1985

Audience Preference for Metaphoric Concept in Broadcast Language

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AUDIENCE PREFERENCE FOR METAPHORIC CONCEPT IN BROADCAST LANGUAGE

An Abstract of a Thesis

Submitted

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts

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University of Northern Iowa

December 1985

This Study by: Denis Martin Bramblette

Entitled: Audience Preference For Metaphoric Concept In Newscast Language

has been approved as meeting the thesis requirement for the Degree of Master of Arts

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ABSTRACT

A recent communication theory premise that individuals tend to arrange their thinking metaphorically is the focus of this study. Some communication scholars posit that humans actually think in metaphors. That is, individuals understand something by using one thing to stand for another. Humans communicate by comparing things they understand. Thus, we as humans actually arrange our thinking metaphorically and we understand things or interpret symbols by processing information through a system of metaphoric concepts.

This study attempts to extend metaphoric concept communication theory by examining the broadcast news segment of mass media. This study's general hypothesis is that if individuals do in fact organize their thinking metaphorically they will prefer newscast language that is organized and presented in metaphoric concepts.

To test this hypothesis, audiences were surveyed to gain responses to two broadcast news stories and two increased metaphoric concept versions that were created for the study. The taped news story versions were randomly presented and audience responses were tabulated on a survey

instrument which asked respondents to rate each news story version by preference.

Survey results were analyzed using the Statistical Package for the Social Sciences (SPSS-X) program. Analysis indicates that audiences overwhelmingly reject metaphoric concept news stories and prefer basic newscast stories.

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ACKNOWLEDGEMENTS

The author wishes to thank his committee for their inspiration and guidance throughout the writing of this thesis. Special thanks to Dr. Jan Robbins for his inspiration during the writing stage, particular thanks for his insight and aid in the study's design. Special thanks to the head of my committee, Dr. Jon Hall, for acting as my mentor which allowed me to individually progress and mature through the graduate student educational process. Very special thanks to Dr. Jay Edelnant for providing candid and intuitive remarks and recommendations. His influence on my work began with the very basic designs of the study and ended with a very careful final reading of the manuscript. Dr. Edelnant was particularly instrumental in the completion of this work because he not only taught me the rudiments of research, but provided an awareness of the politics involved in doing graduate work.

Finally, special thanks to my wife Karen and my daughters Dana, Brandy and Lacey. They sacrificed a great deal during my pursuit of graduate education, and the writing of this thesis. Without their encouragement, understanding and patience this study would not have been completed.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

INTRODUCTION

Typically, metaphors are described as mere rethorical or literary devices. However, some communication scholars have recently posited that human thought patterns are largely metaphorical. The paradigm these scholars propose stresses metaphor as an underlying concept that allows individuals to organize their thinking. To demonstrate the theory's versatility, even cross cultural similarities are being studied, using an extended metaphoric concept model.

An introduction to metaphor and metaphoric concept is presented here, providing the theoretical background for this study. That discussion is followed by an explanation of newscaster use of metaphor and conversational style. Penultimately, the study's hypothesis, problem statement and assumptions are presented. Then the study's definitions of metaphor, newscast style and audience conclude the section.

Metaphoric Concept Theory

A model of how metaphors convey meaning and aid assimilation is given by Rogers, "A typical metaphor reads, an 'x' is like 'y'" (1978, p. 6). The rhetorical significance of metaphor is also presented by Rogers, "Aristotle singles out command of metaphor as the most

important element in style and the hallmark of genius" (1978, p. 5).

Metaphoric language has long been perceived as a writer's stylistic tool. However, Perry (1983) states:

> The rhetorical significance of figurative language is a problem which has not received adequate attention from rhetorical scholars. Though the annals of rhetorical theory and criticism are replete with treatments of metaphor, many of these have been quasi-literary endeavors which sought to understand metaphor largely from within the stylistic canon of rhetoric, as an aesthetic entity to be judged more in terms of its formal qualities than in terms of its practical functions in discourse. (p. 229)

The notion that metaphor is more than a stylistic tool of writers is described by S.I. Hayakawa in the forward to Weller Embler's (1966) book on metaphor and meaning:

> In traditional rhetoric, metaphor has long been known as a "figure of speech"--an embellishment to literary discourse. So long as metaphors were so regarded--as merely the paper panties on one's lamb chop--they could be ignored. Some, in seeking a genetic explanation of metaphor, have looked upon it as a failing of the primitive and prelogical mind. . . . Some few . . . have said that metaphor is the fundamental process by which language grows and adapts itself to the changing world. No one, to my knowledge, has taken the position so boldly expounded in this volume that metaphors are the very stuff with which human beings make sense of the universe--that philosophies of life, "the philosophy of an entire generation, indeed, even of an entire civilization [are] implicit in the metaphors of creative writers. A metaphor is not only the single statement, "He was a lion in battle" (to quote the example in my dictionary) . . . metaphors are the principles of organization by means of which we sort our perceptions, make evaluations, and guide our purposes. We do not use metaphors so much as our metaphors use us. "Figurative language," Professor Embler writes, "is the home of many a deep-seated, unexamined belief or mental attitude." To examine

> closely what we say is to learn much about the operation of our minds. (p. i)

Lakoff and Johnson (1980) expanded metaphoric concept thinking and categorized the different types of metaphoric concepts individuals use. They maintain that individuals arrange their thinking in one of three orientations. Those orientations are spatial, ontological and structured. For a comprehensive discussion of the three metaphoric concept models they define see Appendix A. Lakoff and Johnson state their general position on metaphor as:

> The most important claim we have made so far is that metaphor is not just a matter of language, that is, of mere words. We shall argue that, on the contrary, human thought processes are largely metaphorical. This is what we mean when we say that the human conceptual system is metaphorically structured and defined. Metaphors as linguistic expressions are possible precisely because there are metaphors in a person's conceptual system. (Lakoff & Johnson, 1980, p. 6)

An example of the ordinary conceptual linguistic system's basis in metaphor is given by Lakoff and Johnson as:

> To give some idea of what it could mean for a concept to be metaphorical and for such a concept to structure an every day activity, let us start with the concept ARGUMENT and the conceptual metaphor ARGUMENT IS WAR. This metaphor is reflected in our everyday language by a wide variety of expressions:
>
> Your claims are indefensible.
> He attacked every weak point in my argument.
> His criticisms were right on target.
> I demolished his argument.
> I've never won an argument with him.
> You disagree? Okay, shoot.
> If you use that strategy, he'll wipe you out.
> He shot down all my arguments. (1980, p. 4)

The theoretical use of metaphor to explain human mental processes and the larger culture to which an individual belongs was stated by Deetz (1984), "Thinking, experiencing, and acting in a culture are based upon grand systems of metaphors" (p. 218). Deetz offers support for Lakoff and Johnson's position on metaphor and culture:

> Speech is not composed of isolated metaphors used figuratively to dress up literal expression or make it rhetorically more powerful. Each metaphor is a witness for the system of which it is a part. The appearance of a metaphor in speech at the same time is part of the production of the metaphorical system and reproduces the system that exists. The metaphors in this sense produce their own conditions for being understood. And the systems of metaphors reveal a portion of the coherence of thought and action in a culture. (p. 219)

Deetz extended metaphoric language's use to that of a descriptor of societal thinking or what might be called a "cultural equivalent." He developed that concept into an analytical tool that can be used as an interpretive research paradigm in the behavioral sciences. Deetz explains:

> Interpretive research is interested in describing and explaining the structure of human experience. Frequently in the study of human communication these structures have been treated as if they were subjective interpretive processes, that is, as if meaning was added by the individual to objective things and events that exist in the world. With this view, culture has been too often treated as if it existed as a unified set of consensually shared subjective interpretations. Once such a conceptualization of meaning is in place the methodological debate quickly becomes one between these emphasizing an "analytical-quantitative-reductionist" approach that either disregards meaning or reduces it through a priori operational definition and those emphasizing a "holistic-qualitative-contextual" approach that is heavily reliant on researcher or

> cultural actor interpretation. By conceptualizing meaning as "textual" many of the limitations of these two approaches are avoided. (Deetz, 1984, p. 215)

Deetz's interpretive research paradigm stresses the use of metaphor analysis as a way to understand communication behavior in a cultural context. Within this paradigm lies the morphology that allows for the use of newscast metaphor as a means of studying human behavior.

An application of metaphoric concept analysis to newscasting is seen as a way to expand the understanding of communication behavior and to provide insight into the cultural-textual use of metaphors. An adaptation of the metaphor analysis paradigm has recently been applied to newscasting by Mumby and Spitzack (1983) who conducted a metaphoric analysis of political news stories. Mumby and Spitzack define their application of metaphor analysis to newcasting:

> The news-making process as such thus is inherently ideological, functioning as a means by which the world can be "framed" in a particular way. This framing technique need not be seen as deliberate, but rather as a way of reflecting an objective and pre-existing reality; i.e., news is simply a "window on the world." One way of productively addressing the ideological thrust of news is to examine the language through which stories are presented. . . . The notion of a perspectival world-view is not meant to suggest a subjective reading of news stories, but rather reflects the degree to which news, as an integral part of the acculturation process, continually reproduces and focuses the dominant ideology, and hence partly defines the perception of a particular event for the viewer. This process of selective perception is not achieved through any form of coercion, but rests on the ability of television news to frame stories in such a way that

> selective interpretations are given active assent by viewers. Metaphoric analysis, then, must be concerned with an explication of the ways in which news language guides perceptions. (1983, p. 162)

In summary, by using metaphoric language to create shared experiences, individuals are attempting to provoke interest and aid assimilation of their messages. Lakoff and Johnson state that metaphoric concept exists in language because metaphoric concept exists as a way individuals mentally process information. Deetz extends Lakoff and Johnson's theory by stating that through the use of metaphoric concept analysis it is possible to study the larger context of culture. Mumby and Spitzack have designed a newscast content analysis model as a means of testing metaphoric concept theory.

Newscaster Metaphor and Conversational Style

The intent of the newscaster is, and must be, to attract the listener's attention and present news messages that are interesting and understandable.

> Newspapers, books and magazines are written for the eye. Broadcast news copy is written for the ear. This might seem like a mere anatomical technicality, but it is, perhaps, the key to understanding the nature of broadcast newswriting.
>
> The eye and the ear have different tastes. More of the brain is devoted to the eyes than to any of the other senses. The eye is sharp enough to take its information straight and fast.
> A less sophisticated instrument, the ear gets confused or bored by unrelieved lists of facts. The ear, the

> music-loving sense, prefers an easier, more clever presentation of information.
>
> One effective way of determining whether broadcast writing suits the needs of the ear is to compare it to another form of communication aimed at that sense--conversation. (Stephens, 1980, p. 19)

"Broadcast news writing stresses clarity, simplicity, and informality. These elements are the same as those generally agreed upon as the components of conversation" (Smeyak, 1983, p. 29). That is, conversationalists often vie for attention by personalizing their messages and by speaking in a manner which is intended to excite listener interest. "To write conversationally, broadcast journalists use a vocabulary that corresponds to the one used in conversation" (Stephens, 1980, p. 20).

Engaging language aids newscasters because it attracts listener attention and interest:

> The news can speak for itself. Yet, when the windshield wipers are flapping, the driver is dodging puddles, the brakes are starting to lose their grip and a newswriter wants to get the riders to lend an ear to a story about a drought, it's wise to make sure the news is speaking in its strongest and most engaging voice. (Stephens, 1980, p. 25)

Newscasters, like conversationalists, use figurative language such as metaphors to increase audience interest in their messages. The reason for metaphor usage by either newscasters or conversationalists is to aid the message assimilation process. Stephens says, "The key to using

these figures of speech is to remember that they each require tiny flights of imagination" (1980, p. 31).

Since newscasters intentionally arrange their messages in interesting and attractive conversational style, combining newscast messages and metaphoric concept theory should be a logical way to gain audience attention and aid message assimilation. If, as Lakoff, Johnson (1980) and Deetz (1984) maintain, metaphoric concept exists in language because it exists in both an individual's thinking and culture, the presentation of metaphorically arranged news stories should be widely accepted. Simply put, by creating and presenting news stories in metaphoric concept, newscasters should attract audience attention and aid assimilation of news story messages.

Hypothesis

It is an assumption of this study that engaging language is used by newscasters intentionally. It is also assumed that the majority of newscast listeners are not aware of newscast style.

> What is significantly different between conversationalists and newscasters is that newscasters must distinguish and digest what is news before presenting it in metaphoric language. (Stephens, 1980, p. v)

This study explores the practical application of metaphoric concept theory by attempting to determine

acceptable newscast metaphor content. This is done by stating as a problem: do audiences prefer significantly greater use of metaphoric concept than is currently used in standard newscast language? It is the hypothesis of this study that audiences of newscast stories will demonstrate a preference for greater use of metaphoric concept by newscasters. Thus, it is the intention of this study to contribute to the body of knowledge in communication in two ways:

First, by testing newscaster use of metaphoric concept and determining audience preference for the amount of metaphor in broadcast news stories. This knowledge has obvious practical application for newscasters.

Second, this study of newscast metaphoric concept responds to the call for explication of ways metaphoric concept guides perceptions. It responds to this hypothesis by attempting to add support for the idea that individuals do, to some degree, arrange their thinking metaphorically.

Assumptions

This study assumes that broadcast news writing differs from other forms of news media (newspaper, books, and magazines) by virtue of the spoken word. Newscasters must write and speak in conversational style. In other words,

newscasters must write for the ear. An understanding of this is best stated by Smeyak:

> Unlike print journalism, radio and television news is immediate and personal. News consumers become involved in broadcast stories: feeling grief of older couples defrauded out of their life savings, the tragedy of hurricanes, or the exhilaration of winning football teams. Much of the vicarious involvement is created through the use of interviews, actualities, and live reports. But some of this involvement is created through a personal writing approach developed by broadcast and cable journalists reporting news in conversational, colorful language. Colorful language is not dwelling on sensational aspects of news; it is finding inherent drama in news events and not getting between it and news consumers. (1983, p. 50)

Also, newscasters adhere to the same basic journalistic principles as their print brothers.

> Journalism is still conceived of by the majority of its practitioners, including those in the broadcast industry, as an idealist's profession, dedicated to the discovery and communication of truth and to the improvement of the human lot. Anything less from a reporter and editor, cameraman and producer, whether on paper or on the air, is not just inadequate, but immoral. (Barrett, 1969, p. 5)

Definition of Metaphor

This study of metaphor in newscasting is best understood by establishing a definition for figurative language and metaphor. The definitions provided for metaphoric language in this study come from the area of figurative language. Figurative language is the broad area of imagery in which metaphor exists.

> Metaphorical concepts can be extended beyond the range of ordinary literal ways of thinking and talking into the range of what is called figurative, poetic, colorful, or fanciful thought and language. Thus, if ideas are objects, we can "dress them up in fancy clothes, juggle them, line them up nice and neat," etc. (Lakoff & Johnson, 1980, p. 13)

For the purpose of this study it is necessary to understand that figurative language is the larger context from which metaphor comes. As Myers puts it:

> Although imagination can be defended as the sole source of man's sense of the world's beauty and his own dignity, it is more significant in an age that loves utility to point out that imagination is not only useful but indispensible and that figurative language is not an impractical addition but a practical necessity of life. (1940, p. 257)

It is contended by some rhetoricians that when imagery (picture thinking) is broken down, it is provable, that man cannot logically function in the world without it. Imagery or picture thinking is defined by Myers:

> That man cannot proceed and logically function without the use of this means of thinking. The growth of knowledge is always from the known to the unknown and can only proceed by that imaginative insight which finds expression in metaphors, similes, and other figures. A man comes, for example, upon a new kind of fruit. His thought usually runs in this fashion. What is this round yellow ball (Metaphor)? It is like an orange (Simile). It is a grapefruit (Fact). Scientists and engineers, philosophers and laymen, must, in advancing their thought into new realms, make use of the forms of thought and expression identified with poetry. Figurative language can be avoided only when thought itself ceases to be imaginative, when, in a word, men no longer learn, and knowledge is merely a static system of true propositions. But such time can never come, for thought as a function of a living organism contains within itself, in the imagination, the principle and means of its own growth. Perceptual thought (picture-thinking) finds expression in concrete

> imagery. The expression is as limited as the thought; words are symbols for things seen, heard, tasted, felt. (1940, p. 238)

To continue the survey of metaphor, it is important to establish that metaphor is not just the province of philosophers and poets as some would think; although its general description remains the same. As Hudson (1973) says, "In poetic theorists' discussions of metaphor, the emphasis is on metaphor's capacity to keep language alive and imaginative," (p. 28). It is this definition then that relates best to the newscaster's use of metaphor.

With this theoretical perspective established, it is then possible to refine the definition of metaphor. A precise definition of metaphor is an application of W. B. Stanford's careful description of metaphoric expression. Stanford's (1936) definition is as follows:

> "Metaphor is the process and result of using a term (X) normally signifying an object or concept (A) in such a context that it must refer to another object or concept (B) which is distinct enough in characteristics from (A) to insure that in the composite idea formed by the synthesis of the concepts (A) and (B) are now symbolized in the word (X), the factors A and B retain their conceptual independence even while they merge in the unity symbolized by X. (p. 101)

Additionally, there is this metaphoric concept of translation. Marias offers this reference to metaphor's Greek heritage which is, "The concept of translation is closely related to metaphor. The classical term for metaphor was 'translatio' or transference" (1967, p. 46).

The method of using metaphor in the study of cultural content is derived from these early concepts. The more recent perspective of the "conceptual metaphor" as an experiential transference is:

> Here, metaphors are not seen as purely stylistic devices; rather, they are integral to the way in which social reality is constructed. From this perspective, experience is shaped metaphorically. (Mumby & Spitzack, 1983, p. 162)

The above survey combines the elements that describe the basic perspective of metaphor that the author wishes to use. And, a definition most appropriate to this study is a simple one offered by Lakoff and Johnson. This study proposes this definintion, "The essence of metaphor is understanding and experiencing one kind of thing in terms of another" (1980, p. 5).

Definition of Newscast Style

This study will define newscast style as: a linguistic device used by broadcasters to present news stories. That is, in an effort to gain listener attention, colorful and engaging language is used. Language newscast style, then aids listener understanding. As Fang's (1966) study points out:

> The most significant conclusions are that television news style is easier to understand, less complex and less formal. It has shorter and simpler sentences, more active verbs, fewer progressive form verbs,

> shorter words, more pronouns, and more contractions than newspaper style. (p. 1774)

Another description of newscast style is presented by Smeyak (1983). He observes:

> Broadcast news script must accomplish two objectives. First, scripts must carry news content written in a simple, oral style which will interest and appeal to the audience listening or watching. The oral or conversational writing style that broadcast journalists use allows newscasters to read scripts fluently without stumbling, disturbing the timing or confusing production staff. Second, scripts must contain production directions. . . . (p. 5)

Definition of Audience

This study defines audience as: individuals attending to broadcast news messages. Audience preference for the messages presented to them then can be measured for the purposes of this study.

As Fang's (1966) study of newscast effects points out, "Broadcast news differs from other forms of news reporting through the use of verbalization; more so than any other way" (p. 1774). This verbalization leads to acceptance of the information presented in the message. The audience listening to a newscast translates the verbal symbols into mental pictures or ideas that it can comprehend.

REVIEW OF LITERATURE

The review of literature presented here is a comprehensive research effort into the broad area of studies previously conducted in the broadcast media. The review begins by looking at the general area of studies in mass communication before proceeding to reviews of studies strictly related to newscasting, studies on newscast style and studies on newscaster credibility and recall.

Studies in Mass Communication

The electronic media and the print media are the two basic mass communication forms that serve to distribute news in the United States today. Each has been studied extensively. News that reaches U.S. citizens from these sources comes in a variety of packages. In print, there are newspapers, books, magazines, and journals, which have all been studied.

Serious study of audio and visual communication variables began in the early 1940s. The first studies of mass media effects were not totally scientific in method. They did, however, represent initial attempts to quantify the multitude of variables that affect messages presented via the mass media.

In fact, early communication studies by Hovland et al. (1949) were simplified so that the difficulty in measuring the multitude of message variables could be lessened. Hovland and the "Yale Team" studied various aspects of psychology and sociology and presented their findings in a series of books following World War II.

Another group of researchers from Columbia University began to investigate media effects on audiences at about the same time as Hovland's Yale studies were being conducted. Mathematician-turned-sociologist Paul Lazersfeld (1968) began researching the area of mass media communication. Lazersfeld and his associates began by studying the 1940 presidential elections and the effects that the media had on audiences by using the theoretical paradigm, "Who, says what, to whom, in what channel."

In opposition to previously proposed theories about the power of the media their findings indicated that information presented by the media was generally ignored by the masses. Indeed, the information presented in the media was more likely to be absorbed by a select few. Those few, Lazersfeld (1968) identified as "opinion leaders" because they had the power to influence others.

> These opinion leaders, as they came to be called were not necessarily the traditional leaders such as teachers, businessmen, or government officials, but they were especially knowledgeable about public affairs, and they were more attentive to the mass media

> than most people in the community were. (Fedler, 1982, p. 46)

From these studies, Lazersfeld et al. developed a hypothesis about the "two-step flow" of communications.

The two areas of stimulus-response and the two-step flow dominated research in mass media up until the 1960s. At that time, the inconclusiveness of the two theories led to dissension in the field of communication causing many scholars to rethink the previous mass communication models.

> In 1960 Joseph Klapper reviewed much of the existing research on the effects of mass communication and concluded that rather than radical reorganization of the way an individual organizes his image of the world, the most likely effect of mass communication is maintenance of the status quo. (Roberts, 1971, p. 377)

A summary of early communication study failures was given by Schramm (1983). He says:

> For one thing linear explanations of the communication process now seem rather old-fashioned. The bullet theory, once so fashionable, has been in ill repute for forty years. . . . (2) Similarly, Lasswell's much-quoted "who says what in which channel to whom with what effect," is now read as an index to elements of the communication process rather than a description of how the process works. Indeed, as a description it is misleading in that it implies an active communicator and a passive audience--a one-way relationship in which the communicator does something to an audience. That was once the general assumption behind early studies of propaganda and advertising and political campaigns. It has now largely passed out of our thinking and has been replaced by the concept of a communication relationship in which the audience, for example, has as much to do with effects as has the communicator. (p. 6)

It was the demise of the "bullet theory" and the "two-step flow theory" that eventually led to the creation

of new concepts in the way communication scholars viewed the communication process. In the 1970s, a division in thinking by mass media scholars caused several new theories to be posited. Although it had been presented earlier, the theory of "agenda setting" found new meaning in light of research events.

The two-step flow theory was unable to explain the sometimes overwhelming power of the media to create instant public opinion. Agenda setting theory answered two-step flow theory's inability to explain mass media power. That is, the mass media, by using its unimpeachable power to choose the issues it puts before the public, does consequently influence public opinion. Or, as Bernard Cohen stated:

> The press may not be successful much of the time in telling people what to think, but it is stunningly successful in telling its readers what to think about. (Fedler, 1982, p. 48)

More support for mass media agenda setting theory was presented by Rogers and Rogers (1960) in their 'gatekeeper' portion of the agenda setting syllogism:

> The ability of the media to set the agenda of issues presented to the public infers control by the media. That control is directed by people in the media who are commonly referred to as 'gatekeepers'. A gatekeeper is an individual who is so located in a communication structure as to control the messages flowing through a communication channel. (p. 133)

The conclusion that may be drawn from the agenda setting model, although it has not been empirically proven, is that the mass media may indeed be as powerful at influencing and persuading public opinion as many early theoreticians had hypothesized.

Studies on Newscasting

In broadcasting, there are only two vehicles by which news is presented, radio and television, and they have been studied separately and together. The study of broadcasting has led to examination and explanation of several of the unique elements of newscasting. Studies of newscaster verbal elements have focused on delivery, credibility, or style.

But, there are a host of audience effect variables that are problematic for broadcast communication researchers. As Kerrick (1954) says:

> The important fact in terms of communication theory is that the apparently 'minor' elements of the message may at times exert so profound an effect as to completely dominate the impression of the entire message. (p. 37)

These problems are demonstrated by the contradictory findings presented in the following studies. A study by Pride and Wamsley (1972) was unable to reconcile all the variables at work in a study of broadcast news language:

> The use of this "engaging language" by broadcasters is an overt attempt to interest, and to aid the listener

> in their comprehension of the news. Through the use of this style, newscasters make it easier for people to listen to the news. The addition of visual elements in television newscasting only slightly effects the content of news messages. (Pride & Wamsley, 1972, p. 647)

Two alternate studies disagree with Pride and Wamsley's conclusion that the visual elements in television newscasting only slightly affect the content of messages. There was, for instance, the Sardowski (1972) study of the immediate recall of TV commercial elements which concluded that, "Video is usually remembered over audio" (p. 277).

Waite (1976) went further toward disproving Pride and Wamsley's conclusion. Waite studied the effects of pictorial, audio, and print television news by measuring output, recall, error and equivocation, He stated:

> It was concluded that the basic theoretical perspective which states that information is more effectively transmitted over multi-channels rather than a single-channel can be supported in the context of television news when output, recall error, and equivocation are the dependent variables. (p. 4833)

These studies point out what may be the most important thing to remember in the study of newscasting. There are a multitude of elements that affect the message. This is the case even though most studies of newscasting and, for that matter, communication, isolate individual elements (or variables) for the purposes of study.

It is, however, from this theoretical and research background that newscaster studies have come. Studies of

newscasts and newscasters have generally been pragmatic and occurred in three areas. The areas that have been researched are style, recall, and credibility. A review of literature in these areas has revealed several sources relevant to this study.

Studies on Newscast Style

Newscaster style has been researched in the attempt to define exactly what constitutes effective newscast style. Newscaster style is often separated into different categories. A computer-based anaylsis of television news writing style for listening comprehension states:

> Television provides the main source of news for millions of us. How clearly the news is written is, therefore, important. The hypothesis is: The best television news writing shares stylistic elements which can be analyzed quantitatively, then synthesized into a set of standards and a formula for listening comprehension. (Fang, 1966, p. 1774)

In fact, Fang was able to discern the variables he hypothesized and found four major components of newscast language. He identified them as: "Complexity, liveliness, informality, and dependency" (Fang, 1966, p. 1774). He was also able to develop a 'listenability' formula to aid in identifying these components.

A different direction was taken by Bart (1964) in the study of style. Bart investigated the relative

comprehensibility of print and broadcast news. Bart reported that:

> Dynamic newscast delivery afforded significantly greater comprehension than either the conversational or poor radio delivery. Most broadcasting textbooks advocate a conversational delivery style for the general news broadcaster, and a more dynamic style for the news commentator. These results indicate that the dynamic and authoritative style of delivery may be the most effective approach for all types of news broadcasting. (p. 2917)

Studies on Credibility and Recall

Other studies of broadcast news deal most specifically with newscaster credibility. Although newscaster credibility is not a major component of this study of metaphoric language, it is an important assumption of this study that newscasters must be credible. By assuming newscaster credibility, problems related to audience acceptance of messages are then limited.

A recent credibility study by Ryu dealt with local TV news. Ryu's study is indicative of the credibility studies that occur outside of newscaster studies. Ryu (1983) found that there is no significant difference between the early evening and late evening local news.

Two studies that do relate directly to newscaster credibility were done in the areas of source credibility and attributes of the newscaster's voice. Markham (1965) concluded that newscasters were judged by audiences on

three criteria. The three were a more finely drawn judgmental criteria than other speakers, a morality dimension, and their communication skill dimension.

Burgoon (1978) studied the attributes of newscaster voice. He concluded that voice was one of the attributes of good newscast delivery and therefore had an important effect on credibility of the newscaster.

Two studies reflect the type of research that has been undertaken in the area of newscast message recall. Dyas (1977) studied news viewing behavior and concluded that television viewers attend to high interest stories and reject low interest stories. High interest stories tend to be news stories with highly affective emotional components which thus aids recall.

The second study, by Perloff, Wartella, and Becker, (1983) claims that retention of newscast information is stymied by intervening factors. They found that most audiences are engaged in other activities during newscasts which detracted from their ability to listen.

METHODOLOGY

Description of Subjects

Two recent studies by Shepherd and O'Keefe (1984) were used as a guideline for selecting subjects for this study. The Shepard and O'Keefe study randomly presented persuasive messages in two separate experiments to 254 and 338 undergraduate students respectively.

Persuasive messages were presented in written form, read aloud to audiences and heard on audiotape in an effort to measure the acceptability of the message forms. Response to a particular request was summed as means of measuring message acceptance rate. Both studies demonstrated similar response percentages and the larger second sample had no particular effect on the variables tested.

Based on the Shepard and O'Keefe model, a pilot study was administered to 172 undergraduate students attending the summer 1985 session at the University of Northern Iowa at Cedar Falls, Iowa. College students were used to represent broadcast consumers that generally have no established news habits.

The pilot study was conducted in order to test the methodology and to gain an understanding of the survey instrument's overall reliability. The pilot study was

divided into a survey instrument pre-test and an actual test of the hypothesis variables.

The actual study was administerd to 232 undergraduate students attending the University of Northern Iowa fall 1985 session. Table 3.1 provides a breakdown of presentation groups for the pilot study and the actual study.

Table 3.1

Presentation Groups

Group Number	Number In Group
Pre-test	
Group 1	13
Group 2	21
Group 3	30
Group 4	9
Group 5	14
Group 6	39
Pilot Study	
Group 7	46
Total	172
Actual Study	
Group 1	108
Group 2	41
Group 3	46
Group 4	37
Total	232

Variables

The methodology used in this study is similar to that used in previous newscast research. The methods combined here represent a synthesis of previous successful experiments.

Of the studies conducted in the area of newscasting, several have used different categorization schemes. "Content analysis has used the spontaneous event coverage as opposed to the preplanned event coverage to study 'mythical elements' of television news" (Smith, 1979, p. 76-77).

> Others have used categories that include hard news, features, human interest, commercial, sports, weather, editorials, promotion of upcoming items, interaction, openings or closings, financial and fill time, as well as violence and humor components in the study of newscasts. (Wulfemeyer, 1982, p. 79)

Wulfemeyer (1982) categorized his own study of local TV newscasts by using seven of the areas mentioned above (p. 80). Smith and McEwen's (1974) study of delivery rate on recall embodied the basics of content analysis. They studied recall by presenting differently loaded news messages to an audience:

> Two five-minute radio newscast messages were compiled from United Press International wire stories. The single-topic message was an analysis of Nixon's visit to China, while the multiple-topic message was composed of the first portion of the single-topic message (as a lead) and 11 different news items. Each message was exactly 800 words. Identifiable names, places, and dates were changed in an attempt to control for prior knowledge, but otherwise normal news copy was used. (p. 75)

This study used two test news stories similar to Smith and McEwen's to present variously loaded metaphoric concept versions of the same news stories.

The following Associated Press and United Press International news stories taken from newspapers were rewritten and used as the non-metaphoric content news stories in the test conducted. The stories were chosen for their lack of affective components such as: controversy, proximity, timeliness, and emotional envolvement. These stories are of wide interest and newsworthy enough to stand a reasonable chance of becoming broadcast news stories.

The following 103 word story was printed in the Thursday, June 27, 1985 edition of the Los Angeles Times. It ran under the headline, "Miss Liberty Facelift Is Into 'Home Stretch'."

> New York (UPI) -- Half the work is done and much of the money has been raised to restore the Statue of Liberty to its former glory as the project heads into the "home stretch," a leader of the restoration effort said Wednesday.
>
> Lee A. Iaccoca, chairman of the Chrysler Corp. and head of the Statue of Liberty -- Ellis Island Foundation, said that $170 million has been raised in the last three years to restore both the Lady of the Harbor and Ellis Island.
>
> But he said that at least $60 million more -- and as much as $95 million -- is still needed. ("Miss Liberty," 1985).

To establish a basic broadcast story for the test conducted, the "Miss Liberty" story was rewritten in broadcast language and style. An 87 word, Version A, of the

story (Figure 3.1) written in broadcast style was used as the non-metaphorical base story presented to the test audiences.

Figure 3.1

Statue Story: Version A Test Copy

Version 1 :25 Word count: 87

With restoration of the Statue of Liberty half completed between 60 to 90-million-dollars is needed to finish the work... The Statue of Liberty -- Ellis Island Foundation is raising the funds to return the national landmark to original condition. According to the foundation chairman, work on the monument is nearing completion... In the three years since the project was started over one-hundred-seventy-million-dollars has been raised for the project. Restoration of the statue is expected to be completed within the next two years.

A 91 word metaphorically loaded version of the test story presented to audiences is Version B (Figure 3.2). The Version B test story is constructed with two metaphors per

sentence with a total of eight metaphors for the entire story.

Figure 3.2

Statue Story: Version B Test Copy

Version 2 :25 Word count: 91 Metaphors: 8

With restoration of the Statue of Liberty nearing the three-quarter-pole between 60 to 90-million-dollars is needed to take the project to the wire... The Statue of Liberty -- Ellis Island Foundation is wagering that it can raise the needed ante to return the national landmark to original condition. According to the foundation chairman, work on the Lady of the Harbor is in the home stretch... In the three years since it broke from the gate over one-hundred-seventy-million-dollars has been placed on the project's nose.

A third 89 word metaphorically loaded test story, Version C, was also presented to the survey audience (Figure 3.3). Version C contains two or three metaphors per sentence and has a total of 12 metaphors.

Figure 3.3

Statue Story: Version C Test Copy

Version 3 :25 Word count: 89 Metaphors: 12

With restoration of the Statue of Liberty at half track a 60 to 90-million-dollar dash is needed to bring it home... The Statue of Liberty -- Ellis Island Foundation is betting it can ride the national monument's return to original condition into the winners circle. According to the foundation chairman, the project is galloping to a close... Since called to the post three years ago foundation jockeys have whipped up a one-hundred-seventy-million-dollar donation pace in an effort to bring this project in a winner.

The second test story presented to the survey audience is an Associated Press story taken from the July, 6, 1985, Des Moines Register. The following 196 word story was chosen because the subject matter fit the criteria of having few if any affective components in its content.

The story ran under the headline, "Sales of home computers byte the dust."

MOUNTAIN VIEW, CALIF. (AP) -- Sales of home computers are slumping because consumers don't know what to do with them, according to a market research firm.
"Our surveys over the past two years found that a preponderance of Americans cannot imagine any way they could use a personal computer, either at home or at work," said William Coggshall, president of Software Access.
Home computers accounted for almost 66 percent of all computer sales last year.
Coggshall's firm recently surveyed 4,300 households nationwide and found that 8 percent owned home computers. Of that number, 10 percent reported no one had touched the computer in six months.
The biggest fallacy about home computers is that they will automatically improve a child's schoolwork, said Mary Ellen Dick, an analyst at Software Access.
A survey by the firm found that education was one of the most common reasons for buying a computer. However, the computer was hardly used once it got home.
"If a kid doesn't study, then buying him a machine doesn't get him an A," said Dick.
"We found very little education use," she said, noting that children like to play with computers rather than work on them. ("Sales of Home Computers," 1985)

The 104 word test copy of "Sales of home computers byte the dust," rewritten in broadcast style is Version 4 (Figure 3.4). This is the non-metaphoric version used as a base for the two metaphoric concept versions.

A 108 word metaphorically loaded news story presented to the test audiences is Version B (Figure 3.5). It contains two metaphors per sentence and has a total of 10 metaphors.

The third, 107 word metaphorically loaded news story is Version C (Figure 3.6). This version contains three or more metaphors per sentence with a total of 15 metaphors in the entire story.

Figure 3.4

Computer Story: Version A Test Copy

Version 4 :30 Word count: 104

Market research shows that retail purchases of personal home computers are not good... It seems that Americans don't know what to do with them. A national survey found that only ten percent of those owning a computer have used it for anything in the last six months. And, those not owning a computer can't think of a thing they could use one for at home or at work. The survey found that the reason most often given for purchasing a home computer was for education... Since personal computers accounted for 66 percent of all computer sales last year, manufacturers are concerned by the trend.

The news story versions used in the actual study contain fewer methaphors than the stories used in the pilot study. Results of the pilot study indicated a need to test versions containing fewer metaphors per story in order to completely define audience preference for metaphoric concept. The test copy used in the actual study is presented in Version B (Figure 3.7). This 93 word version

Figure 3.5

Computer Story: Version B Test Copy

Version 5 :30 Word count: 108 Metaphors: 10

Market research shows that there is rough water ahead in the personal home computer sea... It seems that not all is smooth sailing even on placid waters. A national survey found that only ten percent of those who shoved off on the computer voyage have used their computer for anything in the last six months. And, those still boating near shore aren't getting much wind in their sails either because they can't think of a thing they could use one for at home or at work... Since personal computers crested at 66 percent of all computer sales last year, manufacturers are concerned about this shift in the tide.

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contains one metaphor in every other sentence with a total of 3 metaphors.

A second statue story containing a metaphor in each sentence was produced to replace pilot study Version C (Figure 3.8). The actual study story contains 95 words and 5 metaphors.

Figure 3.6

Computer Story: Version C Test Copy

Version 6 :30 Word count: 107 Metaphors: 15

Market research has fathomed a rocky shoal off the retail purchase coast for personal home computers... It seems that Americans are adrift and don't know how to bring small computers about in high technology winds. A view from the national crow's-nest found that only ten percent of those who captain a computer have hoisted its sails in the last six months. And, those not going with the computer tide won't way anchor because they can't chart the way to use one at home or at work... Since personal computers cruised to 66 percent of all computer sales logged last year, manufacturers are concerned about staying afloat.

Actual study Version B (Figure 3.9) is the reduced methaphoric version of the computer story. It contains one metaphor in every other sentence. This version contains 109 words and 3 metaphors.

Figure 3.7

Actual Study Statue Story: Version B Test Copy

Version 7 :25 Word Count: 93 Metaphors: 3

With restoration of the Statue of Liberty nearing the three-quarter pole between 60 to 90-million-dollars is needed to complete the project... The Statue of Liberty -- Ellis Island Foundation is raising funds to return the national landmark to original condition. According to the foundation chairman, work on the project is galloping to the wire... In the three years since the project began, over one-hundred-seventy-million-dollars has been raised for the statue's reconstruction. The refinished statue is expected to stand in the winner's circle within the next two years.

Actual study Version C (Figure 3.10) is an increased metaphoric concept computer story with one metaphor per sentence. This version contains 5 metaphors and 109 words.

The test news stories were audiotaped by professional newscaster Ron Steele, news program co-anchor for the local NBC television affiliate station KWWL. Reading time for each story was not strictly controlled, however no presentation

Figure 3.8

Actual Study Statue Story: Version C Test Copy

Version 8 :25 Word Count: 95 Metaphors: 5

With restoration of the Statue of Liberty nearing half track, between 60 to 90-million-dollars is needed to finish the work... The Statue of Liberty -- Ellis Island Foundation is betting it can raise the needed money to return the national landmark to original condition. According to the foundation chairman, work on the monument is in the home stretch... In the three years since it broke from the gate over one-hundred-seventy-million-dollars has been raised for the project. The restoration is expected to come in a winner within the next two years.

---

of versions used during testing varied in length by more than 2.5 seconds (Table 3.2).

Each story was recorded individually on audio cassettes. Each news story version was recorded separately to facilitate random presentation. The tapes were presented to the audiences via a portable cassette player/recorder.

Figure 3.9

Actual Study Computer Story: Version B Test Copy

Version 9 :30 Word Count: 109 Metaphors: 3

Market research shows that retail purchases of personal home computers are headed for rough water... It seems that Americans don't know what to do with a computer. A national survey found that only ten percent of those who captain a computer have used it for anything in the last six months. And, those not owning a computer can't think of a thing they could use one for at home or at work. The survey found that the reason most often given for sailing the home computer sea was for education... Since personal computers accounted for 66-percent of all computer sales last year, manufacturers are concerned by the trend.

Procedures

Audiences were surveyed in a variety of classes on the UNI campus, either at the beginning of class or shortly before class ended. Students participating in the survey were attending classes in subjects ranging from Principles of Marketing to Publicity Methods to Human Sexual Behavior.

Figure 3.10

Actual Study Computer Story: Version C Test Copy

Version 10 :30 Word Count: 109 Metaphors: 5

Market research shows calm waters in the personal home computer market... It seems that not all is smooth sailing because Americans don't know what to do with a computer. A national survey found that at least ten percent of those owning a computer are adrift because they haven't used their computer for anything in the last six months. And, those not owning a computer aren't getting much wind in their sails either because they can't think of a thing they could use one for at home or at work... Since personal computers earned a 66-percent share of all computer sales last year, manufacturers are concerned about staying afloat.

The procedure was to enter each classroom, distribute the survey instrument and prepare the cassette player and tapes for presentation. The introduction/ instruction script (Appendix B) was then read and the first tape played. A listing of the news story examples presented and the random order of versions presented is shown in Table 3.3.

Table 3.2

News Story Reading Time

Version A	Base story	Pilot/Actual	:26.42
Version B		Pilot only	:25.36
Version C		Pilot only	:25.88
Version B		Actual only	:29.04
Version C		Actual only	:27.34
Version A	Base Story	Pilot/Actual	:31.15
Version B		Pilot only	:31.15
Version C		Pilot only	:32.73
Version B		Actual only	:33.18
Version C		Actual only	:33.40

Respondents in the test audience were asked to evaluate each news story version immediately after its conclusion. Meanwhile, the next audiotape to be presented was inserted in the cassette player. This procedure was repeated until all tapes were played. The entire presentation, from material distribution to administration of the study to the gathering of the materials averaged approximately 12 minutes.

Statistical Method

The survey instrument (Appendix C) was used to rate each news story version and tabulate results. The category system used on the survey instrument is similar to the one

Pride and Wamsley (1972) used to study news content. Their system asked respondents to rate parts of a message as positive, negative, or neutral. The more extensive survey instrument used by this study added the categories: extremely positive and extremely negative. This created a bi-polar Likert-type scale that gave greater audience response latitude, thus allowing for more definitive measurement of the variables.

The survey instrument consisted of a collated packet of nine pages. First, were three sheets, each with questions 1, 2 and 3. The fourth page asked summary evaluation questions about all of the news story versions presented. The fourth page contained questions 4, 5 and 6. This pattern was repeated for the computer news story version tests with a final page added for question 7.

Questions 1, 2 and 3 asked respondents to evaluate each news story version. The questions quantified responses to: 1) overall impression, 2) presentation of facts, and 3) length of the presentation. Question 1 was primarily designed to test audience response to individual versions of the news stories while questions 2 and 3 were intended to support and define this response.

Questions 4, 5 and 6 asked repondents to evaluate and rank the news stories for preference after hearing all three test versions. Question 4 related directly to the study's

Table 3.3

Presentation Groups Randomization

Group Number	Version Presented	Random Order	Number In Group
Pre-test			
Statue story only			
Group 1	A,B,C	C-B-A	13
Group 2	A,B,C	B-C-A	21
Group 3	A,B,C	A-C-B	30
			64
Computer story only			
Group 4	A,B,C	C-A-B	9
Group 5	A,B,C	A-C-B	14
Group 6	A,B,C	C-B-A	39
			62
Pilot Study			
Statue & Computer stories			
Group 7	A,B,C,A,B,C	C-A-B-B-A-C	46
			Total 172
Actual Study			
Statue & Computer stories			
Group 1	A,B,C,A,B,C	B-A-C-B-A-C	
Group 2	A,B,C,A,B,C	A-C-B-A-C-B	
Group 3	A,B,C,A,B,C	C-A-B-C-A-B	
Group 4	A,B,C,A,B,C	C-B-A-C-B-A	
			Total 232

hypothesis by asking which news story version the respondent preferred. Question 5 asked for a specific rank ordering and question 6 was intended to add support for the previous two questions by asking which story did the best job of presenting the facts.

Question 7 was added to the survey packet for testing Group 7 in the pilot study and was retained for the actual study. The question asked respondents which news story subject they preferred over the other, or if there was no subject preference. The question listed the story subjects alternately on half of the surveys to overcome order of question presentation bias.

Statistical survey breakdown was provided by University of Northern Iowa Academic Computing Service Harris H800 computer using the Statistical Package for the Social Sciences SPSS-X program.

RESULTS

The computer analysis and statistical results of this study of audience preference for metaphoric concept are presented here in three parts. A comparison of the two news story subjects tested is presented first, second are results of the pilot study, and third are the actual study results.

News Story Subject Comparison

The construction of two news stories with different subject content was necessary to determine that metaphoric concept variables were being measured, not story content. Therefore, the first task was to establish that the two news story subjects used in the test were perceived by audiences as nearly equal.

Establishing subject parity was undertaken as a pre-test to the pilot study. To achieve a comparison of news story subject content the statue news story in its three versions was presented to test groups 1, 2 and 3. The computer news story in its three versions was presented to test groups 4, 5 and 6 (see Table 4.1). After hearing each version of the three news stories, respondents answered three questions. After all three versions were heard, a summary page asked respondents to evaluate the news stories by

preference, rank order of preference and the story with the best presentation of facts.

Table 4.1

Presentation Groups Defined

Group Number	Version Presented	Random Order	Number In Group
Pre-test			
Statue News Story (Group 1,2,3)			
Group 1	A,B,C	C-B-A	13
Group 2	A,B,C	B-C-A	21
Group 3	A,B,C	A-C-B	30
			64
Computer News Story (Group 4,5,6)			
Group 4	A,B,C	C-A-B	9
Group 5	A,B,C	A-C-B	14
Group 6	A,B,C	C-B-A	39
			62
Pilot Study Statue and Computer News Story			
Group 7	A,B,C,A,B,C	C-A-B-B-A-C	46
			Total 172
Actual Study			
Section 4 (Group 1,2,3,4)			
Group 1	A,B,C,A,B,C	B-A-C-B-A-C	108
Group 2	A,B,C,A,B,C	A-B-C-A-B-C	41
Group 3	A,B,C,A,B,C	C-A-B-C-A-B	46
Group 4	A,B,C,A,B,C	B-C-A-B-C-A	37
			Total 232

Test group responses to each survey question have been broken down to demonstrate the near parity of the statue and computer news stories. Group responses to the statue only news story are presented first. The responses to versions A, B and C are shown in Table 4.2. The table contains results of an analysis of variance of 64 respondent's answers to questions on the first three pages of the survey packet. Three questions relating to 1) overall impression of the news story, 2) presentation of necessary facts, and 3) length of the news story, were all answered after each version was presented. An examination of the mean response column of Table 4.2 demonstrates audience preference for news story version A. The table demonstrates version A preference by showing progressly increasing tendancy from 1. A comparison of the standard deviation scores in table 4.2 and 4.3 demonstrates parity of responses between comparable news story versions.

Test group responses to the computer only news story are shown in Table 4.3. The 62 reponses in the following table are presented in a similar sequence to the statue only responses. The computer only news story analysis of variance within groups also covers the first three pages of the survey packet. The mean response score shows audience preference for news story version A by the ascending tendency from 1 for versions B and C.

An analysis of variance of the rank order question is shown in Table 4.4. This table combines the responses to the statue story and the computer story. The table presents the 64 and 62 responses of each test group and demonstrates summary page parity of the two news stories tested by the similar ranking for each comparable version.

Table 4.2

Pre-test Analysis of Variance

Statue News Story

VERSION	Question	Mean	Std Dev	Sum of Sq	Mean Sq	ETA	ETA Sq
A	Impress	1.87	.7843	38.14	.6125	.26	.06
	Facts	1.82	.8682	46.73	.7537	.22	.04
	Length	3.01	.4853	14.60	.2355	.15	.02
B	Impress	2.68	.9135	50.90	.8345	.38	.14
	Facts	2.89	1.0279	64.44	1.0565	.16	.02
	Length	3.20	.6372	24.76	.4060	.24	.06
C	Impress	3.53	.9357	54.28	.8755	.35	.12
	Facts	3.70	1.0381	66.80	1.0776	.19	.03
	Length	3.10	.8250	42.20	.6807	.02	.00

* 64 cases were processed

A comparison of the statue and computer news stories in each version is shown graphically in the following figures. The large dimensions of the axis on the graphs tends to magnify what are actually very small differences between version response means. The graphs demonstrate parity of both the statue and computer news stories and the parity of the mean responses for each version. The graphs show the comparison between each of the versions by charting responses to each news story version using the mean response score, rounded to the nearest tenth. A comparison of version A of both news stories is presented in Figure 4.1. The comparison of news story versions B and C follow in Figures 4.2 and 4.3.

The responses to each news story version shown in Figure 4.1 demonstrates the question's confidence factor by showing the amount of difference between the means. In version A the difference is 0.2. The difference between means for the second version is B = 1.0. While the difference between means for the last two versions is C = 0.1.

A graphic prsentation of the mean responses to the two news stories in the three versions and the question asking which story presented the necessary facts is shown in Figure 4.2. Differences between means for each version of the fact question are: A = 0.0, B = 0.4 and C = 0.4.

Table 4.3

Pre-test Analysis of Variance

Computer News Story

VERSION	Question	Mean	Std Dev	Sum of Sq	Mean Sq	ETA	ETA Sq
A	Impress	2.03	.8078	38.50	.6526	.50	.25
	Facts	1.88	.7094	29.69	.5033	.54	.29
	Length	3.09	.4587	12.41	.2104	.27	.07
B	Impress	3.66	1.0074	60.89	1.0149	.12	.01
	Facts	3.54	.9931	59.17	.9863	.05	.00
	Length	2.82	.7999	38.39	.6399	.12	.01
C	Impress	3.66	1.0049	60.59	1.0099	.14	.02
	Facts	3.77	.8982	48.40	.8068	.09	.00
	Length	2.70	.8500	43.34	.7224	.17	.03

* 62 cases were processed

Differences between the mean response scores for the third question about each news story version length are presented in Figure 4.3. The differences for each of the three versions are: A = 0.0, B = 0.7 and C = 0.6.

Mean response score differences for the summary page questions follow in Figures 4.4, 4.5 and 4.6. The summary

Table 4.4

Pre-test Analysis of Variance

Rank Order Question

	Question	Mean	Std Dev	Sum of Sq	Mean Sq	ETA	ETA Sq
STATUE	Rank 1st	1.89	.6649	26.96	.4421	.62	.39
	Rank 2nd	2.56	.5512	18.53	.3038	.46	.21
	Rank 3rd	1.54	.5955	21.63	.3547	.40	.16
COMPUTER	Rank 1st	2.22	.5648	18.82	.3190	.67	.45
	Rank 2nd	2.24	.5947	20.86	.3536	.66	.44
	Rank 3rd	1.53	.4420	11.52	.1954	.79	.63

* 62 and 64 cases were processed

page questions demonstrate near parity by the amount of difference between the means for each question.

Mean response score differences for the rank order question are presented in Figure 4.5. The mean score differences for the three versions are: A = 0.4, B = 0.3 and C = 0.0.

Figure 4.1

News Story Version Impression

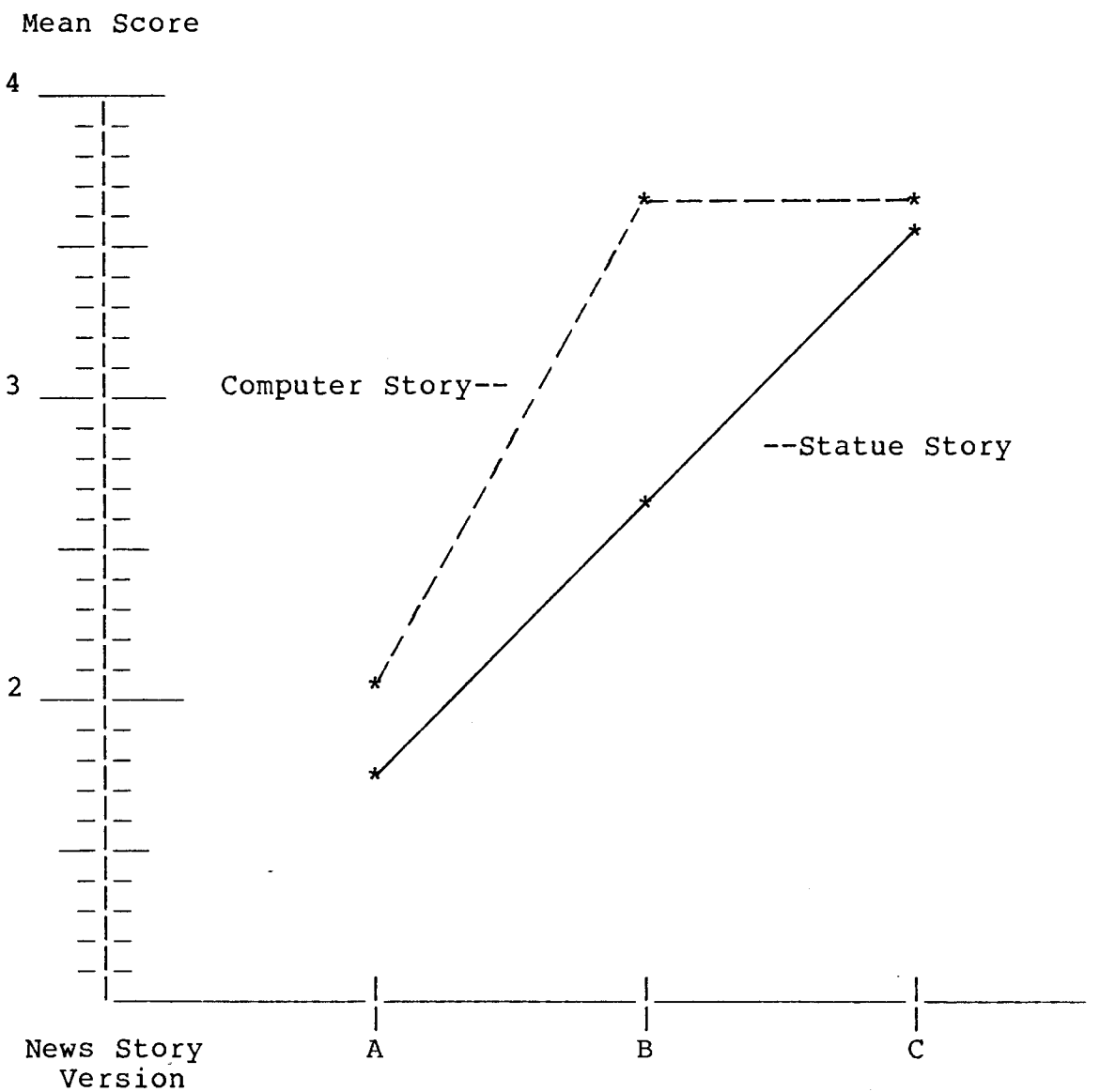


Figure 4.2

News Story Version Fact Presentation

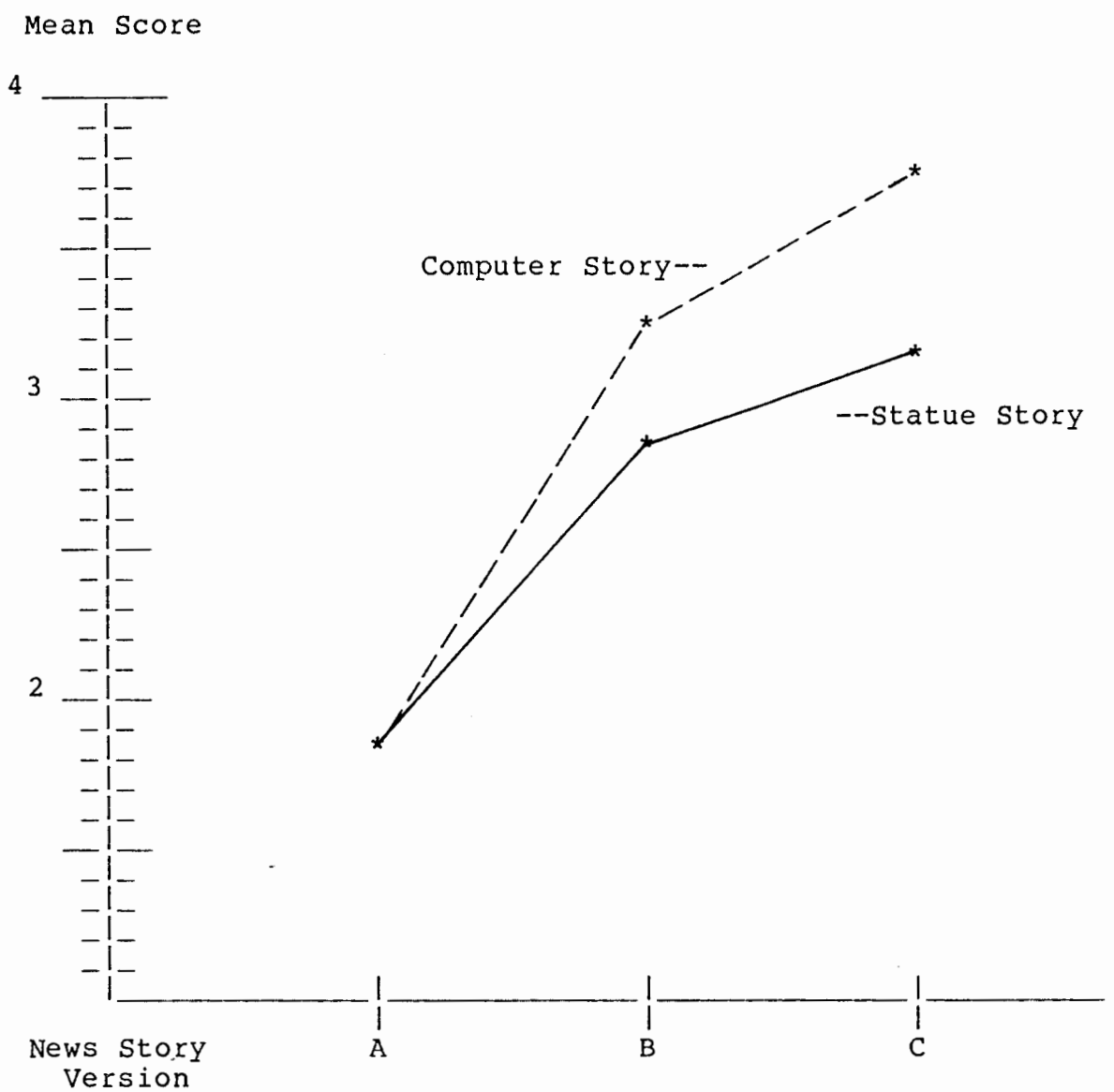


Figure 4.3

News Story Version Length

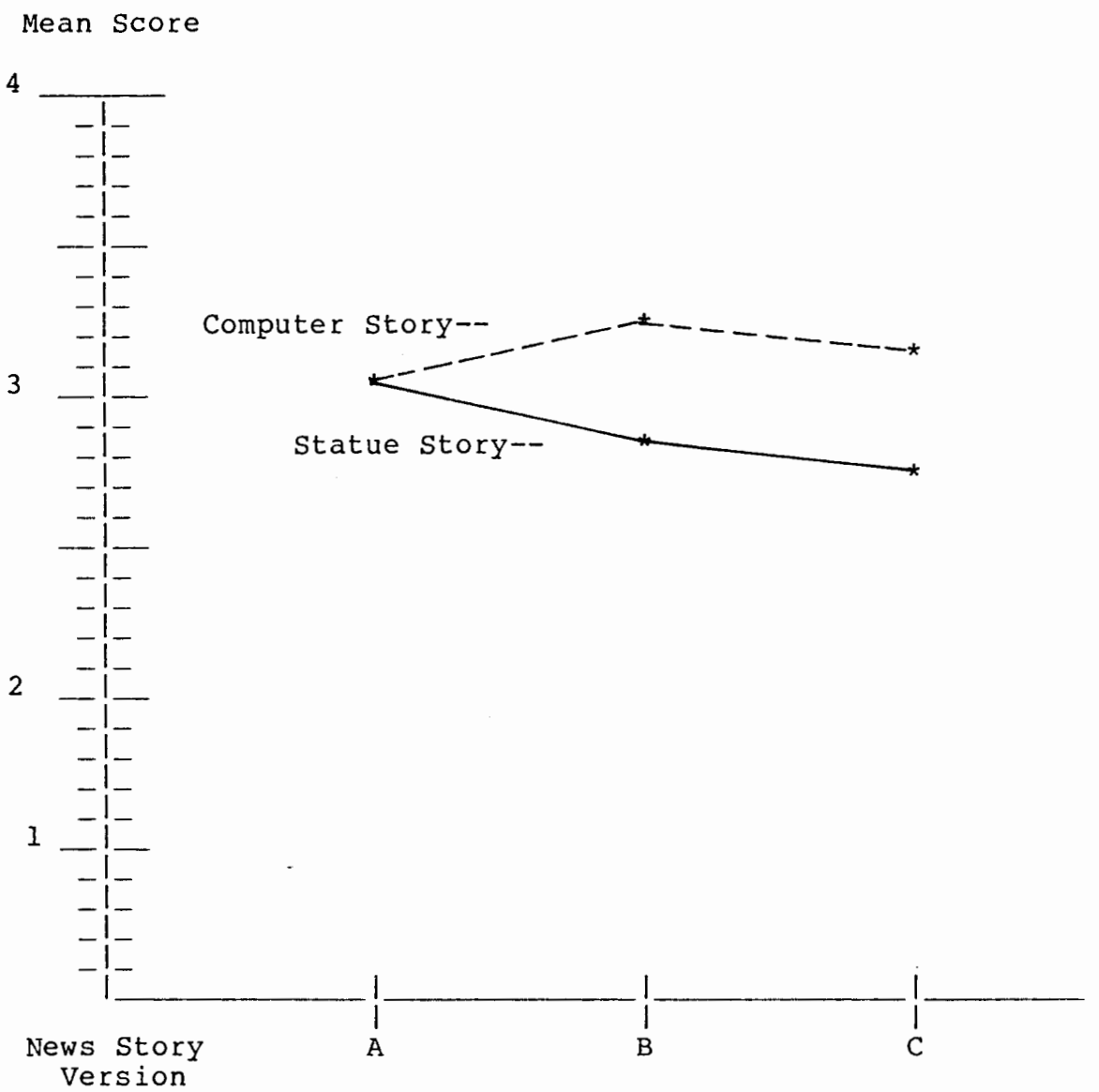
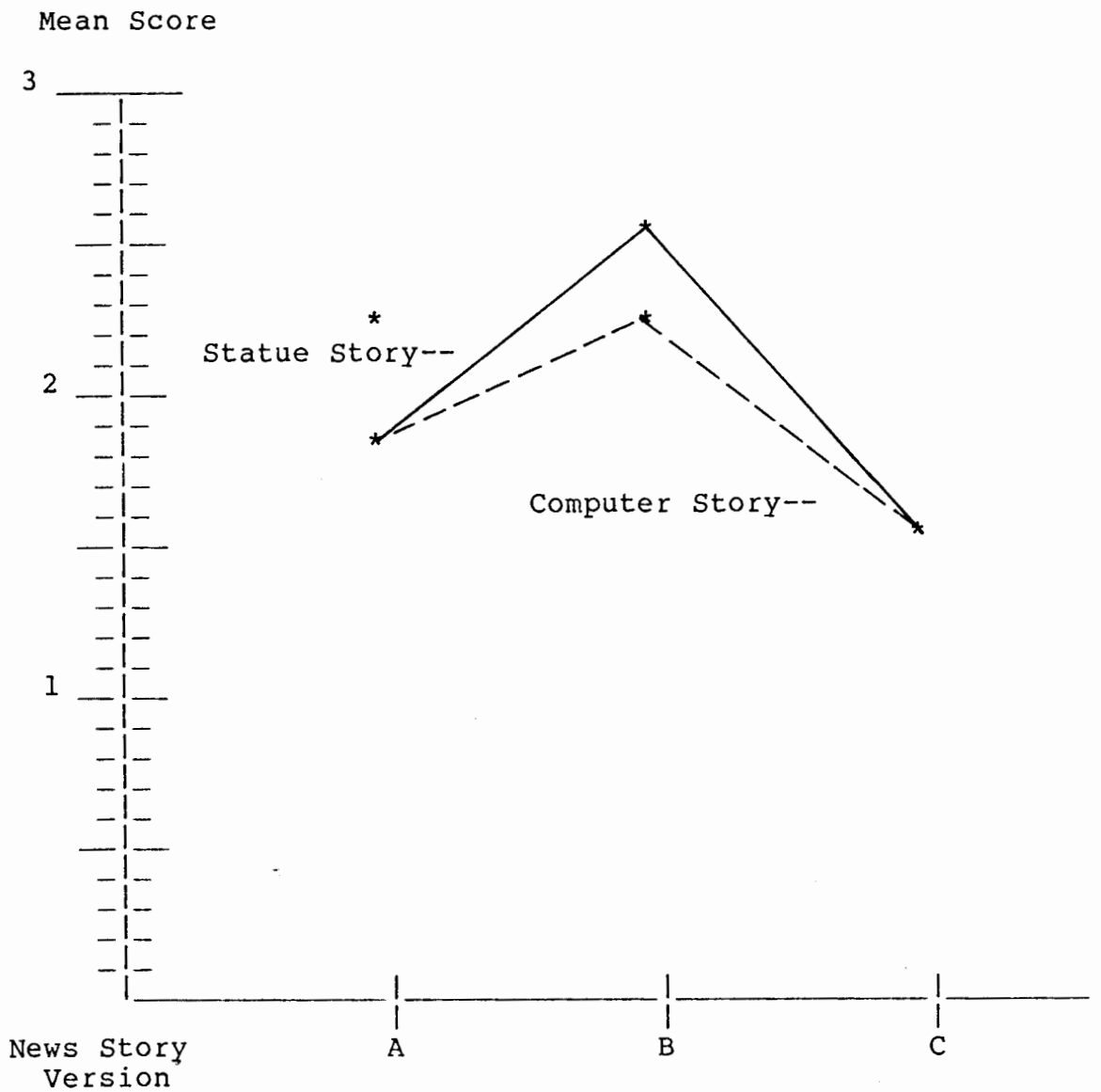


Figure 4.4

News Story Version by Rank Order



Pilot Study

Computer analysis of the pilot study which tested groups hearing both the statue and computer news stories is presented here. Table 4.5 presents a combined analysis of variance for the impression, fact and length questions. Table 4.6 presents cell mean analysis for the same questions. The tables demonstrate a similar mean response score pattern for each version as was reported in the pre-test. The mean score response for versions B and C increases from 1 thus indicating that version A is preferable.

Table 4.5

Pilot Study Analysis of Variance Impression, Fact and Length Questions

Question	Sum of Sq	DF	Mean Sq	Significance F	Significance of F
Impress	378.064	3	126.021	135.630	0.000
Facts	454.773	3	151.591	179.937	0.000
Length	14.194	3	4.731	10.661	0.000

* 654 cases were processed

Tables 4.7, 4.8 and 4.9 show cell mean scores for the three questions on the summary page.

The first summary page question asked respondents to choose which of the three news story versions heard was preferred. The cell mean responses for both the statue news

Table 4.6

Pilot Study Cell Mean Analysis Impression, Fact and Length Questions

Question	Version	A	B	C	
Impress	Statue story	1.76	2.94	3.32	Grand Mean
	Computer story	2.02	3.58	3.80	2.90
Facts	Statue story	1.73	3.05	3.91	Grand Mean
	Computer story	1.87	3.52	3.91	2.93
Length	Statue story	3.01	3.04	3.11	Grand Mean
	Computer story	3.06	2.63	2.55	2.90

* 654 cases were processed

story and the computer news story preference question are shown in Table 4.7. The table presents the dramatic preference for news story version A.

Summary page question 5 asked respondents to rank order the news story versions heard. The resulting cell means for

each story version's ranking are shown for the statue news story and the computer news story in Table 4.8. The table shows exactly the same dominant cell mean response for verson A as in the preference question. This indicates that respondents ranked version A exactly the same as when asked which version was preferred.

Respondents were asked to choose which news story version best presented facts in question 6. Cell mean analysis for both news stories are presented in Table 4.9. Cell mean response to this question was again overwhelmingly in favor of version A and with versions B and C having diminishing ratings.

Table 4.7

Pilot Study Cell Mean Analysis Version Preference Question

Version	A	B	C
Statue story	.91	.04	.04
Computer story	.91	.02	.07

Table 4.8

Pilot Study Cell Mean Analysis Rank Order Question

Version		A	B	C
Statue story Rank Order	1st	.91	.04	.04
	2nd	.09	.54	.37
	3rd	0	.41	.59
Computer story Rank Order	1st	.91	.02	.07
	2nd	.07	.74	.20
	3rd	.02	.24	.74

Table 4.9

Pilot Study Cell Mean Analysis Best Factual Version

Version	A	B	C
Statue story	.89	.07	.04
Computer story	.91	.04	.04

Table 4.10 demonstrates the consistency of responses for the basic news story (version A) ratings on all three summary page questions for both the statue news story and

the computer news story. The rank order question has been simplified by showing the cell mean for each story version when ranked first. Responses for the metaphoric concept versions B and C were extremely small and nearly evenly distributed.

Table 4.10

Pilot Study Cell Mean Analysi Summary Page Questions

Version	A	B	C
Statue story preference	.91	.04	.04
Computer story preference	.91	.02	.07
Statue story rank 1st	.91	.04	.04
Computer story rank 1st	.91	.02	.07
Statue story best facts	.89	.07	.04
Computer story best facts	.91	.04	.04

Survey Results

The actual study survey results and statistical analysis are presented in this section. Analysis of the impression, fact and length questions are presented in the first tables. Table 4.11 presents an analysis of variance

for the version questions while Table 4.12 presents cell mean analysis of the same questions. Analysis of the summary page questions are presented in Tables 4.13, 4.14, 4.15 and 4.16.

Table 4.11 analysis of variance shows a strong response correlation between the impression and facts questions. Variance of responses for the length question are more widely distributed however.

Table 4.11

Study Analysis of Variance Impression, Fact and Length Questions

Question	Sum of Sq	DF	Mean Sq	Significance F	Significance of F
Impress	225.334	3	75.115	84.559	0.000
Facts	321.447	3	77.149	85.935	0.000
Length	22.187	3	7.396	15.757	0.000

* 654 cases were processed

The cell mean analysis Table 4.12 shows a comparison of responses to the impression, fact and length questions for the statue news story and the computer news story. The responses compare nearly equally for all three versions.

The table demonstrates relatively equal responses for the two news story subjects, decreased ratings for the B and C versions of each subject suggest preference for version A.

Table 4.12

Study Cell Mean Analysis Impression, Fact and Length Questions

Question	Version	A	B	C	
Impress	Statue story	1.99	2.55	2.80	Grand Mean
	Computer story	2.59	2.99	3.78	2.78
Facts	Statue story	1.94	2.49	2.88	Grand Mean
	Computer story	2.46	2.82	3.60	2.70
Length	Statue story	3.23	3.03	3.10	Grand Mean
	Computer story	2.97	2.88	2.65	2.98

* 654 cases were processed

Table 4.13 shows cell mean analysis for the preference question on the summary page. Table 4.14 shows cell mean analysis for the rank order question and Table 4.15 shows cell mean analysis for the best facts question on the summary page.

The cell mean analysis shown in Table 4.13 demonstrates significant response preference for news story version A. Responses for version B do not show a considerable drop off in the computer story rating. Low response means are nearly equal for version C however.

Table 4.13

Study Cell Mean Analysis Version Preference Question

Version	A	B	C
Statue story	.57	.23	.15
Computer story	.47	.41	.08

Table 4.14 shows the consistency of ranking version A above versions B and C. The table also shows a similar decrease in ranking for B and C on both news story subjects.

Table 4.15 shows response preference for news story version A when best presentation of facts are concerned. However, version A is not as dominant in response means as in the preference and rank order questions.

Table 4.14

Study Cell Mean Analysis Rank Order Question

Version		A	B	C
Statue story Rank Order	1st	.57	.25	.14
	2nd	.22	.41	.32
	3rd	.16	.31	.50
Computer story Rank Order	1st	.48	.39	.10
	2nd	.40	.44	.12
	3rd	.07	.14	.74

Table 4.15

Study Cell Mean Analysis Best Factual Version

Version	A	B	C
Statue story	.62	.21	.13
Computer story	.51	.38	.07

Ratings for all three summary page questions for both the statue news story and the computer news story (Table 4.16) demonstrates the consistency of survey responses for

version A, the basic news story. The rank order question has been simplified by showing cell mean for each story version when ranked first. Responses to the B and C versions show significant decline in preference for the increased use of metaphor in the news stories.

Table 4.16

Study Cell Mean Analysis Summary Page Questions

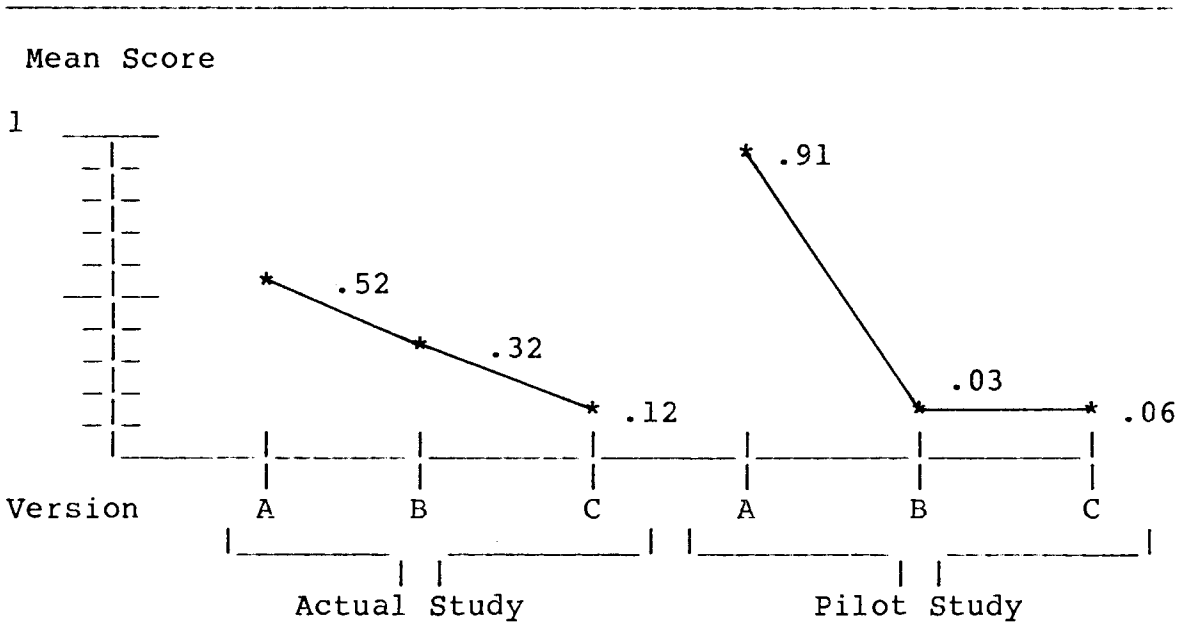
Version	A	B	C
Statue story preference	.57	.23	.16
Computer story preference	.47	.41	.08
Statue story rank 1st	.57	.22	.16
Computer story rank 1st	.48	.40	.07
Statue story best facts	.62	.21	.13
Computer story best facts	.51	.38	.07

A graphic presentation of the versions combined means for both the statue news story and the computer news story are shown in Figure 4.5. The graph demonstrates preference for version A as the news story most often ranked highest in both the pilot study and the actual study. Version B is

ranked second in the actual study, however version B and version C ranked nearly equal, .03 for version B compared with .06 for version C, in the pilot study.

Figure 4.5

Story Version Preference Mean Responses



DISCUSSION

The discussion section of this study presents pre-test conclusions about news story subject comparability first. Second, findings of the pilot study are presented. Third, conclusions and generalizations that can be drawn from the actual study are discussed. Fourth, the study's shortcomings and suggestions for future research are discussed.

Pre-Test Conclusions

Pre-test comparision of the news story subject matter demonstrated near perfect parity of the two stories used. When comparing responses of the group that only heard the statue news story in its three versions to the group that heard only the computer story in its three versions, results were virtually equal.

Respondents routinely chose similar answers in the question sets for each story. This is illustrated by comparing individual question response mean differences between each of the news story versions. The difference between mean responses for the statue story and the computer story version A question which asked for overall impression (Figure 4.1) was .2. The mean response

differences for the same question for versions B and C were 1.0 and .1.

The second question about presentation of necessary facts (Figure 4.2) had a mean response difference between versions of: A = .0, B = .4 and C = .4. The third question on story length (Figure 4.3) had a mean response difference between versions of: A = .0, B = .7 and C = .6.

The strongest indicator of near perfect story parity was shown by answers to question 6 which asked respondents to rank order each story version after hearing all three. The rank order (Figure 4.5) question mean response difference between the statue story and the computer story versions were: A = .4, B = .3 and C = .0.

The parity of the two news story subjects allows for two conclusions. First, news story subject matter was not an issue, metaphoric concept could be tested without story content becoming an intervening variable. Second, the test instrument was basically sound and could be used to gather accurate data for analysis.

Pilot Study

Pilot study findings indicate that audience preference for metaphoric concept was extremely negative. That is, audiences overwhelmingly preferred version A, the basic news

story, to either of the two metaphoric concept versions. In fact, the presentation of the first metaphoric version (B) caused some audiences to smile and giggle and the extreme metaphoric versions (C) at times actually elicited boisterous laughter. It seemed that when random order of presentation was such that the non-metaphoric version came first and the increasingly metaphoric versions followed audiences perceived the B and C news story versions as humorous.

The responses were so drastically negative that three conclusions could be drawn. One, that the extreme limits of metaphoric concept presentation had been reached because audiences neared total rejection of the news story versions presented. Two, it would be necessary for the actual study to test news story versions that used fewer metaphors in sentences in order to fully define audience preference for metaphoric concept. Three, due to the comparable question responses for each of the statue story and the computer story versions, the test instrument had further proven its reliability, and the methodolgy used to gather audience response was effective.

Actual Survey

Based on the findings of the pilot study, the statue news story and the computer news story were rewritten. The stories retained the original metaphoric concepts that the reconstruction of the Statue of Liberty is like a horse race and the downturn in computer sales is like sailing a boat on rough water. The resulting reduced metaphoric concept versions then produced these results.

Although audiences had greater difficulty distinguishing between the basic news story (version A and version B which contained only three metaphors) version C was strongly rejected by all respondents (Figure 4.5). Random order of presentation and the minimal difference between news story versions A and B probably caused respondent difficulty when attempting to rank order versions. However, in no response group did the basic news story version rank second to either metaphoric version. As the pilot study had indicated, the basic news story version was not only preferred, but ranked first most often and was rated most factual by survey respondents.

Conclusions

This study concludes that audiences do not prefer significantly greater use of metaphoric concept than is currently used in standard newscast language and emphatically rejects its hypothesis.

The study concludes that audiences strongly reject metaphoric concept news stories. This means that newscasters would be ill advised to use metaphoric concept as a way to present news messages. Responses to the metaphoric concept stories presented in this study indicate that neither audience attention nor message assimilation is aided by casting news stories in metaphoric concept.

Beyond that, this study does not lend substantial support to metaphoric concept theory. The study was unable to provide any positive linkage between metaphoric concept newscasts and the way individuals arrange their thinking.

However, metaphoric concept theory does benefit from the knowledge of what is an extreme metaphoric content message. Because the study demonstrates that audiences routinely reject messages that contain from one to three metaphors per sentence, limits for metaphoric messages have been well defined. Results of the study also demonstrate that messages containing a metaphor in every other sentence, although not preferred, were not flatly rejected. Also, by demonstrating that measurable research methods can be

designed and applied to metaphoric concept theory this study becomes a basis for future research.

Shortcomings and Future Research

This study's shortcomings and recommendations for future studies will be discussed together.

One weakness of this study is its reliance on subject retention of individual messages in order to choose one that is most preferable. Although random order of presentation aided the study by not allowing audiences to hear progressively increased metaphoric concept messages and thus reject extreme metaphoric concept messages offhandedly, random presentation created its own bias problems. Statistical analysis demonstrated that no matter which news story version was presented first it received an average to slightly above average rating. The second news story version generally began to deviate from average because respondents had something with which to compare that version. When respondents heard the third version they compared it to the other versions and responses were obviously dependent on recall of the two versions that preceeded it.

However, the survey instrument constructed for this study attempted to overcome the problem of presentation

bias. Questions on the first three pages of the survey packet were actually intended to not only gather relevant information, but to act as an involvement mechanism. When respondents heard each version, the act of rating the story for impression, necessary facts and story length forced the individual to participate and actively think about the version heard. The survey instrument forced respondents to become aware of each story version and forced them to physically record their impressions. Thus, after hearing all three versions, respondents were aware of story version differences and were able to accurately respond to the questions on the summary page. The summary page questions were the most important because they quantified information directly related to the study's hypothesis.

Summary page question 4 actually asked repondents which news story version they preferred. Question 5 was intended as a check on that question, and to give respondents an opportunity to correct mistaken preferences in question 4. In virtually all cases, the rank order question supported the audience preference question.

Another shortcoming was audience awareness of the fact that they were actively rating news stories. Indeed, the introduction script mentioned the fact that news stories were being studied and the survey instrument had a similar heading.

Again, however, the survey instrument disguised the intent of the study and actively involved audiences before critical questions were asked. Respondents were aware of being asked to rate news story versions, but were unaware of the actual purpose of the study.

A third shortcoming is that the survey population was receiving news stories out of context and in a situation that guaranteed audience attention. This factor was introduced by the methodology used but was deemed excusable in order to gain directly applicable responses for the study.

Finally, although two news story versions were tested, two other metaphorical concepts categories remain untested. In fact, an extension of this study would be to construct and test metaphoric concept versions from the spatial and structural activities categories defined by Lakoff and Johnson (1980).

To totally overcome presentation bias future studies using similar methods to test audience preference for various messages may find it useful to disguise the message by including it with other messages. For example, a controlled three minute newscast could contain the message or concept to be tested. Granted, the controlled format method is not without difficulties.

In conclusion, this study is intended to provide additional research on metaphoric concept theory. Also,

the results of this study and suggestions for future studies are intended as an aid to researchers. It is necessary to continue the study of metaphoric concept theory in order to completely define this communication science model.

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APPENDIX A

Lakoff and Johnson explain in detail how the conceptual metaphor paradigm works in, Metaphors We Live By. A summary of Lakoff and Johnson's perspective is presented by Deetz:

> Lakoff and Johnson have shown that different metaphorical systems in a culture may overlap, interlock and even be contradictory, yet they are coherent. Coherence comes from conceptual integration through more fundamental metaphorically structured experiences. In the metaphor, "Life is a game," particular experiential aspects of life are highlighted by the more clearly conceptualized and widely shared understanding of a game. Metaphor presents one way seeing as is possible. In the "life is a game" example, life comes to be seen as a game, with players, winners and losers, good moves and strategies.
>
> Metaphors in a society are permutations of the most clearly delineated and shared life experiences. Lakoff and Johnson presented three types of such experience: spatial orientations (up-down, in-out), ontological concepts arising in physical experience (entities, substances, persons), and structured activities (eating, moving, sleeping). From these experiences arise metaphorical concepts that fall into three categories: orientational metaphors (e.g., control is up: "I have control over him."); onotological metaphors (e.g., the mind is a machine: "We are turning out new ideas everyday."); and structural metaphors (e.g., understanding is seeing: "I see what you are saying."). The most basic of these metaphors have become sedimented through habitual use. While they seem literal, they depend upon a comparison between two different kinds of things. This literalness is the every day derivative mode in which the seeing as, and the entire forestructure that makes that possible, is covered up and forgotten.
>
> The systematicity of metaphors is easily observed in the orientation metaphors. Orientation metaphors rest in what might be called archetypal orientations that integrate a whole group of different experiences. For

> example: "right," "might," and "light" are up. Lakoff and Johnson develop this system fairly completely. "Good" is up and this is coherent with "happy," "health," "alive," "conscious," "control," and "status" as all are structured as up. For example: "My spirits rose." "Wake up." "He's at the peak of health." "I have control over her." "He fell into unconsciousness." "She'll rise to the top," and so forth. While there are instances of the use of the word "up" that are inconsistent with this, an identifiable coherent cluster is present which orients the experience of "might," "right," and "light" vertically.
>
> It is clear from their analysis that metaphors are systematically related to each other, In tracing the metaphors that are used by a society, we trace the very way people in that society experience things. The discovery of the systematicity of metaphor in a culture gives some insight into the way members structure space and time and orient themselves to the things about themselves (1984, p. 219-20).

To summarize, Lakoff and Johnson themselves state:

> Therefore, whenever ... we speak of metaphors, such as ARGUMENT IS WAR, it should be understood that metaphor means metaphorical concept (1980, p. 6).

APPENDIX B

News Story Survey Introduction Script

Good Day, my name is Denis Bramblette. I am a graduate student doing research on broadcast news stories. Your instructor has been kind enough to allow approximately 10 minutes of class time so I can conduct a test. During the test you will be asked to complete a brief survey. I appreciate your participation and will be happy to discuss the survey and its eventual results with anyone who is interested.

You are being asked to evaluate six randomly presented news stories that you will hear shortly. After each news story the tape will be stopped. At that time you will be given one minute to answer the questions on one page of the packet you have been provided. Mark just one response -- except for those questions which specifically ask for rank ordering. When ranking, write the numeral: 1 for your first choice, 2 for your second choice, and 3 for your third choice.

I will proceed to the next audiotape in the event everyone completes the questionaire before one minute is up. The fourth sheet in the packet should be filled out only after you have listened to all three news stories. The

eighth and ninth sheets should be filled out only after you have listened to all six news stories.

If you have any questions about the procedure I will be happy to answer them now.

I will begin by playing the first tape.

You should answer the questions on only the first sheet now.

You will have one minute to respond.

I will now play the second tape.

You should answer the questions on only the second sheet now.

You will have one minute to respond.

I will now play the third tape.

You should answer the questions on both the third and fourth sheet now.

You may take more than one minute to respond.

I will now play the fourth tape.

You should answer the questions on only the fifth page now.

Again, you will have one minute to respond.

I will now play the fifth tape.

You should answer the questions on only the sixth page now.

You will have one minute to respond.

I will now play the sixth tape.

You should answer the questions on the remaining pages now.

You may take more than one minute to respond.

APPENDIX C

News Story Survey

Answer all questions on this sheet when the tape has been stopped.

---

1. My overall impression was:

   extremely positive toward this news story ____

   fairly positive toward this news story ____

   neutral toward this news story ____

   fairly negative toward this news story ____

   extremely negative toward this news story ____

---

2. The necessary facts were:

   extremely well presented in this news story ____

   fairly well presented in this news story ____

   more or less average in this news story ____

   not well presented in this news story ____

   extremely poor in this news story presentation ____

---

3. The length was:

   extremely long for this news story ____

   longer than necessary for this news story ____

   about long enough for this news story ____

   shorter than necessary for this news story ____

   extremely short for this news story ____

News Story Survey

---

4. My preference was for: (Choose one)

The first news story I heard ____

The second news story I heard ____

The third news story I heard ____

---

5. I would rank the news stories in this order:

(Place the number 1 in the space for your first choice, then number 2, then number 3).

The first news story I heard ____

The second news story I heard ____

The third news story I heard ____

---

6. The facts were presented best in: (Choose one)

The first news story I heard ____

The second news story I heard ____

The third news story I heard ____

News Story Survey

7. My preference was for: (Choose one)

The news story about the Statue of Liberty ____

The news story about computers ____

I had no preference ____