieved.

Individual Difference Moderators

Metaphoric Thinking Ability. The metaphoric thinking ability-sentence completion test has not been used in a wide variety of research to date. Phillips et al. (2009) were able to get some moderation effects with it in a design using only verbal stimuli. In that experiment, however, the test was taken before stimuli were shown. In the present research the measure was not administered until after the PIA procedure (study one) had been completed. Beyond the fact that the scores of the exam were so low (i.e. average score in both experimental groups was below 50%), it was curious that the scores for subjects viewing the visual metaphors were quite higher than the scores for subjects viewing the verbal metaphors. This difference in experimental design relative to past research raises the possibility that exposure to the more figurative vs. the less figurative ads may have primed participants to think figuratively.

The other design-related possibility is fatigue. Participants could have been tired mentally after undergoing a rather taxing procedure that extracted a deep level of introspection from the individuals taking it such that they were not as equipped to give the kind of effort necessary to generate highly figurative metaphors to complete the MTA-SC. The test itself is a test that requires some mental exertion to complete, unlike other individual difference scales that only require answering simple Likert-style ratings questions.

Persuasion Knowledge. As noted, the PK scale has never been used before with visual stimuli in a persuasive context that was based on processing experience-driven judgments as opposed to verbal-based persuasion contexts.   Most PK-based research is conducted with scenarios (Campbell, et al., 2008), or with studies where subjects read something about the persuasive agent that activates persuasion knowledge (Ahluwalia, et al., 2004).   The present research did not directly activate persuasion knowledge, nor did the research experiments put the participants in situations where they would naturally be expected to defend themselves against an overt persuasion attempt.   However the clear and consistent effects with PK demonstrated in the conceptual fluency condition for study three definitely seemed to serve as some kind of priming mechanism for PK.   Thus the question remains: what was it about the conceptual fluency manipulation that stimulated PK effects that the other experimental designs were unable to achieve?   If the findings with the PK prove to be robust then that will be a major theoretical contribution to the entire persuasion knowledge domain.

Isolating Processing Fluency

The conceptual fluency vs. perceptual fluency conditions, while having some justification from past literature (Nordhielm, 2002; Reber, et al., 1998), was also data-driven to a certain extent (see pretest results for study three).   The perceptual fluency manipulation seemed robust given that all hypotheses for this condition were supported, and given the nature of the responses in the thought listing questions from study three (i.e. complaints about processing time, and no indication that ad meaning/message was processed semantically).

However, it cannot be definitively concluded at this time that conceptual fluency was successfully isolated.   There was some evidence to suggest that the manipulation was as intended while there is other evidence to suggest that a 5-second stimulus exposure may have been too long and therefore permitted a deeper level of processing than was intended. Thought listing responses from study three did indicate that the ads were processed semantically in the conceptual fluency condition compared to the perceptual fluency condition, but given how fast visual information is processed (Barry 1997) it may be that the processing was deeper than what would be expected with conceptual fluency.

One indication that conceptual fluency may not have been properly isolated came with the results in study four. The expectation was that reaction times for the attitude measures would be faster for the visual ad in the conceptual fluency condition than what the results actually showed. The fact that the reaction times were unexpectedly slow in the conceptual fluency condition for study four suggest that participants may have been deliberating on the ad more deeply than was intended by the conceptual fluency manipulation.   One simple way to test conceptual fluency is with a misattribution study (Winkielman, et al., 2003b) where in one condition subjects are told that their emotional reaction to the stimulus can influence their judgments. This is achieved by giving subjects a brief and simple, yet prominent, warning to pay attention to how they feel about the stimulus they just encountered (Schwarz, et al., 2006).   If participants who are told to focus on their feelings reverse their judgments then that typically confirms that conceptual/semantic fluency was the main driver of their sentiments toward the experimental stimulus. This confirms conceptual fluency because while the experiential

132

information was the prominent judgment there was some semantic processing occurring as well; this is in contrast to perceptual fluency where not enough segmental processing occurs so that there is no other useful information to help form judgments other than the processing experience.

Using Verbal Measures to Assess Visual Processing

There were some issues with assessing visual processing in the present study that are inherent given the limits of available techniques to researchers at the present time. The past results from McQuarrie et al. (1999; 2003b), Scott et al. (2007), and of course the present research confirm that visual and verbal processing happen in very different ways from each other. But scales like visual style of processing (Childers, et al., 1985), the MTA-SC, and even the PIA procedure used in study one are verbal techniques.

Therefore, mixed results that failed to separate visual from verbal processing effects may not be due to the fact that there are no differences but may instead be due to limitations in participants' ability to express those differences using the written word. This seems especially true in the present research with the mixed results from the PIA and the MTA-SC in study one. That participants throughout the study responded so much more powerfully to visual metaphor than other ad communication styles suggests that their minds were in fact able to detect and appreciate the technique: thus, that they scored so low on the MTA-SC seems contradictory; at the very least this discrepancy in responding deserves further research and hopefully the development of better techniques that can help researchers have a more accurate assessment of mental capabilities with respect to visual/verbal processing.

APPENDIX A

## VISUAL METAPHOR AD DESCRIBED IN CHAPTER I

APPENDIX B

AD STIMULI

Full Set: Non-Figurative Verbal Literal Stimuli

These ads (McQuarrie & Phillips, 2005) contain the verbal literal taglines representing the non-figurative controls in all experiments for the present dissertation. All ads were based on real brands, professionally manipulated to represent fictitious brands and to remove extraneous sources of information that could affect ratings (e.g. vivid background colors).
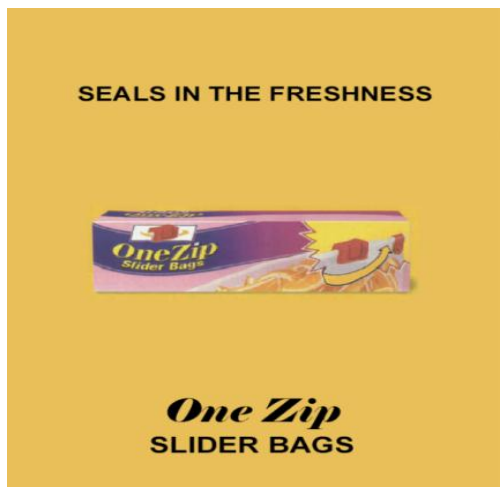
Full Set: Verbal Metaphor Stimuli

These ad stimuli (McQuarrie & Phillips, 2005) contain a figurative tag line.

Everything else about the ad is identical to the verbal literal version.
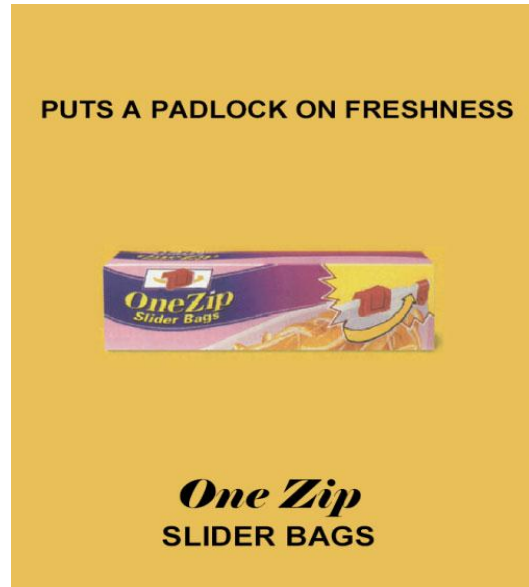
Full Set: Visual Metaphor Stimuli

These ad stimuli (McQuarrie & Phillips, 2005) contain the visual juxtapositions and visual fusions (Phillips & McQuarrie, 2004) which take two unrelated concepts and bring them together to form a new meaning. Pre-tests showed that these ads shared similar implicature as the previous versions, but they also produced a wider variety of interpretations that were different from the verbal editions.
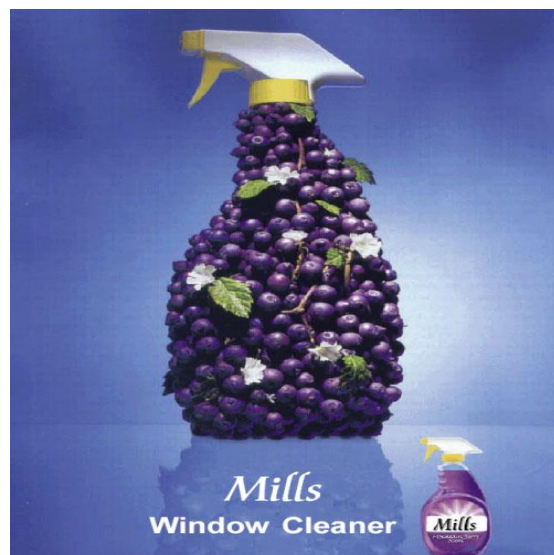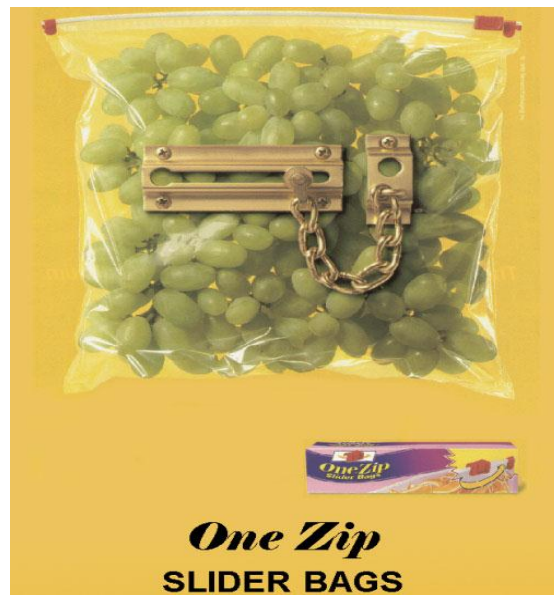
STUDY ONE SURVEY INSTRUMENT: PERSONAL IMPACT ASSESSMENT

After viewing the ad for 60-120 seconds, the task proceeds through each step in sequential order at the person's leisure.   Participants were encouraged to take their time and be as thorough as possible. All data was collected using pencil and paper.   Ample space was provided to answer each question.

---

1) <u>List Primary Words</u>.   List a single word that describes each of the significant parts of the image that seem significant to you — characters, places, things, colors/tone, feelings, and so on. <u>Leave enough space</u> around each word on the list to write a number
of other words.

---

2) List Associative Words. Look at each of the primary words you have written, one at a time. Start with the first word and, beside or in a circle around that word, write other words (word associations that come into your mind as you think about the first word). Finish all of the associations for the first word before you move on to the next word. TRY to list at least three associative words for each primary word. Listing more words is fine.

---

3) Select the Most Significant Associative Word. START back at the first primary word and mull its associative words over in your mind, and go down the list. Try to intuit which is the most significant associative word for each primary word and draw a circle around it or underline it. Do not overthink this; simply pick the word that seems most appropriate to you as you read the associative words surrounding the primary words.

4.) Below the primary word list, make a list of the most significant associative words. Reflect on the associative words ONLY and relate each to an inner part of yourself. Look at each word in the list and consider what part of your inner self that word represents or symbolizes. Write that part of yourself to the right of the "significant word association." To identify the inner parts of yourself, it may be helpful to say "my inner_____ self," for example, my inner vulnerable self, my inner trusting self, my inner fantasy self.

5.) Review the Inner Symbols. Look over these word symbols of your inner self and see if there is some clear connection or story that arises about yourself from the interaction of the inner symbols from the image. This story, connection, or meaning may be simply a feeling, or it may come to you in a flash, or as an ahhhh-haaa-type response.

6). Write down the story or insight.   Below, or on the back of this page….think about how the story or insight applies to your attraction to the image, or how it offers insights about your own life relative to the image.

Metaphoric Thinking Ability—Sentence Completion Test (Instrument)

Due to copyright restrictions only a couple of examples are provided here. The full test includes 9 unfinished sentences.

Instructions

Below are a number of abstract concepts. For each concept, pretend that it is your job to get someone who is not familiar with the concept to appreciate its essence. You do this by completing the given statement in such a way that it paints a concise yet vivid image portraying a way of thinking about that concept. For example, if you were given the concept "being deceived" you might use your imagination and come up with:

Being deceived is...
.
> *...like suffering fingerprint smudges on the lens of truth.*
> *...to make a deal with the Devil.*
> *...equal to playing cards with someone who has an ace up their sleeve.*
> *...to be sold the Brooklyn Bridge.*

...like believing the fox will guard the chicken coop.

Watching a sunset is

_____

Helping someone is

_____

Being in love is

_____

EXAMPLE SURVEY INSTRUMENT: STUDY TWO

This test was conducted using the Qualtrics online survey software system.

Participants saw only one ad in a between-groups design, then answered the DVs and the

PK individual difference measure questions. All survey questions were randomized.

This ad was difficult to process

not at all	2	3	4	5	6	Very much
○	○	○	○	○	○	○

This ad was...

Insincere	2	3	4	5	6	Sincere
○	○	○	○	○	○	○

This ad was...

Dull	2	3	4	5	6	Vivid
○	○	○	○	○	○	○

Rate the extent to which this ad used a tactic...

Not at all	2	3	4	5	6	Very much
○	○	○	○	○	○	○

This ad was...

Plain/Matter-of-fact	2	3	4	5	6	Artful/Clever
○	○	○	○	○	○	○

This ad was...

Boring	2	3	4	5	6	Interesting
○	○	○	○	○	○	○

This ad was...

Dishonest	2	3	4	5	6	Honest
○	○	○	○	○	○	○

Your overall attitude toward this ad was...

Negative	2	3	4	5	6	Positive
⊙	⊙	⊙	⊙	⊙	⊙	⊙

Rate your enjoyment of this ad...

Did not enjoy	2	3	4	5	6	Enjoyed
⊙	⊙	⊙	⊙	⊙	⊙	⊙

Rate how much you liked this ad...

Disliked	2	3	4	5	6	Liked
⊙	⊙	⊙	⊙	⊙	⊙	⊙

This ad was...

Untrustworthy	2	3	4	5	6	Trustworthy
⊙	⊙	⊙	⊙	⊙	⊙	⊙

Experiencing this ad was....

Unpleasant	2	3	4	5	6	Pleasant
⊙	⊙	⊙	⊙	⊙	⊙	⊙

>>

I can tell when an offer has strings attached

Extremely uncharacteristic of me	2	3	4	5	6	Extremely characteristic of me
⊙	⊙	⊙	⊙	⊙	⊙	⊙

I have no trouble understanding the bargaining tactics used by salespersons

Extremely uncharacteristic of me	2	3	4	5	6	Extremely characteristic of me
⊙	⊙	⊙	⊙	⊙	⊙	⊙

I know when an offer is 'too good to be true'

Extremely uncharacteristic of me	2	3	4	5	6	Extremely characteristic of me
⊙	⊙	⊙	⊙	⊙	⊙	⊙

I know when a marketer is pressuring me to buy

Extremely uncharacteristic of me	2	3	4	5	6	Extremely characteristic of me
⊙	⊙	⊙	⊙	⊙	⊙	⊙

I can separate fact from fantasy in advertising

Extremely uncharacteristic of me	2	3	4	5	6	Extremely characteristic of me
⊙	⊙	⊙	⊙	⊙	⊙	⊙

I can see through sales gimmicks used to get consumers to buy

Extremely uncharacteristic of me	2	3	4	5	6	Extremely characteristic of me

APPENDIX E

EXAMPLE SURVEY INSTRUMENT FOR STUDY THREE

Available on the following page is an example of the survey participants saw when using Empirisoft's Media Lab software.   Non-figurative images were shown first and last, while figurative (verbal/visual) images were randomized.   The only difference between conditions was a code that told the software to show the ad for either 5 seconds (conceptual fluency condition) or 1 second (perceptual fluency condition).   All scale variables were presented in random order.   Thought-listing questions were always the last question asked for each advertisement stimulus.

	Name	Question Wording / File Name	TextLabel1	TextLabel7
1	welcome	STUDY 3 EXAMPLE SURVEY INSTRUMENT	none	none
2	intro	Intro.doc	none	none
3	Ad instruct	Instructions	none	none
4	PRACTICE	PRACTICE AD	none	none
5	Ad instruct1	cond_fill.doc	none	none
6	FILLER AD-a	NON-FIGURATIVE VERBAL LITERAL AD	none	none
7	Ad Attitude 1	Your overall attitude toward this ad is...	Negative	Positive
8	Ad Attitude 2	Rate how much you liked this ad...	Disliked	Liked
9	Ad Attitude 3	Rate your enjoyment of this ad...	Did not enjoy	Enjoyed
10	Tactic Salience	Rate the extent to which this ad uses a tactic....	Not at all	A great deal
11	Elaboration 1	Viewing this ad was...	Unexciting	Exciting
12	Elaboration 2	Viewing this ad was...	Boring	Interesting
13	Elaboration 3	Viewing this ad was...	Unappealing	Appealing
14	Ad Honesty 1	This ad was...	Dishonest	Honest
15	Ad Honesty 2	This ad was...	Untrustworthy	Trustworthy
16	Ad Honesty 3	This ad was...	Insincere	Sincere
17	Jesse flanker 1	FILLER TASK	none	none
18	Jesse1	FILLER TASK	none	none
19	Ad instruct3	Instructions	none	none
20	VERBAL MET	VERBAL METAPHOR FIGURATIVE AD	none	none
21	Ad Attitude 1	Your overall attitude toward this ad is...	Negative	Positive
22	Ad Attitude 2	Rate how much you liked this ad...	Disliked	Liked
23	Ad Attitude 3	Rate your enjoyment of this ad...	Did not enjoy	Enjoyed
24	Tactic Salience	Rate the extent to which this ad uses a tactic....	Not at all	A great deal
25	Elaboration 1	Viewing this ad was...	Unexciting	Exciting
26	Elaboration 2	Viewing this ad was...	Boring	Interesting
27	Elaboration 3	Viewing this ad was...	Unappealing	Appealing
28	Ad Honesty 1	This ad was...	Dishonest	Honest
29	Ad Honesty 2	This ad was...	Untrustworthy	Trustworthy
30	Ad Honesty 3	This ad was...	Insincere	Sincere
31	NFC Scale	FILLER TASK	none	none
32	Ad instruct4	Instructions	none	none
33	VIZ MET	VISUAL METAPHOR FIGURATIVE AD	none	none
34	Ad Attitude 1	Your overall attitude toward this ad is...	Negative	Positive
35	Ad Attitude 2	Rate how much you liked this ad...	Disliked	Liked
36	Ad Attitude 3	Rate your enjoyment of this ad...	Did not enjoy	Enjoyed
37	Tactic Salience	Rate the extent to which this ad uses a tactic....	Not at all	A great deal
38	Elaboration 1	Viewing this ad was...	Unexciting	Exciting
39	Elaboration 2	Viewing this ad was...	Boring	Interesting
40	Elaboration 3	Viewing this ad was...	Unappealing	Appealing
41	Ad Honesty 1	This ad was...	Dishonest	Honest
42	Ad Honesty 2	This ad was...	Untrustworthy	Trustworthy
43	Ad Honesty 3	This ad was...	Insincere	Sincere
44	PK questions	PK SCALE	none	none
45	Vsop questions	VISUAL STYLE OF PROCESSING SCALE	none	none
46	guess	Briefly discuss what you think this experiment was trying to measure.	none	none

APPENDIX F

PK QUESTIONNAIRE AND VISUAL STYLE OF PROCESSING QUESTIONNAIRES

The first six items are from the published scale (Bearden, et al. 2001) while the last five items were test items that related more specifically to the specific subject matter of the dissertation. The test items blended effectively with the published items in all cases ($\alpha = .914$). These items were used as an individual difference measure in studies two and three.

- I know when an offer is too good to be true

- I can tell when an offer has strings

- I have no trouble understanding the bargaining tactics used by salespersons

- I know when a marketer is pressuring me to buy

- I can see through sales gimmicks used to get consumers to buy

- I can separate fact from fantasy in advertising

- I can detect techniques advertisers use to gain favorable impressions of their advertisements

- I typically notice persuasion tactics before I notice anything else in marketing situations

- I am usually aware of my emotions during marketing situations

- I not only listen to what a marketer says but also how he or she says it

- I am usually aware of non-verbal signals that marketers send during marketing situations

Visual Style of Processing Questionnaire

These were the eleven items related to visual processing only used as an individual difference measure in study two. The entire scale is twenty-two items long, containing an additional eleven items relating to verbal processing style (Childers et al, 1985).

- There are some special times in my life that I like to relive by mentally "picturing" just how everything looked.

- When I'm trying to learn something new, I'd rather watch a demonstration than read how to do it.

- I like to picture how I could fix up my apartment or a room if if I could buy anything I wanted.

- I like to daydream

- I generally prefer to use a diagram rather than a written set of instructions

- I like to "doodle"

- I find it helps to think in terms of mental pictures when doing many things

- After I meet someone for the first time, I can usually remember what they look like, but not much about them.

- When I have forgotten something I frequently try to form a mental 'picture' to remember it.

- I seldom daydream (reverse coded)

- My thinking often consists of mental 'pictures' or 'images'.

APPENDIX G

EXAMPLE SURVEY INSTRUMENT FOR STUDY FOUR

Available on the following page is an example of the survey participants saw when using Empirisoft's Media Lab software.   Non-figurative images were shown first while figurative (verbal/visual) images were randomized.   The only difference between conditions was a code that told the software to show the ad for either 5 seconds (conceptual fluency condition) or 1 second (perceptual fluency condition).   All scale variables were presented in random order.

	Name	Question Wording / File Name	TextLabel1	TextLabel7
1	welcome	Study 4 example code sheet--measure attitude certainty and attitude accessibility	none	none
2	intro	as a function of the interraction between ad figurativeness and processing fluency	none	none
3	Ad instruct	cond_intro.doc	none	none
4	PRACTICE	Show a practice ad for 5 seconds; non-figurative communication style	none	none
5	PracticeRT	Practice response time task; different question than the real one you'll ask for the test	none	none
6	Ad instruct1	Instructions to pay attention because an ad is going to be shown soon	none	none
7	V-LITa	Command to show non-figurative verbal literal ad	none	none
8	Jesse2	FILLER TASK -- ~2-3 minutes in length	none	none
9	Fill_key_prime	Instructions to put fingers on keyboard and prepare for the response time question	none	none
10	VelitRT	Response time question: "your reaction to this ad was"--- positive/negative	none	none
11	scaleinst	Instructions that scale item questions are coming next	none	none
12	VLita_cer1	How certain are you of your reaction toward this ad?	Uncertain	Certain
13	VLita_cer2	How convinced are you that your reaction to this ad is correct?	Convinced	Not Convinced
14	Ad instruct2	cond_intro.doc	none	none
15	VIZ MET	Stim\2-onezip-viz-met.bmp	none	none
16	FILLER	NFC & AFFECT SCALES FILLER TASK items randomized	Disagree	Agree
17	Viz_key_prime	Instructions to put fingers on keyboard and prepare for the response time question	none	none
18	Viz_RT	Response time question: "your reaction to this ad was"--- positive/negative	none	none
19	scaleinst2	Instructions that scale item questions are coming next	none	none
20	Viz_cer1	How certain are you of your reaction toward this ad?	Uncertain	Certain
21	Viz_cer2	How convinced are you that your reaction to this ad is correct?	Convinced	Not Convinced
22	Ad instruct3	cond_intro.doc	none	none
23	VER MET	Show verbal metaphor ad followed by values questionnaire filler task	none	none
24	Val Scale	VALUES SCALE FILLER TASK	Disagree	Agree
25	VMet_key_prime	Instructions to put fingers on keyboard and prepare for the response time question	none	none
26	VMet_RT	Response time question: "your reaction to this ad was"--- positive/negative	none	none
27	scaleinst3	Instructions that scale item questions are coming next	none	none
28	VMet_cer1	How certain are you of your reaction toward this ad?	Uncertain	Certain
29	VMet_cer2	How convinced are you that your reaction to this ad is correct?	Convinced	Not Convinced
30	homestretch	preparation for PK questionnaire	none	none
31	PK SCALE	PK SCALE ITEMS RANDOMIZED	Like me	Unlike me
32	guess	Briefly discuss what you think this experiment was trying to measure.	none	none

Sample Instructions for the Reaction Time Task

The reaction time task in study four was used to examine the attitude accessibility dependent measure. According to best practices (Fazio, 1990) participants were reminded to put their fingers on the specific keys of the keyboard prior to seeing the reaction time task, in order to answer as quickly and as accurately as possible.

Sample Reaction Time Task Instructions

PAY CLOSE ATTENTION:
You will answer a question about the ad you saw a moment ago. Please place one finger on the **'Z'** key and one finger on the **'/'** key, and press SPACEBAR firmly to continue....remember to answer as quickly and accurately as possible.

Reaction Time Task

This is the actual reaction time task participants completed for each ad type. Reaction time was recorded as soon as they hit the key of their choice, and then the next question from the Media Lab software in the survey sequence was activated.

Your reaction to the ad is...

"Z" = Positive   "/" = Negative

REFERENCES CITED

Ahluwalia, Rohini and Robert E. Burnkrant. (2004). Answering Questions about Questions: A Persuasion Knowledge Perspective for Understanding the Effects of Rhetorical Questions. *Journal of Consumer Research*, *31(*26-42.

Alter, Adam L. and Daniel M. Oppenheimer. (2009). Uniting the Tribes of Fluency to Form a Metacognitive Nation. *Personality and Social Psychology Review*, *13(3)*. 219-235.

Ang, Swee Hoon and Ai Ching Lim. (2006). The Influence of Metaphors and Product Type on Brand Personality Perceptions and Attitudes. *Journal of Advertising*, *35(*2*)*. 39-53.

Barry, AM. (1997). *Visual Intelligence: Perception, Image, and Manipulation in Visual Communication*. Albany:State University of New York.

Barry, AM (2005). Perception Theory (Chapter 3). In Moriarty Smith, Barbatsis, Kennely, ed(s), *Handbook of Visual Communication(*Mahwah, NJ:Lawrence Earlbaum, Associates.

Barthes, Roland. (1964). The Rhetoric of the Image. In ed(s), *The Responsibility of Forms(*21-40*)*, New York:Hill & Want.

Bearden, William O., David M. Hardesty and Randall L. Rose. (2001). Consumer Self-Confidence: Refinements in Conceptualization and Measurement. *Journal of Consumer Research*, *28(*1*)*. 121-134.

Boush, David M., Marian Friestad and Gregory M. Rose. (1994). Adolescent skepticism toward TV advertising and knowledge of advertiser tactics. *Journal of Consumer Research*, *21(*1*)*. 165.

Burroughs, James E. and David Glen Mick. (2004). Exploring Antecedents and Consequences of Consumer Creativity in a Problem-Solving Context. *Journal of Consumer Research*, *31(*402-411.

Cacioppo, J.T., R.E. Petty and C.F. Kao. (1984). The efficient assessment of need for cognition. . *Journal of Personality Assessment*, *48(*1984*)*. 306-307.

Campbell, Margaret and Amna Kirmani. (2008). I Know What You're Doing and Why You're Doing it: The Use of the Persuasion Knowledge Model in Consumer Research. In Curtis P. Haugtvedt, Paul M. Herr and Frank R. Kardes, ed(s), *Handbook of Consumer Psychology(*549-574*)*, New York:Psychology Press.

Chaiken, Shelly and Durairaj Maheswaran. (1994). Heuristic Processing Can Bias Systematic Processing: Effects of Source Credibility, Argument Ambiguity, and Task Importance on Attitude Judgment. *Journal of Personality and Social Psychology*, *66(3)*. 460-473.

Childers, Terry L. and Yang Jiang. (2008). Neurobiological perspectives on the nature of visual and verbal processes. *Journal of Consumer Psychology*, *18(*4*)*. 264-269.

Childers, Terry L., Michael J. Houston and Susan E. Heckler. (1985). Measurement of Individual Differences in Visual Versus Verbal Information Processing. *Journal of Consumer Research*, *12(*2*)*. 125-134.

Damasio, Anton. (1994). *Descartes' Error: Emotion, Reason and the Human Brain*. New York:Avon.

Dimofte, Claudiu V. and Richard F. Yalch. (2007). Consumer Response to Polysemous Brand Slogans. *Journal of Consumer Research*, *33(*4*)*. 515-522.

Dimofte, Claudiu V. and Richard F. Yalch. (2007). The SMAART Scale: A Measure of Individuals' Automatic Access to Secondary Meanings in Polysemous Statements. *Journal of Consumer Psychology*, *17(*1*)*. 49-58.

Fazio, RH, J Chen, EC McDonel and SJ Sherman. (1982). Attitude Accessibility, attitude-behavior consistency, and the strength of the object-evaluation association. *Journal of Experimental and Social Psychology*, *18(*July*)*. 339-357.

Fazio, Russell H. (1990). A Practical Guide to the Use of Response Latency in Social Psychology Research. In Clyde Hendrick and Margaret S. Clark, ed(s), *Review of Personality and Social Psychology Volume 11: Research Methods in Personality and Social Psychology(*Newbury Park, CA:Sage.

Fazio, Russell H. (1995). Atitudes as Object-Evaluation Associations: Determinants, Consequences, and Correlates of Attitude Accessibility. In Richard E. Petty and Jon A. Krosnick, ed(s), *Attitude Strength: Antecedents and Consequences(*Mahweh, NJ:Lawrence Erlbaum Associates, Inc. .

Fishbein, Martin and Susan B. Middlestadt. (1995). Noncognitive Effects on Attitude Formation and Change: Fact or Artifact? *Journal of Consumer Psychology*, *4(*181.

Franks, David. (2003). The Neuroscience of Emotions. In JE Stets & JH Turner, ed(s), *Handbook of the Sociology of Emotions(*38-65*)*, New York:Springer Science + Business Media, LLC.

Friestad, Marian and Peter Wright. (1994). The Persuasion Knowledge Model: How People Cope with Persuasion Attempts. *Journal of Consumer Research*, *21(*June*).* 1-31.

Gross, Sharon Ruth, Rolf Holtz and Norman Miller. (1995). Attitude Certainty. In Richard E. Petty and Jon A. Krosnick, ed(s), *Attitude Strength: Antecedents and Consequences(*Mahweh, NJ:Lawrence Erlbaum Associates, Inc. .

Haugtvedt, Curtis P., Richard J. Shakarchi, Bendik M. Samuelsen and Kaiya Liu. (2004). Consumer Psychology and Attitude Change. In Eric S. Knowles and Jay A. Linn, ed(s), *Resistance and Persuasion(*Mahwah, NJ:Lawrence Erlbaum Associates, Inc.

Hirschman, Elizabeth. (1986). The Effect of Verbal and Pictoral Advertising Stimuli on Aesthetic, Utilitarian, and Familiarity Perceptions. *Journal of Advertising*, *15(2).* 27-34.

Hirschman, Elizabeth C. (2007). Metaphor in the marketplace. *Marketing Theory*, *7(3).* 227-248.

Hung, I. W. and R.S. Wyer. (2008). The impact of implicit theories on responses to problem-solving print advertisements. *Journal of Consumer Psychology*, *18(*2008*)*. 223-235.

Janiszewski, Chris. (1988). Preconscious Processing Effects: The Independence of Attitude Formation and Conscious Thought. *Journal of Consumer Research*, *15(2)*. 199-209.

Janiszewski, Chris. (1993). Preattentive Mere Exposure Effects. *Journal of Consumer Research*, *20(3)*. 376-392.

Janiszewski, Chris. (2008). Rethinking Visual Communication Research: Updating Old Constructs and Considering New Metaphors. In Michel Widel and Rik Pieters, ed(s), *Visual Marketing: From Attention to Action(*New York, NY:Lawrence Erlbaum and Associates.

Kahle, Lynn R. and Pamela M. Homer. (1985). Physical Attractiveness of the Celebrity Endorser: A Social Adaptation Perspective. *Journal of Consumer Research*, *11(*4*)*. 954-961.

Kenney, K. and L Scott. (2003). A Review of the Visual Rhetoric Literature. In LM Scott & Rajeev Batra, ed(s), *Persuasive Imagery: A Consumer Response Perspective(*17-55*)*, Mahwah, NJ:Lawrence Earlbaum Associates, Inc.

Krosnick, Jon A. and Richard E. Petty. (1995). Attitude Strength: An Overview. In Richard E. Petty and Jon A. Krosnick, ed(s), *Attitude Strength: Antecedents and Consequences(*Mahweh, NJ:Lawrence Erlbaum Associates, Inc. .

Lang, Annie. (2000). The Limited Capacity Model of Mediated Message Processing. *Journal of Communication*, *Winter(*46-70.

LeDoux, Joseph. (1996). *The Emotional Brain: The Mysterious Underpinnings of Emotional Life*. New York:Simon & Schuster.

Lee, Angela Y. (2004). The Prevalence of Metacognitive Routes to Judgment. *Journal of Consumer Psychology (Lawrence Erlbaum Associates)*, *14(*4*)*. 349-355.

Lee, Angela Y. and Aparna A. Labroo. (2004). The Effect of Conceptual and Perceptual Fluency on Brand Evaluation. *Journal of Marketing Research (JMR)*, *41(2)*. 151-165.

Leigh, JH. (1994). The Use of Figures of Speech in Print Ad Headlines. *Journal of Advertising*, *23((*June)*)*. 17-34.

Luna, D and L.A. Peracchio. (2003). Visual and Linguistic Processing of Ads by Bilingual Consumers. In LM Scott & Rajeev Batra, ed(s), *Persuasive Imagery: A Consumer Response Perspective(*17-55*)*, Mahwah, NJ:Lawrence Earlbaum Associates, Inc.

Lynch-JR., John G. (2006). Accessibility-Diagnosticity and the Multiple Pathway Anchoring and Adjustment Model. *Journal of Consumer Research*, *33(1)*. 25-27.

McGlone, Matthew S. and Jessica Tofighbakhsh. (2000). Birds of a Feather Flock Conjointly (?): Rhyme as Reason in Aphorisms. *Psychological Science*, *11(5)*. 424.

McGuire, William J. (2000). Standing on the Shoulders of Ancients: Consumer Research, Persuasion, and Figurative Language. *Journal of Consumer Research*, *27(*109-114.

McQuarrie, Edward F. and David Glen Mick. (1992). On Resonance: A Critical Pluralistic Inquiry into Advertising Rhetoric. *Journal of Consumer Research*, *19(2)*. 180-197.

McQuarrie, Edward F. and David Glen Mick. (1996). Figures of rhetoric in advertising language. *Journal of Consumer Research*, *22(4)*. 424-438.

McQuarrie, Edward F. and David Glen Mick. (1999). Visual Rhetoric in Advertising: Text-Interpretive, Experimental, and Reader-Response Analyses. *Journal of Consumer Research*, *26(1)*. 37-54.

McQuarrie, Edward F. and David Glen Mick. (2003a). Visual and Verbal Rhetorical Figures under Directed Processing versus Incidental Exposure to Advertising. *Journal of Consumer Research*, *29(4)*. 579-587.

McQuarrie, Edward F. and David Glen Mick. (2003b). The Contribution of Semiotic and Rhetorical Perspectives to the Explanation of Visual Persuasion in Advertising. In LM Scott & Rajeev Batra, ed(s), *Persuasive Imagery: A Consumer Response Perspective(*191-222*)*, Mahwah, NJ:Lawrence Earlbaum Associates, Inc.

McQuarrie, Edward F. and Barbara J. Phillips. (2005). Indirect Persuasion in Advertising. *Journal of Advertising*, *34(2)*. 7-20.

McQuarrie, EF. (1989). Advertising Resonance: A Semiological Perspective. In Elizabeth Hirschman, ed(s), *Interpretive Consumer Research(*Provo, UT:Association for Consumer Research.

Mick, David Glen. (1986). Consumer Research and Semiotics: Exploring Morphology of Signs, Symbols, and Significance. *Journal of Consumer Research*, *13(*196-213.

Mick, David Glen and Claus Buhl. (1992). A Meaning-based Model of Advertising Experiences. *Journal of Consumer Research*, *19(*317-338.

Mitchell, Andrew A. and Jerry C. Olson. (1981). Are Product Attribute Beliefs the Only Mediator of Advertising Effects on Brand Attitude? *Journal of Marketing Research (JMR)*, *18(3)*. 318-332.

Mothersbaugh, David L., Bruce A. Huhmann and George R. Franke. (2002). Combinatory and Separative Effects of Rhetorical Figures on Consumers' Effort and Focus in Ad Processing. *Journal of Consumer Research*, *28(4)*. 589-602.

Nordhielm, Christie L. (2002). The Influence of Level of Processing on Advertising Repetition Effects. *Journal of Consumer Research*, *29(3)*. 371-382.

Oliver, Richard L., Thomas S. Robertson and Deborah J. Mitchell. (1993). Imaging and Analyzing in Response to New Product Advertising. *Journal of Advertising*, *22(4)*. 35-50.

Peracchio, Laura A. and Joan Meyers-Levy. (2005). Using Stylistic Properties of Ad Pictures to Communicate with Consumers. *Journal of Consumer Research*, *32(*29-40.

Petty, Richard E. and Jon. A. Krosnick. (1995). *Attitude Strength: Antecedents and Consequences*. Mahwah, NJ:Lawrence Erlbaum Associates, Inc.

Petty, Richard E., John T. Cacioppo and David Schumann. (1983). Central and Peripheral Routes to Advertising Effectiveness: The Moderating Role of Involvement. *Journal of Consumer Research*, *10(*135-146.

Petty, Richard E., Curtis P. Haugtvedt and Stephen M. Smith. (1995). Elaboration as a Determinant of Attitude Strength: Creating Attitudes That Are Persistent, Resistant, and Predictive of Behavior. In Richard E. Petty and Jon A. Krosnick, ed(s), *Attitude Strength: Antecedents and Consequences(*Mahweh, NJ:Lawrence Erlbaum Associates, Inc. .

Pham, Michel Tuan and Tamar Avnet. (2004). Ideals and Oughts and the Reliance on Affect versus Substance in Persuasion. *Journal of Consumer Research*, *30(*503-518.

Phillips, Barbara J. and Edward F. McQuarrie. (2002). The Development, Change, and Transformation of Rhetorical Style in Magazine Advertisements 1954-1999. *Journal of Advertising*, *31(*4*)*. 1-13.

Phillips, Barbara J. and Edward F. McQuarrie. (2004). Beyond Visual Metaphor: A New Typology of Visual Rhetoric in Advertising. *Marketing Theory*, *4(*1*)*. 113-137.

Phillips, Barbara J. and Edward F. McQuarrie. (2009). Impact of Advertising Metaphor on Consumer Belief. *Journal of Advertising*, *38(*1*)*. 46-61.

Pracejus, John W., G. Douglas Olsen and Thomas C. O'Guinn. (2006). How Nothing Became Something: White Space, Rhetoric, History, and Meaning. *Journal of Consumer Research*, *33(*82-90.

Priester, Joseph R. and Monique A. Fleming. (1997). Artifact or Meaningful Theoretical Constructs?: Examining Evidence for Nonbelief- and Belief-Based Attitude Change Processes. *Journal of Consumer Psychology*, *6(*67.

Reber, Rolf and Norbert Schwarz. (1999). Effects of Perceptual Fluency on Judgments of Truth. *Consciousness and Cognition*, *8(3)*. 338-342.

Reber, Rolf, Piotr Winkielman and Norbert Schwarz. (1998). Effects of Perceptual Fluency on Affective Judgments. *Psychological Science*, *9(1)*. 45-48.

Reber, Rolf, Norbert Schwarz and Piotr Winkielman. (2004). Processing Fluency and Aesthetic Pleasure: Is Beauty in the Perceiver's Processing Experience? *Personality and Social Psychology Review*, *8(4)*. 364-382.

Schroeder, Jonathan E. (2002). *Visual Consumption*. New York, NY:Routledge.

Schwarz, Norbert. (1997). Moods and Attitude Judgments: A Comment on Fishbein and Middlestadt. *Journal of Consumer Psychology*, *6(*93.

Schwarz, Norbert. (2001). Feelings as Information: Implications for Affective Influences on Information Processing. In Gerald R. Clore and Leonard L. Martin, ed(s), *Theories of Mood and Cognition(*Mahweh, NJ:Lawrence Erlbaum Associates, Inc.

Schwarz, Norbert. (2004). Metacognitive Experiences in Consumer Judgment and Decision Making. *Journal of Consumer Psychology (Lawrence Erlbaum Associates)*, *14(4)*. 332-348.

Schwarz, Norbert and Gerald L. Clore. (2006). Feelings and Phenomenal Experiences. In A. Kruglanski and E.T. Higgens, ed(s), *Social Psychology. Handbood of Basic Principles (2nd edition)(*1-30*)*, New York:Guilford.

Scott, Linda M. (1994a). The Bridge from Text to Mind: Adapting Reader-Response Theory to Consumer Research. *Journal of Consumer Research*, *21(*461-480.

Scott, Linda M. (1994b). Images in advertising: The need for a theory of visual rhetoric. *Journal of Consumer Research*, *21(2)*. 252.

Scott, Linda M. and Patrick Vargas. (2007). Writing with Pictures: Toward a Unifying Theory of Consumer Response to Images. *Journal of Consumer Research*, *34(*341-356.

Shapiro, Stewart. (1999). When an Ad's Influence Is beyond Our Conscious Control: Perceptual and Conceptual Fluency Effects Caused by Incidental Ad Exposure. *Journal of Consumer Research*, *26(*1*)*. 16-36.

Slovic, Paul, Melissa L. Finucane, Ellen Peters and Donald G. MacGregor. (2007). The affect heuristic. *European Journal of Operational Research*, *177(3)*. 1333-1352.

Sugiyama, Lawrence S. (2004). Is beauty in the context-sensitive adaptations of the beholder?: Shiwiar use of waist-to-hip ratio in assessments of female mate value. *Evolution and Human Behavior*, *25(*1*)*. 51-62.

Sugiyama, Lawrence S. (2005). Physical Attractiveness in Adaptationist Perspective. In D.M. Buss, ed(s), *The Handbook of Evolutionary Psychology(*292-343*)*, New York, NY:Wiley.

Toncar, Mark and James Munch. (2001). Consumer Responses to Tropes in Print Advertising. *Journal of Advertising*, *30(*1*)*. 55-65.

Tormala, Zakary L. and Richard E. Petty. (2004). Resisting Persuasion and Attitude Certainty: A Metacognitive Analysis. In Eric S. Knowles and Jay A. Linn, ed(s), *Resistance and Persuasion(*Mahwah, NJ:Lawrence Erlbaum Associates, Inc.

Van-Zandt, Trisha. (2002). Analysis of Response Time Distributions. In Hal Pashler and John Wixted, ed(s), *Steven's Handbook of Experimental Psychology(*New York:John Wiley.

Wegener, Duane T., John Downing, Jon A. Krosnick and Richard E. Petty. (1995). Measures and Manipulations of Strength-Related Properties of Attitudes: Current Practice and Future Directions. In Richard E. Petty and Jon A. Krosnick, ed(s), *Attitude Strength: Antecedents and Consequences(*Mahweh, NJ:Lawrence Erlbaum Associates, Inc. .

Wegener, Duane T., Richard A. Petty, Natalie D. Smoak and Leandre R. Fabrigar. (2004). Multiple Routes to Resisting Attitude Change. In Eric S. Knowles and Jay A. Linn, ed(s), *Resistance and Persuasion(*Mahwah, NJ:Lawrence Erlbaum Associates, Inc.

Whittlesea, Bruce W. A. (1993). Illusions of familiarity. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, *19(*6*)*. 1235-1253.

Whittlesea, Bruce W. A. and Lisa D. Williams. (2001a). The discrepancy-attribution hypothesis: I. The heuristic basis of feelings and familiarity. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, *27(*1*)*. 3-13.

Whittlesea, Bruce W. A. and Lisa D. Williams. (2001b). The discrepancy-attribution hypothesis: II. Expectation, uncertainty, surprise, and feelings of familiarity. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, *27(*1*)*. 14-33.

Williams, R. and J. Newton. (2007). *Visual Communication: Integrating Media, Art, & Science*. Mahwah, NJ:Lawrence Earlbaum Associates, Inc.

Winkielman, Piotr and John T. Cacioppo. (2001). Mind at ease puts a smile on the face: Psychophysiological evidence that processing facilitation elicits positive affect. *Journal of Personality and Social Psychology*, *81(*6*)*. 989-1000.

Winkielman, Piotr, Norbert Schwarz, Rolf Reber and Tedra A. Fazendeiro. (2003a). Cognitive and Affective Consequences of Visual Fluency: When Seeing is Easy on the Mind. In LM Scott & Rajeev Batra, ed(s), *Persuasive Imagery: A Consumer Response Perspective(*17-55*)*, Mahwah, NJ:Lawrence Earlbaum Associates, Inc.

Winkielman, Piotr, Norbert Schwarz, Tedra Fazendeiro and Rolf Reber. (2003b). The Hedonic Marking of Processing Fluency: Implications for Evaluative Judgment. In Jochen Musch and Karl Christoph Klauer, ed(s), *The Psychology of Evaluation: Affective Processes in Cognition and Emotion(*Mahweh, NJ:Lawrence Erlbaum Associates, Inc.

Wood, Natalie, M. Solomon and B Englis. (2003). "No One Looks That Good in Real Life!" Projections of the Real Versus Ideal Self in the Online Visual Space. In LM Scott & Rajeev Batra, ed(s), *Persuasive Imagery: A Consumer Response Perspective(*383-396*)*, Mahwah, NJ:Lawrence Earlbaum Associates, Inc.

Wright, Peter L. (1974). Analyzing Media Effects on Advertising Responses. *Public Opinion Quarterly*, *38(*2*)*. 192.

Zajonc, Robert B. (1980). Feeling and Thinking: Preference Need No Inferences. *American Psychologist*, *35(*2*)*. 151-175.

Zaltman, Gerald and Robie Higie Coulter. (1995). Seeing the Voice of the Customer: Metaphor-Based Advertising Research. *Journal of Advertising Research*, *35(*35-51.

Zaltman, Gerald and Lindsay H. Zaltman. (2008). *Marketing Metaphoria: What Deep Metaphors Reveal About the Minds of Consumers*. Boston, MA:Harvard Business Press.