THE USE OF METAPHOR IN ON-LINE ADVERTISING

By

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Abstract of Thesis Presented to the Graduate School of the University of Florida in Partial Fulfillment of the Requirements for the Degree of Master of Arts in Mass Communication

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Research on the use of metaphor in on-line advertising was undertaken to provide advertisers beneficial competitive information when developing an on-line presence. The research attempted to answer the following questions:

1). What is the most common type of metaphor used in on-line advertising in 1998?
2). Is there a difference between metaphor usage in shopping versus non-shopping web sites?
3). What are the influencing factors that account for these differences?

This study of metaphor in on-line advertising examined commercial web sites that promote goods or services on the Internet’s World Wide Web. Fourteen such web sites were observed and content analyzed according to the coding manual developed through literature reviews and web site observations. These web sites were sampled for their high consumer traffic and popularity.
The five-level hierarchical coding manual was used to code and count metaphors on these fourteen commercial web sites. Data were input into the computer program Statistical Package for Social Sciences (SPSS). Statistical tests included frequencies, an independent sample t-test, and discriminate analysis.

Results showed that working, clickable, and verbo-pictorial metaphors commonly appear in commercial web sites. Shopping sites tended to use more pictorial, clickable, and directional metaphors than non-shopping sites. Verbal and verbo-pictorial metaphors tended to appear more often in non-shopping sites. Verbal, verbo-pictorial, and clickable metaphors were shown to have the greatest discriminating power in differentiating shopping versus non-shopping web sites.

The study of metaphor in on-line advertising is still in its infancy and requires further research. Advertisers could benefit from experimental consumer research on reactions and interactions with on-line metaphors. Paired with competitive market research such as this study provides, advertisers would have useful tools when developing an on-line presence.
CHAPTER 1

INTRODUCTION

The purpose of this study is to provide advertisers and marketers useful information when developing an Internet presence. By exploring the current uses of metaphor in on-line advertising, advertisers can gain a greater understanding of their competitor’s efforts and thus produce more effective web presentations for their own corporation. After introducing terminology related to metaphors on the Internet’s World Wide Web, the research study investigates the way advertisers use metaphors to actively involve consumers in on-line messages. Based on the findings, implications for further study of on-line advertising are also examined.

1.1 The Study of Metaphor in Advertising

Metaphor has been used in artistic and literary expression for centuries and continues to be a form of expression used in popular culture at the end of the twentieth century. Advertising, a form of corporate expression, is not exempt from metaphorical usage since it so intertwines artistic images and literary phrases. As the age of information and electronic media is upon us, advertising has penetrated these realms as well, taking with it creative ways to give meaning and message to products and services. Metaphor is just one of the ways of expressing concepts that companies are utilizing in their web sites.
on the Internet’s World Wide Web. The current study seeks to identify and describe the common types of metaphors used by corporations in their commercial web sites.

1.1.1 What Is Metaphor?

Since the current study deals with metaphors of the on-line world, a definition of metaphor from the Internet can help define the topic of study. According to The Metaphor Home Page, metaphor can be defined as “any structured juxtaposition of two conceptual domains. Metaphor thus encompasses language, cinema, theatre, music, and even (ahem!) dance, etc., in fact any domain that one can sensibly describe in a structured semantic form” (Veale, www.compapp.dcu.ie/~tonyv/mission.html; 4/16/98). To interpret this definition for purposes of the paper, a metaphor is an unusual pairing of two elements that creates a new meaning that neither element had alone, thus creating a whole new conceptual expression.

For example, in the verbal metaphor illustratively used by Max Black, MAN IS WOLF (Black, 1962, 40), the reader is asked to think of the man in terms of the barbaric and beastly nature of a wolf. Man can be seen as possessing some of the qualities of a wolf, but not all of them. The transference of properties is relative to the context and one cannot assume that man is exactly the same as a wolf, but somehow similar. The context should make apparent which qualities the sender of the metaphor wishes the audience to transfer to the primary subject, man. If framed in a business context, perhaps the man could be viewed as cunning, whereas in a dating situation, MAN IS WOLF could evoke images of a wolf scouting for prey.
Whatever the metaphor, two elements, or subjects, are unusually paired so that one subject is conceived in terms of the second. The metaphor may be presented in images, or may even require the addition of words to convey its meaning. Regardless, some properties or characteristics of the secondary subject are transferred to the first and a whole new concept formed. The slight tension of the pairing will increase the viewer/reader’s need to reconcile the juxtaposition and result in the comprehension of the metaphor. The viewer/reader will understand the pairing of the two subjects in a new and completely different light than if the two subjects were presented independently. The need to reconcile this tension may require more active involvement from the viewer/reader.

Thus, metaphor has implications for advertising, as active audiences are highly desirable and interpret the advertising message in a more meaningful and personal way. When more time is spent reading, viewing, and interpreting a message, the meaning is more internalized. Therefore, advertising seeks to involve the consumer so that he or she will internalize the message that product X is the best for cleaning carpets, etc. Web advertising also attempts to draw in the viewer/reader to spend more time with the message. The inherent fast-paced nature of Internet surfing can leave a consumer’s mind cluttered with many messages and products vying for attention. If a consumer could interact with the advertising message, such as clicking the mouse button on an advertisement’s words or images, the message has a higher likelihood of being more internally processed. The more time the consumer spends with the advertisement, the better for the advertiser.

The on-line metaphors under examination for the purposes of this study will primarily be concerned with language (written text), visual images (photos, hand or
computer drawn images, video, or digital animation), and the combination of the two.

Thus an advertisement containing words, visual images, or both will be considered in exploring metaphor. With this in mind, metaphors have been classified to distinguish differences in the usage of metaphor in advertising (Forceville). In this study of metaphor usage in on-line advertising, three types of metaphor, drawn from Forceville’s work, have been defined as follows. Verbal metaphors are textual written language used to convey meaning of the first subject. Pictorial metaphors use images for the first element, without words or any text accompanying the visual image. A combination of images and words as the primary subject will result in a verbo-pictorial metaphor being observed. Some verbo-pictorial metaphors may require both the image and the text to support each other for clear understanding while others may not need the assistance of the other to be understood, but both may still be presented for greater clarity. Regardless, if the first subject contains both words and images, it shall be considered a verbo-pictorial metaphor.

For example, Figure 1 below presents a pictorial metaphor that uses only visual images to convey the meaning of the primary subject. The musical notes with the sound waves radiating from the stems implies someone is hearing or listening to music. This image, located at http://www.musicblvd.com, is found beside certain musical compact discs for sale at the Music Boulevard web site. This pictorial metaphor indicates that, when clicked with the mouse, music will play. This image is only located beside those CD’s that have audio available for listening on-line.

![Figure 1 Pictorial Metaphor](http://www.musicblvd.com)
An example of a verbal metaphor can be found at http://www.marthastewart.com, as seen in Figure 2. The words, “Guest Book Sign-In,” are completely textual and have no accompanying images of any kind. This phrase, as the primary subject, leads the web surfer to actually sign-in and make comments as one would do in the real world. This virtual guest book is a prime example of a verbal metaphor on-line.

![Guest Book Sign-In]

Figure 2 Verbal Metaphor (www.marthastewart.com)

Lastly, verbo-pictorial metaphors combine both text and images in the primary subject that work collectively to aid the viewer. The Virtual Vineyards web site, located at http://www.virtualvin.com, displays an example of this type of metaphor, as seen in Figure 3 below. The Wine Shop is just one of the many departments in the on-line store of Virtual Vineyards, presented by a bottle and glass of wine paired with the words, “Shop for Wine.” The web surfer uses the mouse to click upon this primary subject and is swept away to the wine shop. The combination of the verbal and visual elements clarifies the meaning of this virtual shopping experience.

![Shop for Wine]

Figure 3 Verbo-Pictorial Metaphor (www.virtualvin.com)
1.1.2 Metaphor in On-line Advertising

In observing metaphors in on-line advertising, key terminology must be defined to clearly identify metaphors within a limited framework. The current study’s framework is metaphors in on-line advertising. Advertising on the World Wide Web can take several forms, from commercial web sites designed specifically for promotional purposes to banner ads, small banner-shaped areas used for ad space as in traditional media, that look like this one found at http://www.yahoo.com:

However, this study is focusing on commercial web sites that advertise, promote, and market goods and services. The Internet’s World Wide Web was used to view these commercial web sites, which are web presentations that contain several pages usually arranged in a hierarchy. The starting page is commonly referred to as the home page, containing many hyperlinks. These links, when text, are usually blue in color and underlined as well. When a mouse is used to click on these hyperlinks, the web surfer loads another web page, either contained within the same web presentation or another page from a separate web presentation.

Commercial web sites will be defined as web presentations that market, promote, and/or sell goods or services for a sponsoring corporation. The web address of the home page will usually end in “.com,” meaning commercial. Most web addresses, or also contain the corporation’s name, as in http://www.gap.com/, an example of the web address for the clothing company, The Gap. Two types of commercial web sites will be examined, shopping and non-shopping sites. The web sites that actually sell products or
services via the Internet will be classified as shopping sites. Other web sites that simply promote goods and services not for sale on-line but for sale only in tradition retail outlets will be classified as non-shopping sites.

1.2 Objectives of the Study

There are four primary objectives of this research. First, the study seeks to develop a coding method for metaphor to be used in a content analysis of corporate web sites. Classifications of metaphor will be set forth in a hierarchical fashion that will help the researcher to clearly identify a metaphor and to distinguish one type of metaphor from another. These classifications will be developed from both literature and observation. Secondly, the study will collect data from the observation of commercial web sites, as defined earlier. Metaphors from these web sites will be thoroughly explored and examined. Third, the observed metaphors will be coded and counted according to the codebook developed through achievement of the first objective of the study. The sample will provide information on the frequency of certain types of metaphors and help to identify the most commonly used types of metaphor. Metaphors used in shopping and non-shopping sites will be compared and contrasted to examine differences and influences on group membership. Coding and analyzing the collected data will be done through the computer program SPSS, Statistical Program for Social Sciences. Lastly, with the knowledge from the research results, any significant findings will be presented and differences among the two groups, shopping and non-shopping web sites, will be discussed. The conclusions will make suggestions for the application of metaphor in on-line advertising and its further uses. The results should answer the following questions:
1). What is the most common type of metaphor used in on-line advertising in 1998?

2). Is there a difference between metaphor usage in shopping versus non-shopping web sites?

3). What are the influencing factors that account for these differences?

1.3 Scope of Work

To accomplish these objectives and answer the research questions, several tasks were performed. A literature review was conducted to examine metaphor and how to identify a metaphorical utterance or phrase. Sources from metaphor studies included literary, pictorial, and advertising viewpoints. Consumer behavior and web research was also conducted. The literature review was also completed to help identify the various types of metaphor, its uses in advertising, and its implications for the on-line world.

From the literature, a coding manual was developed specific to metaphor in advertising and more specifically, to on-line advertising. The coding manual allows the identification of three distinct types of metaphor, each with independent subclasses.

Sampling PC Magazine on-line's September 1998 picks for the Top 26 commercial web sites produced a sample of 12 web sites for observation. These sites are some of the most commonly consumer-viewed corporate web sites used for selling and marketing products and merchandise, chosen for their high traffic. These sites were viewed and their contents examined for the inclusion of metaphors in their on-line promotions. However, personal classifieds and auction web sites were omitted since they did not meet the criteria for a corporation selling, promoting, or marketing a good or service.
The identified metaphors were coded according to the created codebook (see Appendix A). Once identified, metaphors were classified as pictorial, verbal, or verbo-pictorial. The metaphors present were then classified according to each sub-classification, counting the total number of each type.

Finally, the data was analyzed using SPSS software with an independent sample t-test to compare and contrast the usage of metaphor on shopping and non-shopping web sites. Frequency tests identified the most commonly observed type of metaphor in these commercial sites. Discriminant analysis was performed to identify influencing factors of group membership in shopping versus non-shopping web sites. Differences and means were compared from the results produced. Conclusions were drawn to make recommendations for future metaphor use in on-line advertising.
CHAPTER 2

LITERATURE REVIEW

The purpose of this chapter is to introduce to the reader the study of metaphor. The reader will be taken through a brief history of metaphor in literature from different philosophical perspectives. Metaphor in advertising will then turn the discussion to more relevant issues for the purposes of this study. Finally, on-line metaphors will present the reader with a basis for understanding the foundation of the current study on metaphor.

2.1 Max Black’s Interaction Theory of Metaphor

In 1962, Max Black published his first article on the interaction theory of metaphor, following the groundwork laid by I. A. Richards in 1936 (Forceville, 4). A revision in the form of a second publication followed in 1979, still acutely aware of the fact that “metaphorical meaning cannot be adequately discussed without resorting to metaphorical use” (Forceville, 4). Basic elements of the theory are described through the example “MAN IS A WOLF” (Forceville, 7). Man is the ‘primary’ subject and wolf is the ‘secondary’ subject, terms from the 1979 work, revised from the use of ‘principal’ and ‘subsidiary’ in 1962 (Forceville, 5). The secondary subject, here ‘wolf,’ is viewed as a system rather than an individual thing, projecting upon the primary subject (man) characteristics with which it is associated. Black calls these projections ‘associated implications’ that are comprised in the ‘implicative complex’ and are ‘predicated’ onto the
primary subject (Forceville, 6). Black states “that the secondary subject, in a way partly depending upon the context of metaphorical use, determines a set of what Aristotle called *endoxa*, current opinions shared by members of a certain speech community. The maker of the metaphorical statement selects, emphasizes, suppresses, and organizes features of the primary subject by applying to it statements isomorphic with the members of the secondary subject’s implicative complex (Black 1979, 28-29).

Black notes that the interaction of the primary and secondary subject is three-fold: some of the secondary subject’s properties are elicited, a parallel implication complex is then constructed for the primary subject, and parallel changes are reciprocally induced for the secondary subject (Black 1979, 28-29). The entire interaction theory is best viewed within this notion of the “interanimation,” as Richards called it, between the two components (Forceville, 6). Both the primary and secondary subjects predicate their properties upon the other, thus creating a whole new meaning for the metaphor than the two words possessed separately. The two subjects must have a clearly understood meaning within the speech community in order for these meanings to be “readily and freely evoked” when used in a metaphor (Black 1962, 40). Otherwise, the metaphor will not be understood correctly, for it is dependent on a cultural context, full of understood and accepted beliefs (Black 1962, 40).

Directionality is also important for correct interpretation of the metaphor. Reversing the two subjects’ order does not imply the same meaning and changes the metaphor altogether (Black 1979, 215). However, only a selection of meanings are elicited in the projection or predication of associated commonplaces, with some features of each subject not transferred to the other. “Thus, only a selection of all characteristics
of the secondary subject that could be thought of is actually transferred to the primary subject. It is precisely the partiality of projectable (or ‘transferable’ or ‘features which constitutes the ‘tension’ between primary subject and secondary subject that is associated with the interaction theory of metaphor” (Forceville, 10).

Black believes in metaphor as a tool to restructure cognitions. Black describes what metaphor is, its key components, and how they work together to create a new concept altogether different from what the two subjects mean independent of one another. His reason for studying and postulating on the topic is to understand how metaphor is used within a given speech community. Perhaps Forceville, in his evaluation of Black’s work, states it best. “The reason for this is that conventional metaphors are so embedded in a language that their metaphoricity is often no longer recognized as such” (Forceville, 26). A metaphor is often laden with cultural symbols that are only understood within a particular culture. The symbols interact and their understood meanings evolve into something new as a result of the pairing of the two terms. Black describes metaphor through the interaction theory to explain how our concepts are restructured through the interplay of the associated meanings of both subjects within the metaphorical phrase. He explains the interaction of the associated commonplaces between the two variables that creates and restructures our concepts of not only the primary subject, but the secondary subject as well.

2.2 Literary and Linguistic Theories of Metaphor

Literary metaphor studies early on set the groundwork for the later studies on pictorial or visual metaphors. Therefore, many more literary studies of metaphor exist
than those of the visual type. In comparison to Black’s interaction theory, other theorists such as Kittay, Lakoff & Johnson, MacCormac, and Indurkhya all support Black’s basic tenants with their own minor adjustments and criticisms (Forceville, 4). From the literary and cognitive perspective, Black’s theory has wide acceptance among scholars. His definition of what metaphor is and how it works is often borrowed in studies based on other theoretical perspectives.

Although Kittay has written much criticism of Black’s terminology of his interaction theory of metaphor, she does base some of her cognitive theory upon Black’s work in her perspectival account of metaphor. One major contribution of Kittay is to provide an understandable purpose for the study of metaphor, one that is from the foundation of Black’s thesis that metaphor has an irreducible cognitive force (Kittay, 13). Kittay asserts that the theory of metaphor functions to “provide a perspective from which to gain an understanding of that which is metaphorically portrayed” (Kittay, 13-14). Kittay, from her literary perspective on metaphor, further explains, “metaphor provides the linguistic realization for the cognitive activity by which a language speaker makes use of one linguistically articulated domain to gain an understanding of another experiential or conceptual domain, and similarly, by which a hearer grasps such an understanding” (Kittay, 14). This is similar to Black’s thesis that we understand one subject in terms of what the secondary subject brings to the metaphor.

Kittay is just one of the cognitive theorists studying metaphor. Similarly, Indurkhya sees metaphor as a reconceptualization of the primary subject, a complete change in paradigm (Indurkhya, 11-16). This is also a cognitive view of metaphor, implying that much cognition is required in understanding the interaction of the primary
and secondary subjects within a metaphor. Indurkhya is one of the few theorists who has tried to develop a theoretical model that will incorporate both visual and verbal metaphors (Indurkhya, 1991).

Lakoff and Johnson view metaphor as a systematic conceptualization of certain domains of experience in terms of other domains of experience (Lakoff & Johnson, 139). They also come from a cognitive perspective of metaphor, explaining how metaphor changes our views. In their studies on metaphor, “The essence of metaphor is understanding one kind of thing in terms of another” (Lakoff & Johnson, 5). Lakoff & Johnson rely upon the cognitive components in their theory, focusing on human thought processes. Their theory of metaphorical systematicity purports that “metaphorical entailments can characterize a coherent system of metaphorical concepts and a corresponding coherent system of metaphorical expressions for those concepts” (Lakoff & Johnson, 9). Their writings deal with socially engrained metaphors that have become so commonplace in our society that we do not recognize these metaphors as such.

Stuart Jay Kaplan does not limit his understanding of metaphor to just the literary world, but still views metaphor from the same cognitive theoretical perspective as those before him. To Kaplan, metaphor is “a combination of two ideas (presented in the forms of words or nonverbal images) in relationship to one another such that one idea is used to organize or conceptualize the other” (Kaplan, 198). Kaplan also believes that the cognitive perspective is important for two reasons. First, it has helped facilitate the development of a unified theory of metaphors. Secondly, it does not rely on the traditional, language-based explanations of the metaphorical process (Kaplan, 1992).
Kaplan identifies two conditions that must be met for the image or phrase to be considered metaphorical. “There must be at least some features of the two ideas that are shared between them and the attempt to map one idea on to the other must violate linguistic norms or beliefs about the world to the extent that a measure of tension is created by the combination” (Kaplan, 198). Black’s writings agree with this notion of tension and sharing of features that make the metaphor work. However, Kaplan does not accept Black’s definition of metaphor and seeks to establish his own. He shares Black’s cognitive perspective, but differs in his definition and seeks to clarify his terminology. Kaplan’s “Conceptual Analysis of Form and Content in Visual Metaphors” establishes three ways of classifying metaphors: by metaphor form, type of tension, and by metaphorical content (Kaplan, 202-206).

Whittock’s cognitive perspective views metaphor as generating totally new ways of experiencing the familiar (Whittock, 126). Whittock suggests we categorize our experiences in schemas to help us make sense of them. When two opposing elements are paired and we perceive this metaphorical expression, we have no existing schema in which it will fit. When we perceive one thing in terms of another, as in a metaphor, we make a “category mistake” (Whittock, 138-139). That is to say, the new metaphorical utterance under consideration causes one to classify the primary subject in terms of the secondary subject, which creates tension in the mind since the two subjects are inherently different. As a result, we create new schemas to accommodate this new connection between the two metaphorical elements (Whittock, 1990).

MacCormac views metaphor as a knowledge process, also from the cognitive perspective. “When we speak of metaphor as a knowledge process, we include in that
knowledge process the cognitive activity of the mind, the activities of the brain on which the mind depends for its operations, and the interaction of the mind with its environment” (MacCormac, 127). MacCormac’s view of metaphor is similar to other linguistic perspectives in that metaphor is seen as changing the way we conceptualize the meaning of the two elements. MacCormac defines this in greater detail: “Metaphors appear as linguistic devices in surface language, but the intentional ability to produce a semantic anomaly that suggests a new meaning originates in a cognitive process. The human mind combines concepts that are not normally associated to form new concepts. This cognitive activity operates consciously and unconsciously” (MacCormac, 127). The ‘semantic anomaly’ that MacCormac refers to is what Black would call the tension between the two terms, or what Whittock would call a ‘category mistake.’ Black’s basic premises are still the foundation for MacCormac’s writings as he seeks to describe metaphor in three explanatory levels. MacCormac explores linguistic surface meaning, a deeper level of linguistic explanation, and the deepest level of cognitive activity relevant to metaphor (MacCormac, 127).

Clifford Geertz recognizes that what makes metaphor work is that it is ‘wrong’ and asserts one thing that is something else (Geertz, 1973). “The power of metaphor derives precisely from the interplay between the discordant meanings it symbolically coerces into a unitary conceptual framework and from the degree to which that coercion is successful in overcoming the psychic resistance such semantic tension inevitably generates in anyone in a position to perceive it” (Geertz, 211). Again, this is based on Black’s definition of metaphor that restructures our cognitions through the tension of the pairing of two opposing elements.
2.3 Visual Metaphors and Metaphors in Advertising

Visual metaphor scholars, often unhappy with the literary perspective, have begun to develop theories of their own. As discussed earlier, Indurkhya’s studies attempt to “develop unifying accounts of metaphor that can apply to verbal and nonverbal contexts” (Geertz, 197). Indurkhya’s semantic transference uses new terminology that could apply to both verbal and nonverbal metaphors, both in description and explanation of the function of metaphors. Van Noppen summarizes Indurkhya’s theory: “Metaphor is the description of a target domain in terms of a source domain; a transfer from one domain to another, characterized by different functions which condition the interpretation of metaphoric utterances” (van Noppen, 125). He is considered one of the few authors developing a new context that is not strictly literary, but one that is cross-categorizeable to verbal and nonverbal metaphor analysis. Also, some of Black’s basic tenants are still at work, especially those of transference or mapping features of one ‘subject’ onto the other. The interaction of the two elements or ‘domains’ is still the key to understanding how metaphor works.

Even literary theorists recognize that metaphors do not require language to transfer meaning from one subject to another. Kittay writes, “In exploring metaphor as a phenomenon of language, I do not mean to claim that metaphor is found only in language nor that metaphor is merely linguistic. We can have metaphor in dance, in painting, in music, in film, or in any other expressive medium” (Kittay, 14).

Rudolf Arnheim, in his studies of visual perception, finds metaphor in the expressive medium of visual art. In his discussion of symbolism in art, he recognizes that metaphor unites “practically disparate objects” and “derives from and relies on the
universal and spontaneous way of approaching the world of experience” (Arnheim, 435). The metaphorical communication has become a part of how meaning is conveyed in our messages to one another. Metaphor, even in art, has passed down meaning from generation to generation and thus developed a socially accepted norm of metaphorical expression.

Leiss, Kline, and Jhally have used metaphor to study social communication in advertising. They suggest that metaphors in advertisements have become a powerful and commonly used strategy. “Metaphor is the very heart of the basic communication form used in advertising” (Leiss et al., 241). Many other researchers share this view as they seek to explain the effects of metaphor use in advertising.

The study of metaphor in advertising has been used to gain insight about consumer behavior (Zaltman & Coulter, 1995). Zaltman’s Metaphor Elicitation Technique (ZMET) was a research tool developed to define and describe the metaphors that drive consumer behavior with implications for copy testing (Zaltman & Coulter, 1995). Metaphors are relevant to the study of advertising because metaphors are “laden with symbols and imagery that might be used creatively in implementing decisions that will animate or bring appropriate reasoning processes and mental models to life (Zaltman & Coulter, 38).

Stern also is an advocate of studying symbolism along with metaphor in advertising. Stern believes that advertising is a metaphorical art, much like poetry. She is more interested in verbo-pictorial metaphors (in Forceville’s terms) than strictly verbal metaphors since “words alone cannot convey the burden of meaning” (Stern, 90). Print, television, and even the Internet’s World Wide Web may be more appropriate media as
they are not limited to verbal communication. Stern’s work, although concerned with visual metaphors, still concerns the integration of verbal elements.

Charles Forceville tries to look at previous metaphor literature in hopes of developing a theory of pictorial metaphor in advertising, but notes that most of the literature on metaphor is primarily on verbal metaphors (Forceville, 4). Forceville uses the cognitive perspective from Black’s interaction theory and extends that to what he calls a pictorial theory of metaphor in advertising. “Metaphor occurs first of all on the level of cognition, and can manifest itself on the pictorial as well as the verbal level – and possibly in yet other ways” (Forceville, 108). Forceville has done content analyses of advertisements to locate four distinct types of pictorial metaphors in advertising: (1) Pictorial metaphors with one pictorially present term, (2) Pictorial metaphors with two pictorially present terms, (3) Pictorial similes, and (4) Verbo-pictorial metaphors (Forceville, 108-164).

Homer and Kahle propose a social adaptation explanation of visual metaphors, where “problems are solved by rearranging what we have always known….combined in such a way as to evoke something else” (Homer & Kahle, 51). Socially accepted norms are rearranged by juxtaposing two elements that interact and create tension. Homer & Kahle specifically studied surrealist images, but their definition of surrealistic content is related to metaphor and can be discussed along with metaphor studies. Similar to metaphor, they describe the effects of surrealist: “By juxtaposing unrelated objects, they revealed unexpected affinities between different objects” (Homer & Kahle, 50). They investigated the effects of metaphor use on persuasion, finding that ads incorporating
surrealistic content produced greater recall and purchase intent than other more traditional advertisements (Homer & Kahle, 1986).

Similarly, Fazio, Zanna, and Cooper have found that direct experience may affect attitude formation by altering the way in which the available information is processed (Fazio et al, 51). Since metaphors in consumer advertising require the consumer to become more actively involved and experience one thing in terms of another, advertising using metaphors may affect attitude formation towards a product or brand. At the very least, the active involvement stimulated by metaphors will alter the way in which the information is processed (Fazio et al., 51).

2.4 Advertising on the World Wide Web

Advertising on the Internet’s World Wide Web continues traditional publishing and broadcast media goals. “However, unlike traditional broadcast media, it facilitates two-way communication between actors. The medium possesses what Blattberg and Deighton (1991) have termed interactivity: it has the facility for individuals and organizations to communicate directly with one another regardless of distance or time” (Berthon et al., 43-44). This interactivity is what attracts marketers, for the consumer can actively participate and move through the buying process conveniently and quickly. “The Web offers marketers and advertisers the ability to make available full-color virtual catalogues, provide on-screen order forms, and to elicit customer feedback either quantitatively (online structured surveys) or qualitatively (open-ended email)” (Berthon et al., 43-44).

Many other features attract marketers to Web advertising, like the low cost and relatively few barriers to entry. This provides an equal playing field for most advertisers.
of all sizes, giving an almost equal share of voice since no one company can drown out
another (Berthon et al., 43-44). Organizations and businesses can be accessed 24 hours a
day, providing information on their company and products internationally at the click of a
mouse. The goal is to convert these mouse-clickers into consumers of your product or
service by the nature of the interactivity of the Web as an advertising medium.

2.5 Virtual Metaphors of the On-line World

Metaphors are one way to promote interactivity. Computer design of a graphical
user interface was first to utilize metaphors to encourage interactivity of the computer
user. With a Macintosh windows operating system and a mouse, early computer users
pointed and clicked to interacted with their virtual world. Tim Rohrer speaks of ‘virtual’
metaphors in computer interface design, such as the virtual desktop of the Apple
Macintosh OS (Rohrer, http://metaphor.uoregon.edu/gui4web.htm, 07/17/98). “In the
DESKTOP metaphor, the computer screen is a virtual ‘desktop’ with electronic ‘folders,’
‘documents,’ ‘disk icons’ and a ‘trash can’ which are patterned after the physical objects
in the physical office” (Rohrer, http://metaphor.uoregon.edu/gui4web.htm, 07/17/98).
In the late twentieth century, metaphors in the on-line world are combining ideas from
literary and pictorial metaphors, as well as those from early computer interface design,
into virtual metaphors. Many graphic icons use symbolism, pictographs, and other
elements from semiotics along with linguistic metaphor in hopes of catching the eye of a
Web surfer. On-line metaphors are often images, while others are text, and still others
combine both text and images. These computerized metaphors present the viewer with a
semblance of the actual physical world on their computer screen. For example, Security
First Network Bank, the first financial services institution to offer full-service banking on the Internet, uses on-line metaphors. “The company uses the graphic metaphor of a conventional bank to communicate and interact with potential and existing customers, including an electronic inquiries desk, electronic brochures for general information, and electronic tellers to deal with routine transactions” (Berthon et al., 45).

On-line metaphors should entice the computer user to interact with the icons or images in a way that is intuitive. These images should represent closely their real-world counterparts and if performing a function, they should be clear as to what function it is they perform. Rohrer agrees with this assumption, first presented by Collins, when he states that “metaphors are most intuitive to users when they are fairly literal” (Rohrer, http://metaphor.uoregon.edu/gui4web.htm, 7/17/98). As a marketer, the goal is to have consumers become more interactive with your message and your products. Thus leading to purchases and eventually repeat purchases. The more intuitive this process is, the more likely the advertiser can convert the casual web surfer to a loyal customer. To accomplish this goal on-line, the web site should hold the visitor’s attention, be readable, and be visually appealing as well as inform (Berthon et al., 50)

On-line users, especially on-line shoppers, actively seek interaction with this virtual world to perform functions such as browsing a catalogue or ordering merchandise much like they would in the real world. Metaphors provide a quick, easy way to present information to on-line consumers that also allow interaction. On screen images and words entice web surfers to click and interact with these metaphors in ways similar to their real world interactions, such as traditional advertising and in-store displays.
As the number of Internet shoppers increases, business on the web see more marketing opportunities and sources for revenue. Internet shopping is increasing, with about one in ten Americans now buying via electronic commerce (http://www.headcount.com; 07/27/98). In 1998, an estimated 18,567,784 people will make on-line purchases that total revenues of $26,469,360,000 (http://www.headcount.com; 07/27/98). According to Headcount.com, an Internet resource for who’s who on the web, there are about 333,000 businesses on the Internet out of the 40 million companies worldwide listed with Dunn & Bradstreet (http://www.headcount.com; 07/27/98). These businesses with the capabilities to market, sell, and distribute their products via the web have a distinct advantage. When targeting the Generation X web users, marketers have even more of an advantage, since this one demographic group seems to be leading in Internet commerce (http://www.headcount.com; 07/27/98). But as many marketers know, they have to be more and more savvy to reach Gen-Xers, and on-line metaphors that promote interaction, deeper mental processing, and message internalization could be a useful tool for the on-line marketplace.

2.6 Continued Study of Metaphor

Metaphor is usually considered in literary and artistic realms of discussion, and therefore is often an untouched subject for many in their daily lives. However, whether consciously or subconsciously, we all use and understand social and cultural metaphors as part of our everyday communications. To use Lakoff & Johnson’s example, “ARGUMENT IS WAR,” we can illustrate this point. Statements such as “Your claims
are indefensible” or “He attacked every weak point in my argument” are two expressions commonly heard in normal conversation that are founded on the culturally accepted metaphor “ARGUMENT IS WAR” (Lakoff & Johnson, 4).

Metaphors play “a fundamental role in thinking, behavior, and aesthetic phenomena, as well as language use” (Kaplan, 197). Metaphors have become a common means of expression from dance and art to poetry and literature. To revisit an earlier quote, Forceville discusses conventional metaphors that are “so embedded in language that their metaphoricity is often no longer recognized as such” (Forceville, 26). So this common use of metaphors is a way we reorganize our thoughts and meanings in communication, juxtaposing two elements in such a way as to create new meaning for the recipient of our communication. Is it not then fruitful to study this reorganization and transformation to more fully understand and take advantage of the nuances of language and imagery in the creation of metaphor? One may arguably question why study communication at all if not for the purpose of understanding and utilizing the tools available. Thus is the situation with the study of metaphor, for it is a deeply embedded social convention of communication, both verbal and nonverbal.

Another deeply imbedded social convention is advertising to consumers. Metaphor study has relevance to advertising as well since both are so intertwined in our daily lives. Advertisers hoping to modify beliefs, behaviors, and thinking could study metaphors in language and aesthetics. Metaphor has implications then for the study of mass communication. Metaphorical messages are present in corporate communications such as advertising and public relations. “Metaphor is the very heart of the basic communication form used in advertising” (Leiss et al., 241), and perhaps in other
communication fields as well. Thus, the study of metaphor would be a valuable investigation for many in mass communication studies. Not only does metaphor theory shed light on social conventions of conversation, but also provides practitioners tools for the marketplace in dealing with message communication. As the marketplace changes and we move to more commerce taking place on-line, perhaps advertisers will try to reach a different audience. On-line shoppers may have different needs and wants, such as convenience and saving time. Marketing to this audience presents new challenges and new opportunities for using metaphor in consumer on-line advertising.
CHAPTER 3

METHODOLOGY

The purpose of this chapter is to operationalize several key terms not yet clearly defined and to present the methodology of the research study at hand. Determination of the sample and sample size will also be explained. Methods examined will be those for coding, collection, and analysis of the data utilized throughout the research study.

3.1 Key Terms Defined

Key terms used in the collection and coding of data are defined in Chapter One; however, definitions of metaphor and the various types studied through this research are summarized below.

- Metaphor: an unusual pairing of two elements that creates tension when one element transfers meaning to another, thus creating a new concept different from what one element would have without the other
- Pictorial metaphor: a metaphor as defined above where the first element, or subject, is an image rather than words
- Verbal metaphor: a metaphor as defined above where the primary subject is presented in language rather than images
• Verbo-Pictorial metaphor: a metaphor as defined above where the first element is presented in language and images; the text and images need not be dependent upon the other for understanding, but they may be supportive of one another.

3.2 Data Coding Methods

Before data collection could begin, a proper coding method had to be defined. Metaphor literature suggested a useful way in which to classify metaphors, such as Forceville’s pictorial, verbal, and verbo-pictorial organizations. In viewing web sites, a number of similarities also presented other methods for the classification of metaphors. Some metaphors were “clickable” while others were not; some when clicked led the viewer to the intended second subject while not all of the on-line metaphors worked in this way. Many metaphors were of similar orientation, such as directional metaphors, while others clustered around the concept of searching for information. Thus a hierarchy of classifications grew out of both the literature and web site exploration.

First and foremost, these commercial web sites were coded as Type 1 for shopping sites and Type 2 for non-shopping sites. Then, from Charles Forceville’s work on metaphors in advertising, the top-most level in the hierarchy for classifying metaphors was created. The three highest classifications of metaphor are pictorial, verbal, and verbo-pictorial metaphors, denoted by P, V, and VP respectively. Any of these three types of metaphors can be clickable or non-clickable.

The second level of the hierarchy in the coding process requires the researcher to determine if the metaphor is clickable. This is determined by placing the mouse over the
text, image, or text with image and clicking the left mouse button. If clicking on this metaphor causes the browser to load another web page, then the metaphor is clickable. However, if the act of clicking on the metaphor does not result in new information being loaded onto the computer screen, the metaphor is termed non-clickable. Clickable metaphors will be coded as “C” while non-clickable types will be “NC.” Only clickable metaphors will be examined further for coding purposes.

Thirdly, the clickable metaphor either works or does not work, in terms of being understandable. The clickable metaphor, when clicked upon, should lead the web surfer to the second subject of the metaphorical concept. When the primary subject is clicked, the new information loaded on the screen should present the second subject of the metaphor, resulting in an understanding of the pairing of the two elements. Thus, the metaphor is termed workable and coded with a “W.” However, if clicking upon the first subject does not lead the web surfer to the second subject, the metaphor cannot be clearly understood or comprehended. The act of clicking may lead the viewer to more information on another web page, but without the pairing of the second subject, does not make any sense. These non-workable metaphors, denoted with “NW,” will not be studied past this point in the coding process.

The clickable, workable metaphor fell into several common categories of metaphors on-line. Directional metaphors (“D”) are frequent, pointing the viewer to go up, down, or back. Also, web surfers may find metaphors that offer help locating information, with a searching function (“S”). Still others feature entryways (“E”), such as a door or entrance to an on-line store.
Lastly, by combining the above eleven variables, it was noted that these metaphors fell into one of two types – virtual or symbolic. The metaphors could be collapsed into ones that represented an item in the real world via the virtual world of the Internet or ones that were symbolic of something not tangible in the real world. Combining all of the metaphors previously coded allowed the classification of metaphors into either virtual or symbolic, coded respectively as “Virtual” and “Symbol.”

3.3 Data Collection Methods

To compare commercial web sites on the Internet, high volume sites were needed. Therefore, a judgmental sample was utilized in order to study the highest-traffic commercial sites on the Internet’s World Wide Web. PC Magazine on-line has identified the top 100 web sites by traffic in five categories: Commerce, Computing, Entertainment, News & Views, and Reference. The commerce category was employed in this study since this collection of web sites contains corporations selling a good or service via their on-line presence, usually with their web address ending in “.com,” meaning commercial. The Top 26 commercial web sites, as identified by PC Magazine on-line’s September 1998 edition, were viewed and sampled for metaphors. Web sites that operated on individual persons placing classified ads to sell products or auction products were omitted from the sample since they did not meet the requirement of being a corporation promoting or selling a good or service. Web sites were first divided into either “shopping” or “non-shopping” categories. The shopping sites were defined as corporate web sites that not only promoted goods and services on-line, but also offered viewers the opportunity to purchase their products. Non-shopping sites often promoted and marketed the corporation’s
products, but there was no on-line selling of items, leaving the consumer to make their purchases in traditional retail outlets or elsewhere. With fewer non-shopping sites, it was necessary to identify the top non-shopping sites first and to select the same number of shopping sites for comparison. September’s top commerce sites contained seven non-shopping sites and therefore the top seven shopping sites were also chosen for comparison. The top fourteen of these commercial sites, with the exclusion of the classified and auction sites, were selected as the two independent samples.

Sites were examined thoroughly, starting with the home page, and all potential metaphors explored. All images were viewed and all text read to look for potential pairings of subjects that created tension. All links were followed to the best of the ability of the researcher, leading to numerous sub-pages of the web site.

3.4 Data Coding Examples

fit into the categories defined above. The total number of metaphors fitting each sub-
classification was input into the computer program.

Pictorial metaphors found were counted as the second variable input into SPSS.
An example of a pictorial metaphor can be found at www.amazon.com. The pictorial icon
image, , presents a shopping cart, but no accompanying words for the viewer to read.
Thus, the web viewer must look at this virtual shopping cart and pair this image with their
mental idea of a real-world shopping cart. The image is clickable and leads the web surfer
to the contents of the virtual shopping basket in this on-line store. Therefore, the image is
coded as a pictorial, clickable, working, virtual metaphor because the graphic image, when
clicked, leads the viewer to the second subject of the metaphor, the contents of the
shopping cart of the on-line consumer.

Verbal metaphors were also found in the web sites. To use a similar example,
www.bigstar.com also allows viewers to purchase items on-line and put items in a
shopping basket. However, no image is used to denote such a metaphor. Only words
convey this virtual shopping basket, as shown on the web site by this clickable phrase,
Shopping Basket. The text-only shopping basket was coded as a verbal metaphor that is
clickable, working, and virtual since the act of clicking on the phrase leads the consumer
to view the contents of the on-line shopping basket.

In the same vein of shopping, a verbo-pictorial example was found at
www.marthastewart.com, depicting the verbo-pictorial metaphor . The
image of a basket paired with the words, “view basket,” aids the web surfer to
comprehend the metaphor. When clicked, this green rectangle allows the web surfer to
view the contents of their shopping basket in the Martha Stewart on-line store. This verbo-pictorial metaphor was thus coded as clickable, working, and virtual as well.

Non-clickable metaphors were found where the first subject of the metaphor was not linked to another web page and thus was not a clickable image or phrase. When the mouse was pointed at the object or phrase, the pointer did not become the “hand” icon that denotes a hyperlink in the body of the web page. Therefore, when the image or phrase was clicked upon, nothing happened. An example of this is found at

www.bigstar.com, where the pictorial metaphor, , is non-clickable, but still denotes the “BigStar’s Big 10” movie choices.

Non-working metaphors were also identified where, when clicked upon, did not lead the web surfer to the second subject of the metaphor. On occasion, clicking on the first subject of the metaphor did load another web page, but produced a confusing and unrelated web page that did not provide the viewer with the second subject of the metaphor. For example, the verbo-pictorial metaphor, symbolic for e-mail, used at

www.amazon.com, is shown as . Clicking on this combination of words and images does not lead the viewer to read or check his mail or e-mail, but only to fill out a form to request book reviews via e-mail from the Amazon book company. The clickable image does not present the web surfer with the second subject of the metaphor, and is thus coded non-working.

Classifications or groupings of online metaphors that arose such as entryways, directional, and searching were also observed. A searching example was located at

http://investor.msn.com. When clicking on the hyperlink text, Finder, the web surfer
loaded a page that would allow them to search a database of over 16,000 stocks and funds. This metaphor’s first subject was clickable text, which was coded as a verbal metaphor. However, when the second subject appears on the linked web page, a graphic image is paired with the word “Finder”: . This image of binoculars represents the web surfer looking for information or details about the stocks and funds available at http://investor.msn.com. However, it is still a verbal metaphor since the primary subject was only text and no image accompanied it. This metaphor was classified as a searching type of verbal, clickable, working, symbolic metaphor.

3.5 Data Analysis Methods

Data collected from the observed web sites were coded similar to the examples above and input into the computer program SPSS. An independent sample t-test was performed to compare means and find the most common type of metaphor currently used in on-line advertising in both shopping and non-shopping web sites. The shopping sites were compared with non-shopping sites for observing similarities and differences among the different types of metaphors used by each. Frequency tests were also performed to compare the means of the variables. Discriminant analysis was performed to locate and isolate any significant influences on the use of metaphors on shopping and non-shopping web sites. The results from the tests were compared for validity and reliability. Results are located in Chapter 4.
CHAPTER 4

FINDINGS

This chapter will present the findings of the tests performed as discussed in Chapter Three, Methodology. The results from the three tests will be examined and compared in detail. Research findings will be discussed in general terms showing any significance determined.

4.1 Frequencies

Table 4.1 shows the frequencies of the first eleven variables over the fourteen commercial web sites studied. The number of occurrences was the greatest for clickable metaphors, with thirteen being the highest number of clickable metaphors observed in any single web site. Therefore, the mean, 5.64, is higher than all other means in the study. However, the spread of the data is greatest, as the standard deviation is 3.56. This means that some web sites have very few clickable metaphors while others have many clickable metaphors, as shown in the range column below.

Verbo-pictorial and working metaphors also had a high level of occurrence, with each ranging up to eleven observances in any given web site. The variable working has a slightly higher mean (5.29) than verbo-pictorial (4.50), but also has a higher standard deviation (3.27 as compared to 1.14). This shows that although
working metaphors have a slightly higher average, there is a greater distribution of metaphors across the fourteen web sites. There is at least one working metaphor in every web site studied, whereas not all web sites contained verbo-pictorial metaphors. Virtual and symbolic metaphors have a large mean due to the fact that each metaphor observed was coded as one or the other. There were slightly more symbolic metaphors observed than virtual metaphors. Also, there was only one non-clickable metaphor observed across all fourteen web sites in the population.

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>Total</th>
<th>Range</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pictorial</td>
<td>14</td>
<td>4</td>
<td>0-1</td>
<td>0.29</td>
<td>0.47</td>
</tr>
<tr>
<td>Verbal</td>
<td>14</td>
<td>13</td>
<td>0-3</td>
<td>0.93</td>
<td>1.14</td>
</tr>
<tr>
<td>Verbo-Pictorial</td>
<td>14</td>
<td>63</td>
<td>0-11</td>
<td>4.50</td>
<td>1.14</td>
</tr>
<tr>
<td>TOTAL</td>
<td>14</td>
<td>80</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clickable</td>
<td>14</td>
<td>79</td>
<td>1-13</td>
<td>5.64</td>
<td>3.56</td>
</tr>
<tr>
<td>Non-Clickable</td>
<td>14</td>
<td>1</td>
<td>0-1</td>
<td>0.07</td>
<td>0.27</td>
</tr>
<tr>
<td>TOTAL</td>
<td>14</td>
<td>80</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working</td>
<td>14</td>
<td>74</td>
<td>1-11</td>
<td>5.29</td>
<td>3.27</td>
</tr>
<tr>
<td>Non-Working</td>
<td>14</td>
<td>6</td>
<td>0-3</td>
<td>0.36</td>
<td>0.84</td>
</tr>
<tr>
<td>TOTAL</td>
<td>14</td>
<td>80</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entryways</td>
<td>14</td>
<td>4</td>
<td>0-2</td>
<td>0.29</td>
<td>0.61</td>
</tr>
<tr>
<td>Directional</td>
<td>14</td>
<td>3</td>
<td>0-3</td>
<td>0.21</td>
<td>0.80</td>
</tr>
<tr>
<td>Searching</td>
<td>14</td>
<td>4</td>
<td>0-1</td>
<td>0.29</td>
<td>0.47</td>
</tr>
<tr>
<td>Recycling</td>
<td>14</td>
<td>0</td>
<td>0-0</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>TOTAL</td>
<td>14</td>
<td>11</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Virtual</td>
<td>14</td>
<td>39</td>
<td>0-8</td>
<td>2.57</td>
<td>2.95</td>
</tr>
<tr>
<td>Symbolic</td>
<td>14</td>
<td>41</td>
<td>0-5</td>
<td>2.71</td>
<td>1.44</td>
</tr>
<tr>
<td>TOTAL</td>
<td>14</td>
<td>80</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.2 Independent Sample t-test

Table 4.2 below shows the results from the independent sample t-test performed.

The two independent samples are the shopping and non-shopping web sites of the
population. The means and standard deviations are compared for each variable based on sample group membership.

The variable verbal shows a significant t-value of 2.50. Although the variable pictorial appears to be significant at first glance at Table 4.2, there is no variance within Type 2 (non-shopping) web sites, thus yielding a zero mean and standard deviation. Therefore, no statistical comparison can be made because of lack of variance. However, the fact that there were no pictorial, non-clickable, directional, or recycling metaphors on non-shopping sites compared to an average of 1.53 metaphors on shopping sites provides evidence that shopping sites use more pictorial, non-clickable, directional, or recycling metaphors than non-shopping sites. Also, no statistically significant differences appeared among the variables virtual and symbolic.

### Table 4.2 t-test Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Shopping</th>
<th>Non-Shopping</th>
<th>t</th>
<th>df</th>
<th>Sig: equal variance assumed</th>
<th>df</th>
<th>Sig: equal variance not assumed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pictorial</td>
<td>0.57 0.53</td>
<td>null null</td>
<td>2.83*</td>
<td>12.00</td>
<td>0.015</td>
<td>6.00</td>
<td>0.030</td>
</tr>
<tr>
<td>Verbal</td>
<td>1.57 1.13</td>
<td>0.29 0.76</td>
<td>2.50</td>
<td>12.00</td>
<td>0.028</td>
<td>10.45</td>
<td>0.031</td>
</tr>
<tr>
<td>Verbo-Pictorial</td>
<td>3.14 3.58</td>
<td>5.86 3.39</td>
<td>-1.46</td>
<td>12.00</td>
<td>0.171</td>
<td>11.96</td>
<td>0.171</td>
</tr>
<tr>
<td>Clickable</td>
<td>5.14 3.58</td>
<td>6.14 3.08</td>
<td>-0.51</td>
<td>12.00</td>
<td>0.620</td>
<td>11.03</td>
<td>0.620</td>
</tr>
<tr>
<td>Non-Clickable</td>
<td>0.14 0.38</td>
<td>null null</td>
<td>1.00*</td>
<td>12.00</td>
<td>0.337*</td>
<td>6.00</td>
<td>0.356</td>
</tr>
<tr>
<td>Working</td>
<td>4.57 3.41</td>
<td>6.00 3.21</td>
<td>-0.81</td>
<td>12.00</td>
<td>0.436</td>
<td>11.96</td>
<td>0.436</td>
</tr>
<tr>
<td>Non-Working</td>
<td>0.57 1.13</td>
<td>0.14 0.38</td>
<td>0.95</td>
<td>12.00</td>
<td>0.361</td>
<td>7.32</td>
<td>0.373</td>
</tr>
<tr>
<td>Entryways</td>
<td>0.43 0.79</td>
<td>0.14 0.38</td>
<td>0.87</td>
<td>12.00</td>
<td>0.403</td>
<td>8.63</td>
<td>0.410</td>
</tr>
<tr>
<td>Directional</td>
<td>0.43 1.13</td>
<td>null null</td>
<td>1.00*</td>
<td>12.00</td>
<td>0.337</td>
<td>6.00</td>
<td>0.356</td>
</tr>
<tr>
<td>Searching</td>
<td>0.29 0.49</td>
<td>0.29 0.49</td>
<td>null*</td>
<td>12.00</td>
<td>1.000</td>
<td>1.00</td>
<td>1.000</td>
</tr>
<tr>
<td>Recycling</td>
<td>null null</td>
<td>null null</td>
<td>null*</td>
<td>12.00</td>
<td>null</td>
<td>null</td>
<td>null</td>
</tr>
<tr>
<td>Virtual</td>
<td>2.14 2.79</td>
<td>3.00 3.27</td>
<td>-0.53</td>
<td>12.00</td>
<td>0.61</td>
<td>11.70</td>
<td>0.61</td>
</tr>
<tr>
<td>Symbolic</td>
<td>2.86 1.35</td>
<td>2.57 1.62</td>
<td>0.36</td>
<td>12.00</td>
<td>0.73</td>
<td>11.60</td>
<td>0.73</td>
</tr>
</tbody>
</table>

* Sig. = affected by null set
4.3 Discriminant Analysis

In discriminant analysis, variables whose variance equaled zero, pictorial, non-clickable, non-working, directional, and recycling, were deleted. Only variables with variance were included in this analysis. These variables were verbal, verbo-pictorial, clickable, working, entryways, and searching. The variables virtual and symbolic were not included in the analysis because the researcher did not hypothesize these two variables had any influence on group membership. The discriminant analysis showed that group membership among shopping and non-shopping web sites was affected by multiple variables from the eleven tested. A single significant function resulted from the discriminant analysis (df = 6, p = 0.017). The eigenvalue was 4.614, explaining 100% of the variance, with a canonical correlation of 0.907.

Verbo-Pictorial (see Table 4.3) had the largest positive discriminant function with a 13.445 coefficient, and clickable had the largest negative coefficient (-11.251). These coefficients provided evidence that verbal, verbo-pictorial, and clickable metaphors had the greatest discriminating power in differentiating shopping versus non-shopping metaphor usage. Verbal metaphors tend to be present more often in non-shopping web sites, as do verbo-pictorial metaphors. Clickable metaphors tend to have a strong correlation with shopping web sites. Strong influence on group membership is displayed among these three variables. Other variables influenced group membership to a lesser degree, such as working, entryways, and searching.
Table 4.3 Standardized Canonical Discriminant Function Coefficients

<table>
<thead>
<tr>
<th></th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>VERB</td>
<td>2.128</td>
</tr>
<tr>
<td>VERBPIC</td>
<td>13.445</td>
</tr>
<tr>
<td>CLICK</td>
<td>-11.251</td>
</tr>
<tr>
<td>WORK</td>
<td>-1.908</td>
</tr>
<tr>
<td>ENTRY</td>
<td>-0.501</td>
</tr>
<tr>
<td>SEARCH</td>
<td>0.862</td>
</tr>
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CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

This research study set out to answer three questions through a series of objectives. By obtaining the objectives of study, which were to develop a coding method, collect, code, and analyze the data, the following questions were answered during this research:

1). What is the most common type of metaphor used in on-line advertising in 1998?
2). Is there a difference between metaphor usage in shopping versus non-shopping web sites?
3). What are the influencing factors that account for these differences?

In answering these questions, we found that verbo-pictorial, clickable, and working were common. Shopping sites tend to use more pictorial, non-clickable, and directional metaphors than non-shopping sites. Verbal and verbo-pictorial metaphors tend to be present more often in non-shopping web sites. Verbal, verbo-pictorial, and clickable metaphors had the greatest discriminating power in differentiating shopping versus non-shopping metaphor usage.
5.1 Conclusions

In evaluating the metaphor usage of commercial web sites, it is noted that verbo-pictorial, clickable, working metaphors are the most effective and present the least risk to advertisers on the web. Verbo-pictorial metaphors pair text and images, thus making the metaphor clearer to the viewer by giving them both images and written words. Also, verbo-pictorial metaphors aid those web surfers that have the images turned off in their web browser by at least giving them the accompanying text to understand the metaphor. Clickable metaphors allow more consumer interaction, and from the literature review, it is noted that the more consumers interact with the advertising message, the more they internalize this message. Active consumers are more desirable than passive consumers. Lastly, working metaphors pair the first subject with the second subject properly, creating a new concept in the mind of the consumer. The working metaphor restructures the way the consumer comprehends the message and gives them a clear understanding of the metaphor.

However, not all web sites were using these types of metaphors. Non-shopping web sites in the sample appeared to be utilizing verbo-pictorial, clickable, working metaphors more often than shopping sites. It can be concluded then that non-shopping sites are more effective in their use of metaphors.

With that said, shopping sites and non-shopping sites tended to be similar in many regards. There were few significant differences found through the course of the study, as discussed in Chapter Four. The lack of difference between shopping and non-shopping commercial web sites could be due to several factors. First, the medium of the Internet’s World Wide Web is relatively new compared to other media. Secondly, advertising on the
web is still in its infancy. Businesses that promote their goods or services on-line are still learning what to do and how to do it, without any rules or guidelines. Perhaps web developers for businesses just entering the on-line world look to other corporate web sites for guidance and replicate their promotions. This influence on new commercial web sites could account for the similarities and consistencies among commercial web sites’ usage of metaphors in on-line advertising.

5.2 Recommendations for Future Research

This study observed commercial web sites’ usage of metaphors in on-line advertising in hopes of providing useful information to marketers and advertisers when developing an Internet presence. However, to create an effective web site, further consumer research would be necessary. Research in this area in the future should concentrate on how the consumer reacts and interacts with on-line metaphors. An experiment, using research-specific web sites created by the researcher, could aid in providing this type of consumer information to advertisers. Paired with market research about competitors’ use of on-line metaphors, such as this study provides, consumer research could give the web developer a guide to building an effective on-line presence for his or her company.

This descriptive study set out to merely identify the metaphors in use at the present time, but as the web and advertising change and grow, further study will become more important. Metaphors have been used in many genres for many centuries, and no one knows how they will be used in the future as we move into becoming an electronic
society. Research about the present can identify changes in metaphor use and hopefully hypothesize about its use in the future.
APPENDIX

CODE BOOK

Metaphor Classifications:  Web Site Classifications:

P = Pictorial metaphors  1 = shopping
V = Verbal metaphors  2 = non-shopping
VP = Verbo-Pictorial metaphors

C = Clickable
N = Non-Clickable

W = Workable
NW = Non-Workable

D = Directional
S/B = Shopping/browsing activity
S/L = Searching/looking activity

Virtual = Virtual metaphors
Symbol = Symbolic metaphors
Coding Hierarchy

Metaphor Classifications

- Pictorial Metaphors
- Verbal Metaphors
- Verbo-Pictorial Metaphors

- Clickable Metaphors
- Non-Clickable Metaphors

- Workable
- Non-Workable

- Shopping/Browsing
- Directional
- Searching/Looking

- Virtual
- Symbolic
REFERENCES


BIOGRAPHICAL SKETCH

Elizabeth M. Anderson was born in Morganton, North Carolina, in 1973. She grew up in Valdese, North Carolina, attended Burke County public schools, and graduated from East Burke High School in 1991. In the fall of that year, she enrolled in Meredith College in Raleigh, North Carolina, where she obtained her bachelor’s degree in art with a concentration in art education. After graduation in 1995, she married Brian Anderson and began teaching art in the public school system of North Carolina.

In the fall of 1996, Elizabeth and her husband moved to Gainesville, Florida, for Brian to complete his master’s degree in civil engineering. In the fall of 1997, Elizabeth was admitted to a master’s program in advertising while her husband was beginning his doctoral studies. Elizabeth graduated from the University of Florida in December 1998 and currently is seeking a full-time position in advertising. She also anxiously awaits her husband’s completion of his doctoral program by the spring of 2000.