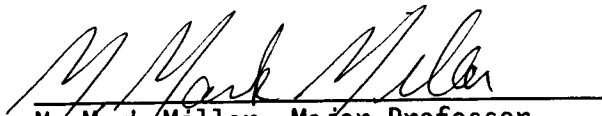
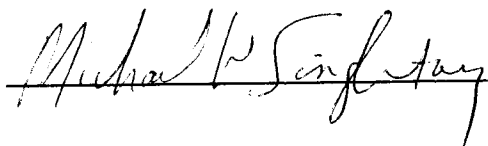


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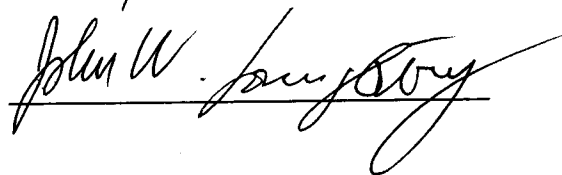
I am submitting herewith a dissertation written by Robert E. Hurd entitled "Evaluating News Media Coverage of a Presidential Election Campaign: Multidimensional Scaling of Audience Perceptions and Their Effects." I have examined the final copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Communications.


M. Mark Miller, Major Professor

We have read this dissertation
and recommend its acceptance:







Accepted for the Council:


Vice Provost
and Dean of The Graduate School

EVALUATING NEWS MEDIA COVERAGE OF A PRESIDENTIAL ELECTION CAMPAIGN:
MULTIDIMENSIONAL SCALING OF AUDIENCE PERCEPTIONS
AND THEIR EFFECTS

A Dissertation
Presented for the
Doctor of Philosophy
Degree
The University of Tennessee, Knoxville

Robert E. Hurd

May 1989

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ABSTRACT

This study measured audience perceptions of the quality of news media coverage of a presidential election campaign, and used an expectancy-value model to predict news media use from these audience evaluations.

A random sample of 83 Knoxville, Tennessee adults was surveyed by telephone during the 1984 presidential election campaign. Galileo (tm) metric multidimensional scaling techniques were used to measure audience perceptions of the decision-making utility, interest value and availability of five types of campaign information from the news media.

Multidimensional maps were derived revealing the perceived spatial relationships among cognitive concepts representing the components of audience perceptions. These maps suggested that the news media failed to satisfy the audience's need and desire for substantive campaign news. This interpretation was verified using analysis of variance techniques.

"Substantive" types of campaign coverage about the leadership abilities and voting records of the candidates were perceived to be significantly more useful in making a vote decision and no less interesting than "consummatory" news reports about campaign promises, "mudslinging" and horse race poll results.

Respondents perceived that the news media devoted as much attention to consummatory news as it did to substantive information necessary to make an informed vote decision. Audience perceptions significantly predicted conventional measures of television news

exposure, attention to news about the campaign and satisfaction with news media coverage.

The more people expected they would receive the types of information they valued, the more they exposed themselves to television news, the greater their attention to the campaign, and the more satisfied they were with campaign coverage. The perceived availability of substantive news was the most important factor behind satisfaction with news media coverage of the campaign.

These results raised the possibility that the current quality of news media coverage could actually discourage some people from using the news media to inform themselves and participate more fully in the democratic process. Contrary to the conventional wisdom, the news media might be able to provide more substantive campaign coverage without jeopardizing audience interest and attention, and the revenue they represent.

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CHAPTER I

INTRODUCTION

This dissertation will review relevant literature and analyze original survey data, in an attempt to (1) identify the perceived information needs and interests of the news media audience during a presidential election campaign, (2) determine the extent to which the news media were perceived to satisfy these needs and interests, and (3) explore the possible impact of these audience perceptions on news media use and political information seeking during the campaign.

A review of theory and research in political communication will indicate that such a reassessment of the interaction between news media and the audience/electorate is warranted. The fate of democracy ultimately depends on the ability and willingness of citizens to inform themselves and promote their perceived interests by participating in the self-governing process. In democratic societies, the mass media are generally charged with the responsibility for making available the public affairs information necessary for citizens to do so (Pateman, 1970; Siebert, 1974). Although most Americans are confronted with a never-ending and possibly overwhelming tide of public affairs information from the mass media (Graber, 1984), serious questions have been raised about the quality of that information and the effectiveness with which the news media inform the public (Gans, 1983; Lemert, 1981; Mannheim, 1976; Paletz and Entman, 1981; Lemert, 1981; Patterson, 1980; Patterson and McClure, 1976; Robinson et al., 1982; Robinson, 1975; Robinson and Sheehan, 1983).

Most observers and scholars are willing to concede that public affairs information is not communicated effectively from news media to their audiences. The literature, however, suggests two conflicting perspectives on the problem. On one hand, critics frequently disparage the coverage of public affairs and political campaigns as superficial and blame news media practices, norms or priorities (Downs, 1957; Gans, 1983; Lemert, 1981; Manheim, 1976; Paletz and Entman, 1981; Robinson, 1975). In contrast, the conventional wisdom places more blame on the audience. This perspective recognizes the economic necessity for mass media to attract large audiences, even for their news programs, and it accepts the widely-held premise that audience interest in public affairs is very narrow and limited (Berelson, 1954, 1952; Broh, 1980; Graber, 1984). Unfortunately, neither the critics nor the conventional wisdom offer realistic solutions to the problem, short of radical change in either human nature or the economic structure of American mass media.

Yet a solution might be found. A constructive approach would seek to identify or clarify the information needs, interests and abilities of the audience, and suggest ways that news media might better accommodate them within existing constraints. Journalists have typically resisted such research efforts for fear that the results might be used to promote entertainment values that encroach upon their professional standards (Robinson et al., 1982). This conventional wisdom, however, is premised on the belief that audience interests and desires are mutually exclusive from their information needs--an assumption that has not been adequately tested (Gans, 1983).

In fact, a small but growing number of scholars have come to recognize the need to reassess and facilitate the interaction between news media and the audience/electorate in democratic society. Blumler (1983) urges communication researchers to find ways the mass media can promote "political literacy" and avert an impending "crisis" in democracy. Gans (1983) advocates research specifically to evaluate the news media. He notes that despite the potential impact of news media on democratic processes, adequate methods have yet to be devised with which to monitor and evaluate news media performance and effectiveness. Such evaluation requires a better understanding of the information needs, interests and abilities of the audience/electorate and the extent to which news media satisfy or accommodate them. Only then can we begin to suggest how news media performance might be improved to facilitate democratic processes.

The research for this dissertation used innovative, metric multidimensional scaling techniques to measure and "map" audience perceptions of news media coverage of the 1984 presidential election campaign and the extent to which it satisfied their information needs and interests. Respondents in a sample of Knoxville, Tennessee area adult residents were asked to assess the substantive utility and interest value of various types of campaign information and then indicate the extent to which they perceived these types of information were provided by television and newspaper coverage of the campaign. Direct comparisons of these perceptions provided the basis for evaluating news media content and performance, and determining the

extent to which their campaign coverage satisfied audience needs and desires for public affairs information. Finally, an attempt was made to explore the possible impact of these audience evaluations on political information seeking and news media use during the campaign.

CHAPTER II

LITERATURE REVIEW

Only in recent years have scholars begun to recognize the need to reassess and facilitate the interaction between the news media and its audience--the democratic electorate. Such concerns were not often expressed or explored in the early days of mass communication research. Perhaps they were difficult to address within a dominant paradigm of research which sought above all to find ways sources could induce attitude and behavior change in members of a presumably passive, mass audience (McQuail, 1984). But researchers today are more likely to heed the advice of Katz (1960, 1959) and ask not what mass media can do to people, but what people can do with mass media. This represents a subtle, but significant, shift in the focus of mass communication research toward cognitive processes and the concerns of media users (Chaffee and Hochheimer, 1983). Upon close inspection, this contemporary research and its findings call into question some of the conventional wisdom about the nature of the audience/electorate and its relationship with the news media.

The Evolving Perspective on the Electorate

Classical theories of democracy require that citizens be ever able and willing to inform themselves, recognize their self-interests and express their policy preferences by participating somehow in the self-governing process (Pateman, 1970). The early voting studies, however, cast considerable doubt on the capability or inclination of typical

Americans to perform these duties and fulfill their democratic obligations (Berelson et al., 1954; Campbell et al., 1960; Lazarsfeld et al., 1944). These studies were based on large-scale, random sample surveys and provided the first empirical evidence on the actual nature of the American electorate and its voting behavior. They generally concluded that most Americans were uninterested, uninformed and inactive when it came to politics or public affairs (Berelson et al., 1954). The implications for democratic theory were obvious.

In democratic societies, the mass media are generally charged with the responsibility for making available the public affairs information necessary for the electorate to inform and mobilize itself (Siebert, 1974). The early voting studies would seem to discharge some of this obligation, however, when they implied that the mass media could have little impact on the political knowledge or activity of the apathetic masses. The relative few who paid attention to election campaigns were thought to expose themselves selectively to information with which they already agreed, thereby maintaining their "cognitive consistency" or "balance" (Berelson et al., 1954). From this early perspective, an individual's vote appeared to be an expression of stable, partisan predispositions that were reinforced or activated during the campaign--hardly the product of "rational" deliberations based on information the citizen had dutifully gathered (Berelson et al., 1954).

This rather dismal portrait, however, has undergone dramatic revision in recent years, as more and more evidence has been brought to bear on questions pertaining to the nature of the American electorate

and its behavior. It might be argued that both the methods and the objects of inquiry have changed (Chaffee and Hochheimer, 1983; Kraus and Davis, 1976; RePass, 1971). Certainly social science methods and statistics have evolved since the early studies of the 1940s and 1950s--as have the mass media, the political environment and the voters themselves. But perhaps the most significant changes have occurred in the nature of our research questions and the goals of political communication inquiry (Chaffee and Hochheimer, 1981; Graber, 1984; Katz, 1960, 1959; McQuail, 1984). By taking the vantage point of an active audience and focusing on cognitive processes, a new understanding of the interaction between media and audience has begun to emerge.

Psychological predispositions are no longer thought to be the sole or primary determinants of the vote decision, nor are they thought to be merely reinforced or activated by mass media (Graber, 1984). Today the vote decision is widely regarded as the product of complex cognitive processes (Bennett, 1981). The news and other mass media are recognized as the primary source of information to be processed as people construct the mental images of social reality that guide their political behavior (Graber, 1984; Lippmann, 1922). While social and affective psychological factors influence how this information is processed, the news media play an instrumental role in determining the quality and quantity of information available for selection and cognitive processing. This is especially true in a political

environment in which most public affairs to which citizens might respond are beyond their direct, personal experience.

From this contemporary perspective, the news media appear to have a far greater impact on the functioning of democratic society than previously thought. This prospect has raised legitimate concern about the responsibility and performance of news media. Blumler (1983) notes that the mass media provide a crucial link between a public characterized by apathy, skepticism and volatility, and leaders of social and political institutions (including the mass media themselves) that are rapidly losing credibility and perhaps even legitimacy (Robinson, 1975). It is worth noting that, according to U.S. Census Bureau statistics, the percent of the voting age population that has voted for president has decreased significantly and consistently with each election since 1960 and the advent of national television news coverage--dropping from 63.1 percent to less than 54 percent in 1980 (Plissner and Mitofsky, 1981).

Blumler (1983) argues that the media should accept responsibility for the political reality they inevitably help to create, especially in light of increased public dependence on media for public affairs information. He urges communication researchers to find ways the mass media can promote "political literacy" and avert an impending "crisis" in democracy (Blumler, 1983). Gans (1983) suggests this research should focus directly on evaluating news media performance and suggesting ways it might be improved to facilitate democratic processes.

Evaluating News--Normative Issues

Any attempt to evaluate news media performance or content will inevitably raise both normative and empirical issues which must be distinguished from each other. Gans (1983) stresses the need to reach some consensus on the normative standards against which the empirical evidence might be interpreted:

Ultimately such evaluations are based on purposes one assigns to news media and what one considers to be the essential elements of democracy. Nevertheless, only if we give serious and systematic thought to news norms and news media purposes do we have the right to tell journalists and others whether and how to improve the news. (p. 183)

Reaching such a consensus can be very difficult, even on such seemingly fundamental issues as how "democracy" should be defined and what role it prescribes for mass media.

Gans (1983) is critical of contemporary scholars who have redefined democracy and promote elite pluralism as a legitimate and desirable form of it (Berelson, 1952; Dahl, 1958). Elite pluralism may be an accurate empirical description of the current American political process as it has evolved, but it is not an adequate or acceptable guide for normative standards or goals. Gans (1983) advocates adherence to more classical conceptions of democracy (Kelso, 1978; Pateman, 1970; Walker, 1966). These classic forms, however, require broad-based political participation and frequently imply a far greater burden on mass media (Pateman, 1970; Siebert, 1974).

This increased responsibility is implicit in charges that the mass media have contributed to a growing "political malaise" by denigrating the political process and "sapping participatory dispositions"

(Blumler, 1983; Robinson, 1975). It is also a key premise of arguments that the news media foster a mistaken illusion of awareness and involvement, or fail to provide the "mobilizing information" necessary for meaningful political participation (Lemert, 1981; Paletz and Entman, 1981). Even if such charges were supported by convincing empirical evidence (Miller and Reese, 1981), it would be difficult to build a broad social consensus around a normative standard that extends media responsibility beyond simply informing the public or making public affairs information available. No matter what the Founding Fathers may have intended, the mass media are not universally expected to inspire or mobilize actual political activity (Pateman, 1970). That responsibility is generally thought to rest with the individual citizen, and not the press (Siebert, 1974).

Nevertheless, mass media can be charged with some responsibility beyond mere economic survival. Gans (1983) suggests an acceptable compromise might posit a media responsibility "to inform people for responsible democratic citizenship." Although there may be considerable debate as to what exactly "responsible citizenship" entails, this definition has an important advantage in that American journalists have traditionally pronounced it as their own--accepting this social responsibility, perhaps in exchange for Constitutional press freedoms (Chaffee and Hochheimer, 1983).

News Media Content--Empirical Evidence

Once an acceptable normative standard has been found, an evaluation of news media must then address empirical questions

concerning the nature of the news media, their content and their audiences. Clearly at issue is the quality, and not the mere quantity, of public affairs information made available to the electorate. Graber (1984) notes that most Americans must cope with a never-ending and possibly overwhelming tide of public affairs information supplied by mass media. Serious questions have been raised, however, about the quality of that information and the effectiveness with which the news media inform the public, especially during election campaigns (Gans, 1983; Lemert, 1981; Patterson, 1980; Patterson and McClure, 1976; Robinson et al., 1982; Robinson and Sheehan, 1983).

Critics have contended for many years that news media coverage trivializes the political process and reduces national elections to little more than a spectator sport (Manheim, 1976; Paletz and Entman, 1981; Robinson, 1975). More recently, such charges have received empirical support. Content analyses have revealed that news media coverage of presidential election campaigns tends to emphasize the superficial drama surrounding the political "horse race" at the expense of substantive information necessary to make an informed vote decision (Graber, 1976; Hofstetter, 1976; Patterson, 1980; Patterson and McClure, 1976; Robinson and Sheehan, 1983).

Patterson and McClure (1976) drew a large random sample of newspaper campaign stories, network television news broadcasts and paid political advertisements televised during the 1976 presidential election campaign and analyzed their themes and content. The political advertisements were found to contain more information about campaign

issues than did network TV news broadcasts. The authors reported that television and newspaper accounts of the campaign focused primarily on popularity poll results and candidate image, style and strategy. Much less coverage was devoted to substantive information about the candidates' voting records, issue positions or the extent to which they possessed the experience or qualifications necessary to perform effectively in office. These findings echoed analyses of the 1972 election coverage (Graber, 1976; Hofstetter, 1976) and have been replicated in subsequent presidential elections (Patterson, 1980; Robinson and Sheehan, 1983).

These observations suggest a potential threat to democracy, the full gravity of which can only be appreciated when one considers recent changes in the scholarly perspective on the audience/electorate. Contemporary research indicates that people not only select and cognitively process public affairs information, but also many appear actively to seek this information from mass media. This prospect might effectively shift scholarly attention from the demands of democracy on its citizens to questions concerning the responsibility and performance of news media. However, the nature and extent of this audience activity remains unclear and must be better understood before news media can be evaluated properly.

The News Audience--Two Views

A thoughtful evaluation of news media requires more than simply comparing an empirical description of news content with some normative standard. One must also take into account audience orientations,

abilities and perceptions of news before content analyses can be interpreted properly. The news media could hardly be faulted for failing to provide its audiences with content they neither understand nor desire. But such crucial questions about the nature of the audience are the subject of perhaps the greatest scholarly debate in communications. The literature provides evidence to support two conflicting views on the issue, each with important implications for evaluating and improving news media performance. One view suggests that the news media typically underestimate the audience's need and desire for substantive political information and consequently fail in their responsibility to inform the public. The other view suggests that news media are constrained in their ability to inform the public because they must maintain the interest and attention of a mass audience that prefers entertainment to public affairs.

Research on media "uses and gratifications" seems to support the former view more than the latter. This research has led many scholars to discard the old notion of a passive audience in favor of another conception--that of an active audience engaged in routine and purposive surveillance of the social/political environment through the use of mass media. Graber (1984) notes that some selectivity is inevitable and necessary if people are to cope with the glut of public affairs information available from the mass media. But little evidence exists to indicate the type of selectivity described by selective exposure hypothesis of the early days (Atkin, 1973; McLeod and Becker, 1981; Sears and Freedman, 1971). Instead the literature since the landmark

voting studies suggests that mass media use, message selection and information processing are typically guided by factors other than a need for psychological reinforcement (Atkin, 1973). On this the scholars--from both perspectives--tend to agree. But numerous issues have yet to be settled with regard to the extent of audience activity, the degree to which it is purposeful or goal-oriented, and the nature of the specific psychological rewards that motivate or reinforce habitual news media use.

Uses and gratifications research seeks to identify and weigh these motivations and rewards. In an early effort, Atkin (1973) developed a conceptual model that distinguished between two major classes of motivations which underlie information seeking, mass media exposure and message selection. "A simple act of mass media exposure can be traced to a complex set of determinants involving the needs of the receiver and the attributes of the message," he explained. The first class of motivations he described as "information seeking for utilitarian purposes, where an individual acquires message content as a means toward solving his practical problems" (Atkin, 1973, p. 205). Atkin posited that extrinsic uncertainty creates needs for information that possesses instrumental utility--information sought or selected because it is perceived to be useful in constructing various adaptive responses to the environment. According to his model, the types of information needed by an individual vary with the type of adaptive response that he or she desires to make: surveillance information is necessary for cognitive adaptation and awareness; guidance information is used for

attitude formation and decision-making; reinforcing information is sought for defensive adaptation; and performance-related information is needed for behavioral adaptation.

Each of these information needs "generate extrinsic motivation to seek messages from mass media sources," messages possessing instrumental utility of one type or another. These substantive types of information are contrasted with messages designed to satisfy the second class of motivations, called "consummatory gratifications" (Atkin, 1973):

Message selection may also be based on non-instrumental considerations . . . (where) the individual derives consummatory gratifications in the form of intrinsic satisfaction during exposure, but he does not directly apply the content to problem solving (p. 205).

These desired gratifications include entertainment, emotional arousal and intrinsic interest in a particular type of information or media content.

Studies on media uses and gratifications typically provide a random sample of respondents with a list of possible reasons for reading the newspaper, watching TV news or following the election campaign. These reasons usually represent a wide range of possible motivations or "gratifications sought," such as "to enjoy the excitement of the election race," "to see where the candidates stand on the issues," and "to give you something to talk about with others." Respondents are then asked to indicate the extent to which each reason applies to them, using a standard Likert-type scale. These procedures allow investigators to identify the psychological motives or

gratifications associated with a particular form of media exposure or use.

After reviewing the results of more than a dozen such audience surveys, Atkin (1973) concluded that the desire to acquire information useful in making adaptive responses is among the most important influences on news media exposure, attention and message receptivity. Similar, but more recent reviews by Becker (1979) and McLeod and Becker (1981) also cited the importance of surveillance and decision-making information in motivating news media consumption. McLeod and Becker (1981) noted that news media users most often say they seek substantive public affairs information from the news media. These same respondents, however, frequently report they do not fully obtain the surveillance-related gratifications they seek. This tendency might be explained by the alleged deficiencies in news coverage, as described in many content analyses. People are not likely to be gratified psychologically if they seek substantive information and the media provide primarily superficial or titillating fare.

On the other hand, Graber (1984) suggests the problem may be overstated because social desirability bias encourages people to inflate their self-reported interest in public affairs. Graber (1984) conducted intensive interviews with a small sample of news media users for an entire presidential election year, comparing their views and knowledge with the content of the campaign coverage in the media. She argues the news media are confronted with an "impossible task" in trying to satisfy an audience whose diverse social characteristics,

backgrounds and experiences have created differential information needs, interests and processing abilities. These differences appear to account for the wide variation in their media use habits. Graber (1984) suggests news media users may actually desire to be better informed about public affairs, but often remain unable or unwilling to make the necessary effort.

In fact, journalists frequently complain that their ability to inform the public more responsibly and effectively is constrained by economic disincentives associated with these presumed limits on the political interest and cognitive abilities of typical audience members (Gans, 1983; Graber, 1984; Robinson et al., 1982). This conventional wisdom suggests the news media are torn between two imperatives--a professional responsibility to inform democratic society and the pragmatic necessity of economic self-preservation in a competitive marketplace (Paletz and Entman, 1981).

Increasingly, network news divisions are expected to be more conscious of the "bottom line"--and if not make an outright profit, to at least cut costs and drain less revenue from the other corporate divisions. In this environment, attracting large audiences for paying advertisers becomes a higher priority. Nor are newspapers immune from these competitive pressures. With newspaper reading and market penetration on the decline, the print media are often said to be taking their lead from television in an attempt to compete with the medium and for the attention of its audience. In each case, news content is more likely to be driven by perceived audience demand, whether these

perceptions are accurate or not. In the conventional wisdom, "horse race" journalism becomes a necessary evil--the inevitable outcome of news media attempts to fulfill at least part of their responsibility to inform the public, without losing the attention of the mass audience and the revenue that it represents (Paletz and Entman, 1981). Other observers have gone further to suggest such practices may be an effective and desirable way to communicate with an essentially "uninvolved" electorate (Broh, 1980; Sinclair, 1982).

This conventional wisdom appears to be in direct conflict with some of the more recent research on media uses and gratifications. It implies that the information needs and intrinsic interests of the audience are necessarily at odds. And it assumes that entertainment and other consummatory gratifications typically provide a stronger motivation for news media use than do desires for substantive information possessing instrumental utility (Atkin, 1973).

Gans (1983) takes issue with these assumptions and notes they have not been subjected to adequate empirical tests. Gans has conducted extensive studies of journalists, their work and their values, interviewing reporters and examining their news content at CBS, NBC, Time magazine and Newsweek (Gans, 1979). He argues that journalist's perceptions of their audience are often inaccurate, but are nevertheless likely to influence their norms, values, practices--and ultimately the news product (Blumler, 1969; Gans, 1979; Robinson et al., 1982; Tuchman, 1972).

Robinson et al. (1982) have also studied news reporters and producers as they work and conclude that journalists generally fail to understand the needs, interests and abilities of their readers and viewers. The authors suggest some of this misunderstanding is compounded by widespread suspicion among working journalists that audience research threatens to replace their professional news values and standards with those serving the needs and interests of marketers and advertisers. Ironically, this same audience research could be used to help journalists be more effective in pursuing their goal of informing the public. Robinson et al. (1982) compared the journalist's intent and views of their own stories with the views and comprehension of those same stories by audience members in a sample survey. The authors found that reporters and producers routinely underestimated audience interest in substantive news about public affairs and overestimated the audience's ability to process and comprehend that information. The result, in the context of a political campaign, may be news coverage that is neither interesting nor useful to much of the audience/electorate.

The Potential Impact of Audience Perceptions

It is not known whether audience members in fact share the same complaints about the quality of news content as those lodged by the scholars and critics discussed here. But audience perceptions are of considerable consequence, particularly if one accepts the premise that the audience actively seeks and selects from the news media the public affairs information that it uses to construct the mental pictures of

social reality that guide its political behavior (Atkin, 1973; Graber, 1984; Lippmann, 1922).

According to the Atkin (1973) model of media consumption, people routinely scan the news media and select messages when the estimated reward value exceeds the expected cost of obtaining and processing that information, relative to their available resources. The utility assigned to a message is then a product of both the information needs of the user and characteristics of the message itself. In this context, the nature of the problem becomes clear--the reward value of public affairs information available from mass media may be relatively less than the cost of obtaining and processing it (Atkin, 1973; Downs, 1957).

Once again, analysis of this problem requires a comparison of media content and the audience for whom it is provided. Numerous content analyses imply that news content frequently offers more entertainment value than instrumental utility (Patterson and McClure, 1976; Robinson and Sheehan, 1983). At the same time, research on media uses and gratifications indicates there is considerable audience demand for the latter, more substantive fare (McLeod and Becker, 1981). Given this possible disparity between audience needs and media content, we might expect audience members to report that their needs or desires for political information are not entirely fulfilled by news media use. This, in fact, was reported by McLeod and Becker (1981) and could be attributed to the prohibitive cost of obtaining and processing news information (Atkin, 1973). The reward value of news media content may

not be sufficient to motivate its acquisition, or insufficient "resources" may be available to the user, or both (Atkin, 1973).

The implications for democratic society should be obvious. To the extent that the news media actually underestimate their audience and its desire for substantive information, they threaten to make the dismal findings of the early voting studies an enduring reality or self-fulfilling prophecy. Citizens not afforded adequate opportunities to inform themselves at relatively low personal "cost" are likely to remain uninformed and unable to fully recognize their self-interests, cast "rational" ballots or engage in meaningful political activity. Nor are such citizens likely to develop or maintain much interest in politics. They may also be discouraged from continued information seeking or participation in democratic self-government. Although one must resist the temptation of overstating this potential threat, one cannot overlook the mounting evidence in support of its fundamental premises and likely effects.

This grim scenario is not without implications for the media themselves. Recent research in media uses and gratifications suggests the news media may have an economic stake in informing the public more effectively and responsibly. A basic premise of the "uses and gratifications" approach is that media use represents an attempt by individuals to satisfy their own needs. As Galloway and Meek (1981) explained:

Audience members are assumed to be goal-directed in their attempts to satisfy needs; they create expectations about media and media content and the ability of media to satisfy

needs, and they construct lines of action in order to achieve gratifications. (p. 435)

McLeod et al. (1982) reasoned that audience evaluations of a medium and its ability to satisfy these needs are likely to depend on whether they had actually obtained the gratifications they sought from its use on previous occasions. These evaluations would reflect any perceived discrepancies between gratifications sought and obtained, which in turn might influence subsequent media exposure or use. People who obtain the specific gratifications they seek are likely to continue exposing themselves to a given medium, message or channel. Those who do not obtain the gratifications sought from exposure are likely to discontinue that mode of media use (Palmgreen and Rayburn, 1979). In practical, economic terms, this hypothesis means that the size of the audience and ratings for a news program could very well depend on whether the audience perceives that it has obtained the gratifications that it seeks. In many cases, those gratifications are thought to be instrumental, not consummatory. The implication is important and calls attention to the need for empirical evidence linking these perceptions to actual audience behavior and media use. It is necessary to demonstrate that news media can profit from satisfying their audiences needs, presumably needs for substantive public affairs information.

The distinction between gratifications sought (GS) and gratifications obtained (GO) represented a conceptual breakthrough, but one that has proved difficult to operationalize. As Katz et al. noted in 1973:

In principle, a distinction may be drawn between (a) expectations about content formed in advance of exposure and

(b) satisfactions subsequently secured from consumption of it. In practice, however, research workers have indiscriminately approached these phenomena from both ends. (p. 25)

Similarly, Greenberg (1974) warned that operationally, with the present methods, "one cannot distinguish whether the response obtained from the viewer of a medium . . . is an accurate statement of what he wanted or what he thinks he got" (p. 89). This problem continues to plague the various discrepancy approaches on the empirical level, despite their conceptual appeal (Becker, 1979; McLeod and Becker, 1981; Palmgreen, 1984). Nevertheless, several studies have achieved modest success in linking GS-GO discrepancies to levels of news media exposure (Palmgreen and Rayburn, 1979), program choice (Palmgreen et al., 1981) and news media dependence (Wenner, 1982).

Palmgreen and Rayburn (1979) reported that discrepancies between gratifications sought and obtained successfully predicted levels of exposure to public television content and discriminated between viewers and non-viewers on 8 of 11 common gratification items. The authors conducted their survey with the heads of 526 randomly-selected households in Lexington, Kentucky and asked them to indicate on a 5-point Likert scale how often they watched KET, the local public television station. Respondents were then provided with a list of 11 different possible reasons for watching television in general, and asked to indicate how much each reason applied to them personally. These reasons for watching were meant to correspond with gratifications they sought from viewing, and were very similar to those used in other uses and gratifications studies (Atkin, 1973; McLeod and Becker, 1981).

For example, viewers were asked whether they agreed or disagreed with the statement, "I watch TV to give me things to talk about with other people." Respondents were then asked to indicate the extent to which KET provided each of these 11 gratifications, using such statements as, "Programs on KET give me things to talk about with other people."

For each pair of corresponding gratification items, Palmgreen and Rayburn (1979) took the absolute difference between the gratification sought rating and the gratification obtained. These discrepancy scores were then averaged across the 11 gratifications to form an index hypothesized to correlate with an individual's level of exposure to the public television station. The smaller the average discrepancy, the higher the expected level of exposure. The authors found that 8 of the 11 gratifications discriminated between viewers and non-viewers of the station. Together, these 11 gratification items significantly predicted exposure to KET ($R = -.16$) among those who reported making the viewing decision themselves. A scale of the 8 discriminators emerged as a better predictor ($R = -.35$) than many traditional demographic correlates.

Palmgreen et al. (1981) also applied their GS-GO discrepancy model to program choice, rather than exposure. They found that neither GS nor GO alone predicted TV news program choice, but a functional relationship did emerge when comparisons were made between the gratifications viewers obtained from their choice of evening newscasts and the gratifications they thought they would receive from competing programs. The authors reasoned that when viewers choose between two or

more programs, they compare, in effect, the discrepancies between GS and GO among the programs, and choose the program with the smallest average discrepancy--the program that would best provide the gratifications they seek. Mathematically, the GS term cancels out of the formula when it is assumed that gratifications sought remain constant while the gratifications obtained would vary depending on the program. In other words, viewers seek the same gratifications from each program, but the ability to satisfy these needs varies from program to program and determines their choice.

To test this model, Palmgreen et al. (1981) interviewed 327 Lexington area residents who watch network evening newscast at least once a week. Respondents were again given a list of 15 gratifications they might obtain from watching network evening news, and asked to indicate on a 5-point scale how much each statement applied to their favorite network newscast. They were then asked to repeat these procedures, thinking instead about each of the other two competing news shows. In 86 of 90 different t-tests, viewers perceived they obtained significantly higher levels of gratifications from the program they watch than they would have received from the competing programs. Given the potential for response bias, it is perhaps more impressive that in a subsequent discriminant analysis these GO evaluations were at least as strongly related to viewing choice as more traditional measures of program attributes, such as program style, format, the quality of news coverage and the appeal of anchorpersons (Palmgreen et al., 1981).

Wenner (1982) provided some of the strongest evidence to suggest that GS and GO interact to predict news media "dependence," if not actual exposure. Telephone interviews were conducted with a systematic random sampling of 306 male and female heads of households in Iowa City, Iowa. Again, respondents were read a list of 12 reasons for watching news programs and asked to indicate on a 5-point Likert scale how much each reason applied to them personally. They were then instructed to use the same scale to rate how much each statement applied to the program "60 Minutes" and the network evening news program they watched most often. T-tests and correlations between gratifications sought and gratifications obtained indicated these concepts were empirically distinct. That is, GS items had significantly different means than corresponding GO items and they were not highly correlated. Most notable was the particular pattern of these findings. Respondents, on average, sought significantly higher levels of "surveillance" gratifications from network news than they perceived they obtained. These items included information needed to "make up my mind about the important issues of the day" and to "find out about issues affecting people like myself," and were in greatest demand by respondents. On the other hand, viewers perceived they obtained significantly more than they sought when it came to other, non-instrumental types of gratification, such as being entertained, having things to talk about and parasocial relationships with TV news personalities.

Wenner (1982) also measured respondents' "dependency" on each of the news programs, by asking whether they would miss the program "very much, somewhat or not at all" if for some reason they could not watch it for a long period of time. He then used hierarchical regression to test the proposition that the influence of gratifications obtained would be significant after controlling for the ordered influences of demographic variables, habitual media exposure, gratifications sought and attention to the program. In other words, he asked: does the strength of a person's attachment to a news program depend on whether it satisfies his or her needs? Together, all of the variables in the model accounted for 39 percent of the variance in network news dependency scores. The demographics and habitual media use variables each accounted for about 14 percent of the variance, while the gratifications sought accounted for 5 percent of the variance in network news dependency. The gratifications obtained also contributed significantly and accounted for 6 percent of the variance when added as the last block in the equation. The impact of perceived gratification among viewers of "60 Minutes" was even greater and more striking. The entire model accounted for 49 percent of the variance in program dependency, and G0 scores explained significant amounts (12 percent) of additional variance.

While not conclusive in and of themselves, together these three studies shed new light on the potential impact of audience perceptions and gratifications on continued consumption of news media. Given that respondents count instrumental, surveillance-related gratifications

among the most important motives for their news media use (Atkin, 1973; McLeod and Becker, 1981), and the instrumental utility of news media may be less than its entertainment or diversion value (Patterson and McClure, 1976; Robinson and Sheehan, 1983), respondents are likely to (a) perceive discrepancies between the gratifications they seek and obtain, (b) evaluate news media coverage negatively, and may (c) decrease their exposure or attention to it.

Similar outcomes would be predicted by recently-developed alternatives to discrepancy models of media consumption (Galloway and Meek, 1981; Palmgreen, 1984; Palmgreen and Rayburn, 1982; Rayburn and Palmgreen, 1984). These alternative models have their origins in the "expectancy-value" or expectancy-valence theories of psychology, and were developed in the communications field to overcome problems of operationalization and measurement associated with the concepts of gratifications sought and gratifications obtained. If successful, these new models can be expected to provide stronger empirical evidence of the impact of perceived audience gratification on news media use.

Galloway and Meek (1981) briefly trace the intellectual roots of the expectancy-value approach to the work and motivation theories of Tolman (1932), Lewin (1935), Escalona (1940), Festinger (1942), Atkinson (1964) and Vroom (1964). They characterize expectancy-value as a broad perspective representing not a single theory, but a "general theory of action." But despite its many forms, the authors note a common thread--the assumption that expectations about behavioral outcomes combine multiplicatively with the value or attractiveness of

these outcomes to determine subsequent behavior. Galloway and Meek (1981) also note the apparent compatibility of the expectancy-value approach with the uses and gratifications perspective.

Basically, expectancy-value theories suggest people expose themselves to mass media, channels or messages when they "expect" such activity will result in outcomes they "value" (Galloway and Meek, 1981). Audience members who have come to expect that news media will provide them with campaign information they value will continue to expose themselves to campaign news. Others might be discouraged from continued exposure because they have learned not to expect the outcomes they value. Although the conceptualization is somewhat different, the predictions based on expectancy-value theories would not differ substantively from those made by Palmgreen and associates (Palmgreen and Rayburn, 1979; Palmgreen et al., 1981; Wenner, 1982). Using a discrepancy approach, these same respondents would be expected to report they had not obtained the gratifications they sought from news media exposure. Based on the preliminary work of Galloway and Meek (1981), however, it appears that expectancy-value offers the advantage of conceptual clarity and will prove easier to operationalize and measure than gratifications sought or obtained. Rayburn and Palmgreen (1984) also note these advantages and have attempted to integrate the expectancy-value concept into their model of media use (Palmgreen and Rayburn, 1982; Palmgreen, 1984).

But from either approach, it appears the news media may actually lose readers and viewers if they do not provide information that

satisfies the needs or desires of the audience. If the news audience truly demands substantive information as has been suggested, the content analyses that criticize the superficiality of news also spell trouble for both the news media and the democratic process. However, it should be noted that the hypothesized decrease in news media use may depend on the reward value, relative cost and availability of alternative sources of campaign information (Atkin, 1973). In other words, ungratified information seekers may continue their current media use habits if attractive alternatives are not readily available.

Summary and Problem Statement

Since the advent of modern media, democracy in America has been characterized by low levels of political interest and knowledge and declining participation in the political process. Given the proliferation of media capable of disseminating public affairs information, one must wonder how the mass media might contribute to the problem or how they could help solve it. Although the news media accept some responsibility for informing democratic society, they are criticized today for providing superficial and sensational campaign coverage. The conventional wisdom for many years has exonerated the news media, by citing their need to attract and maintain the interest of large audiences that must be delivered to advertisers if the news media are to survive and prosper in an increasingly competitive market. The news media are often said to be doing the best they can in view of the mass audience's limited interest in public affairs.

But a great deal of research has been conducted during this period, some of which raises serious questions about the conventional wisdom, the performance of the news media and the quality of information that they provide. On one hand, research in media uses and gratifications suggests a more active, sophisticated and demanding audience than previously thought. On the other hand are content analyses of news media coverage that document an emphasis on the superficial and titillating at the expense of substantive information necessary to make an informed vote decision. The implication is profound when one considers how the theoretical perspective on the American voter has evolved over the years. Today people are thought to actively seek information from the mass media and use it to construct the pictures of social reality that guide their political behavior. It should come as no surprise then to find that news media users frequently report that they do not fully obtain the substantive public affairs information they seek from the media.

This research also suggests that "turned off" voters may also be turned off to the news media and discouraged from continued information seeking and news media use. But in uncovering this potential problem, hope for a solution has also been revealed. By linking perceived audience gratification to actual viewing habits, uses and gratifications research implies that improvements in news content may be necessary to ensure the continued economic viability of the news media. Given an increasingly competitive market, dissatisfied news media users might be lured away by new communication technologies or

outlets that satisfy their needs and inform them better. In short, it might prove profitable to inform the public more effectively.

Of course, much depends on the nature of the audience and its use of news media. What are the information needs and interests of the audience/electorate? How do they diverge or overlap, and to what extent are they satisfied by the news media? Does the news audience really prefer entertainment to substance? Or have reporters and producers underestimated the ability and interest of the news audience? Can the news be both informative and interesting to a broad cross-section of American society? Can we inform the public effectively within these audience constraints and the current economic structure of American mass media? These questions are more important than ever, but many have not yet received adequate attention. In fact, the existence of the problem, much less its possible solutions, relies largely on conjecture and a collection of disparate, inconclusive findings. Still, sufficient evidence exists to call into question the conventional wisdom and the consequences for democratic society are grave enough to warrant further research.

This dissertation seeks to identify the perceived information needs and interests of the audience/electorate and thereby test the conventional wisdom that these needs and interests are divergent and that audiences prefer entertainment to decisional utility in news content. By comparing audience desires to their perceptions of campaign coverage, it will be possible to infer the extent to which their needs and interests have been satisfied by news media. This will

provide the basis for an evaluation of news that takes into consideration any actual limits on audience interest in substantive information.

The literature suggests that news media coverage can be evaluated along two principal dimensions, one representing its entertainment or interest value and the other indicating its instrumental utility in making adaptive responses such as a vote decision. Information might then be classified according to the gratifications it is presumed to provide. "Substantive" information would include all information presumed to possess instrumental utility, in this case information perceived to be helpful in making a vote decision. "Consummatory" information would be that which lacks instrumental or decisional utility and provides interest value or entertainment instead. Some of the research reviewed here suggests that the news media may emphasize "consummatory" campaign news at the expense of more "substantive" information.

These characterizations of media content are based on the dichotomous categories used by Atkin (1973) to classify media gratifications and by Grunig (1979) to distinguish between "instrumental" and "consummatory" uses of media. While the term consummatory may have different connotations in psychology and other fields, it has been used repeatedly in communications research to signify intent and actions motivated by such non-instrumental considerations as pleasure, entertainment, intrinsic interest, passing time and gratification from the mere process of media exposure (Urban,

1984). This choice of terminology also deliberately avoids categorizing gratifications as either "immediate" or "delayed" (Schramm, 1949). While this labelling may often produce similar results, this research is concerned with how media users are gratified, not when it occurs. In theory and practice, utilitarian or instrumental gratification could be immediate. And one could conceivably obtain mere pleasure from media some time after its actual consumption.

Scholars have made such assessments of the nature and value of media content. But few, if any, studies have investigated audience perceptions of news and the quality of campaign coverage. Audience perceptions are more important, in fact, because they are likely to determine the extent to which citizens choose to follow public affairs in the news media. This is especially vital in the context of an election campaign, given increasing public dependence on media for the information necessary to make an informed vote decision.

The literature suggests the news media may underestimate audience demand for informative campaign coverage and that resulting audience dissatisfaction with news content may discourage further news media exposure and information seeking. An attempt will be made to test this hypothesis and link audience perceptions of news to actual news media exposure. In this manner, the dissertation will seek a new and better understanding of the interaction between the news media and its audience during the election process. Only then can news media performance be improved to promote "political literacy" and facilitate meaningful participation in democratic processes (Blumler, 1983).

CHAPTER III

METHODS

Evaluating News--Methodological Considerations

The research and evaluation prescribed here thus far demands a better understanding of the extent to which news media satisfy or accommodate the information needs, interests and abilities of the audience/electorate, as well as the development of empirical methods capable of identifying these characteristics and making such an assessment. Despite the potential impact of news media on democratic processes, adequate methods have yet to be devised to evaluate its performance (Gans, 1983).

The Atkin (1973) model poses important implications for any evaluation of news content. First, it suggests that users of the news media assess the utility or reward value of content prior to exposure, attention or message selection. It also suggests the utility of news content depends on characteristics of both the user and the message, and that these determinations should be made from the audience's perspective. Estimates of reward value and acquisition cost necessarily depend not only on perceived characteristics of the message, but also on audience perceptions of its own information needs, interests and abilities. Thus, an evaluation of news content requires the use of methods that can measure audience perceptions of both themselves and the messages to which they are exposed. Preferably, these measurements should be taken simultaneously and in equivalent

units so that direct comparisons could be made among audience and message characteristics.

Galileo theory (Woelfel and Fink, 1980) appears to provide such a method, capable of measuring audience perceptions of news media content relative to their perceived information needs and interests. This is accomplished by using the same "yardstick" to measure both sets of perceptions (Barnett et al., 1976; Miller and Hurd, 1984; Woelfel and Fink, 1980). Respondents are asked to make direct magnitude separation estimates of the similarity or dissimilarity of pairs of concepts representing cognitive objects and their attributes. In this case, the concepts represent information needs, interests, types of campaign information, and perceptions of news media content. By using metric multidimensional scaling techniques to map these audience perceptions, it then becomes possible to clarify the perceived information needs and interests of the audience/electorate and compare them directly with perceptions of news media and the types of information their campaign coverage provides. Such a direct comparison would allow for an evaluation of the extent to which this coverage satisfies audience needs and interests.

Measuring Audience Perceptions

The media uses and gratifications literature indicates audience members are capable of assessing their own orientations as well as the characteristics of media content. However, these assessments are typically made independent of one another and appear difficult to compare directly. The gratifications perspective asserts that media

use is goal-oriented, requiring that respondents be able to articulate the gratifications they seek and discriminate among media channels and messages according to the gratifications or types of information they are likely to provide (Palmgreen, 1984). These fundamental assumptions were met during early efforts to develop typologies of gratifications that people seek or value and those they receive or expect from media use (Blumler and McQuail, 1969; McLeod and Becker, 1981; McQuail et al., 1972; Palmgreen, 1984).

These studies indicate people are not only able to articulate perceived needs, interests or desired gratifications, but they can also identify the medium, channel, message or activity that will most likely satisfy or fulfill these needs or desires (Katz et al., 1973; McLeod and Becker, 1981; Palmgreen, 1984). Respondents appear capable of associating certain gratifications with particular media and distinguishing among different media on that basis. Lichtenstein and Rosenfeld (1983, 1984) found numerous media have clear, socially-defined images in the form of gratifications expected or obtained from media use. These expectations or perceptions appear influenced by both experiential and normative, social factors. Kippax and Murray (1980) found people were able to discriminate among six media based on their perceived ability or "helpfulness" in fulfilling some 30 different needs.

Multidimensional scaling (MDS) techniques have proven very useful in exploring the underlying structure of these audience perceptions of media and messages. Katz et al. (1973) used MDS to demonstrate that

Israeli audience members could differentiate among five media according to perceived or expected gratifications obtained. Elliot and Quattlebaum (1979) essentially replicated this study with students in the United States. Lometti et al. (1977) used similar techniques to demonstrate that people can distinguish among channels and messages based on gratifications they are seeking. The authors asked respondents to judge the perceived similarity between all possible pairs of eight media channels, using as a basis for their judgments "whatever attributes they choose to think about." Multidimensional maps were then derived from these paired comparisons. The relative locations of the eight media or cognitive objects were interpreted to suggest the dimensions along which they were compared. Distances between objects were assumed to represent the perceived similarity between media channels (Lometti et al., 1977).

The authors found only three operative gratification dimensions along which media were compared. Interestingly enough, the strongest of these dimensions appeared to represent a continuum from instrumental utility to entertainment value (Lometti et al., 1977). Interpretation of these dimensions was validated with univariate gratification measures, and appeared to confirm observations made by Atkin (1973). Lometti et al. (1977) noted that respondents may have confounded channel and content attributes and called for future research to develop strategies to separate such gratifications. Critics of the uses and gratifications perspective have voiced similar concerns that

research has ignored audience perceptions of media content and its attributes (Palmgreen and Rayburn, 1979; Swanson, 1979).

The Advantages of Galileo Measurement

Galileo theory and method (Woelfel and Fink, 1980) appears to provide an alternative method which offers numerous advantages for the measurement of audience perceptions of news media, including the capability to address many of the above concerns. It allows for the potential separation of channel and content attributes, as well as the measurement of media content, its attributes or the mass media themselves. The advantages provided by this method begin with assurance that objects, attributes and criteria for evaluation are meaningful to respondents. Open-ended, in-depth interviews are conducted to determine the domain of discourse and its most salient concepts or members (Miller and Hurd, 1984; Woelfel and Fink, 1980). This is especially important in uses and gratifications research because the domain of relevant gratifications is likely to vary with the type of content under investigation (Palmgreen, 1984).

In addition, Galileo requires no dubious assumptions that the phenomena to be measured are unidimensional, or that the dimensions of evaluation and their interrelationships are known apriori. Nor is the geometric representation determined by dimensions selected by the investigator. Galileo method also provides a spatial representation of respondent perceptions of concepts, their relative locations and relationships, such that all perceptions can be visualized simultaneously (Lometti et al., 1977; Woelfel and Fink, 1980).

Although Galileo method shares many of the above characteristics and advantages with the Lometti et al. (1977) approach, its innovative measurement techniques represent a significant departure from this and other conventional methods (Woelfel and Fink, 1980). Lometti et al. (1977) asked respondents to express their perceptions of the dissimilarity between two cognitive objects using a 5-point Likert scale ranging from "very dissimilar" to "very similar." Such ordinal scales are common in mass communication and gratification research, but they are imprecise and bounded measures that allow for very little discrimination among observations. Consequently, respondents may be unable to express their perceptions adequately and accurately. Potentially valuable information is lost when substantively different objects or observations are assigned the same numerical value, as is inevitable with such scales (Woelfel and Fink, 1980). These measures are also overanchored, in that equal intervals cannot be assumed and respondents must then choose among several possible "yardsticks" with which to make their measurements of media or other phenomena. This inevitably leads to inconsistent and incomparable results (Woelfel and Fink, 1980).

Galileo method makes all comparisons or measurements with a standard yardstick that is neither overanchored nor has an upper bound. Respondents are asked to make direct magnitude estimations of the separation or conceptual distance between concepts representing cognitive objects and their attributes. These ratio-level distances provide a more precise measurement of perceived similarity and

dissimilarity, allowing for an infinite number of possible outcomes and discriminations among observations (Woelfel and Fink, 1980).

Extensive tests of the scaling procedure indicate this precision does not come at the cost of reliability (Barnett, 1972; Barnett et al., 1976; Gillham and Woelfel, 1977; Gordon, 1976; Miller, 1986). In fact, only modest sample sizes are necessary to yield data that are more precise and reliable than conventional survey data (Miller, 1986; Miller and Hurd, 1984). Aggregate test-retest reliability coefficients of .90 and above have been reported by Barnett (1972) with as few as 50 cases, and by Gillham and Woelfel (1976) with only 29 cases. Simultaneous but separate random samples of 100 have produced intergroup correlations ranging from .93 to .97 in repeated tests by Gordon (1976).

Barnett et al. (1976) explain that aggregation eliminates the potential problem of unreliability because the arithmetic average of all responses for any given paired comparison will converge on the true mean of the population as the sample grows large. This is simply an application of the Central Limits Theorem and the Law of Large Numbers. The authors caution, however, that reliability coefficients may vary from sample to sample and by the sets of concepts that are scaled. Surveys of heterogeneous populations may require larger samples to obtain data that are equally reliable.

Finally, Galileo theory and method allows for the scaling and comparison of an infinite range of concepts representing not just physical entities, but all cognitive objects and their attributes.

These concepts could include the "self," human emotions, activities, ideas--anything that can be conceived by the human imagination (Woelfel and Fink, 1980). Investigators using more conventional MDS techniques have included a cognitive object representing the "self" in their measurements and maps. Reeves and Miller (1978), for example, operationalized the degree of children's identification with television characters as the mean interpoint distance between the self-concept "Me" and concepts representing various TV characters.

Galileo theory goes one step further and assumes anything that might be imagined can be represented by some concept whose meaning must be defined relative to other concepts, and can be expressed as perceived distances or separations between concepts. These distances can be aggregated and then used to derive multidimensional cognitive maps representing the spatial relationships among salient concepts in a given domain. These maps are presumed to represent the perceived or constructed social reality to which people construct responses (Barnett et al., 1976; Woelfel and Fink, 1980). The greater the reported distance, the greater the conceptual discrimination among cognitive objects. The smaller the mean interpoint distance, the greater the perceived similarity or association between concepts--regardless of what these concepts represent. Thus Galileo theory and method allows, in a very real sense, for the direct comparison of "apples" and "oranges."

It is precisely this capability that makes Galileo appropriate to this research. The Atkin (1973) model implies direct comparisons are

necessary between self-perceptions of information needs or interests and the perceived attributes of information or its ability to satisfy those needs and interests. Similar comparisons between attributes of information and their availability from news media would also provide the basis for evaluating news media performance or content. This apparent flexibility in operationalization could also prove useful in media gratifications research which seeks to measure and compare audience perceptions of gratifications sought and obtained, or gratification outcomes that are valued and expected.

Galileo method has been used successfully to scale a wide range of aggregate values, beliefs and perceptions (Barnett et al., 1976; James, 1985; Korzenny et al., 1980; Levy et al., 1979; Maase et al., 1984; Miller and Hurd, 1984; Reeves and Lometti, 1980; Serota et al., 1977). Nevertheless, this dissertation appears to be the first research to apply Galileo methods to evaluate news media or to understand media uses and gratifications. And while MDS techniques have been employed to measure and map audience perceptions of media and gratifications obtained (or expected), they have not been used to measure audience characteristics--gratifications sought (or valued) or perceived information needs and interests. Nor have methods been used that allow for direct comparisons between these perceived needs/interests and the extent to which news media satisfy them.

Research Purpose and Methods

Content analyses of news media coverage of presidential election campaigns have identified the types of information that are available,

in varying degrees, to the audience/electorate. These types of campaign information can be classified into two possible categories: "substantive" information that possesses instrumental utility and may be useful in making a vote decision, and "consummatory" information that may be intrinsically interesting or entertaining, but lacking instrumental or decisional utility. Each type of campaign information is presumed to satisfy different and potentially conflicting needs or desires, sometimes called gratifications. This research measured, for perhaps the first time, evaluations of news media content by a non-elite group--the audience for which the content is actually intended.

This research first used open-ended questions to identify the types of information that come to mind most frequently when people think about election campaigns, news media coverage and voting. Respondents were then asked to indicate the extent to which each of these types of information are associated with two attributes or gratifications--utility in making a vote decision and mere interest value. They were also asked to indicate the extent to which they perceive each type of information to be available from the news media and their content. These measurements were taken using Galileo metric multidimensional scaling techniques.

From these data, it was possible to determine whether each type of information was considered interesting, useful or both. The needs and interests of the news audience were identified and compared with perceptions of news media coverage. This comparison provided the basis for an evaluation of news media and inferences about the extent to

which they satisfied audience needs and interests during a presidential election campaign. An attempt was then made to determine whether these audience evaluations were systematically related to actual news media exposure. The results indicated whether the consequences of current news media practices might be as grave as previously suggested, and whether possible solutions exist within the constraints imposed by human nature and the profit motive.

These same procedures were also used to test an expectancy-value model of media consumption, and simultaneously validate an innovative method of measuring and mapping these audience perceptions--metric multidimensional scaling techniques (Woelfel and Fink, 1980). An attempt was made to determine specifically the extent to which respondents can be rendered able and willing to express their perceptions of news media content as ratio-level distances between salient concepts, and the extent to which such measurements are reliable and valid. These results should have useful implications for the theory, methods, and policies of mass communication.

Data Collection Strategy

Data on audience perceptions of their information needs, interests and news media content were gathered from a representative sample of Knoxville, Tennessee adult residents via a telephone survey administered in two phases during the 1984 presidential election campaign. In early September, open-ended interviews were conducted with a small sample of adult Knoxville residents to ascertain their attitudes and perceptions concerning the election campaign, its

coverage by the news media, and the types of information they found interesting or useful. These open-ended interviews were used to generate a list of salient cognitive objects and attributes commonly used by respondents to describe their perceptions and evaluations of news media coverage and the campaign.

In the second phase, a structured questionnaire was constructed from this list of salient concepts and was administered to a larger sample of Knoxville adults. These respondents were provided a list of all possible non-redundant pairs of concepts generated from the open-ended interviews. They were then asked to make direct magnitude estimates of the "distance" between the concepts in each pair. Respondents were also provided with a reference stimulus and were asked to make their estimates relative to this "yardstick." From these ratio-level data, an aggregate multidimensional map was derived to represent the perceived relationships among salient concepts in this cognitive domain.

The structured questionnaire also included conventional measures of demographic characteristics, news media use and political attitudes and behavior.

The Open-Ended Interviews

In early September of the 1984 campaign, open-ended interviews were conducted with a small, systematic sample of Knoxville area adult household members ($n = 21$) whose numbers were drawn from a current, local telephone directory. Respondents were selected at random within each household by identifying and requesting to interview the adult

member who had the most recent birthday. Demographic statistics from this sample compared favorably with known population parameters available from a recent census.

Respondents were asked to (1) provide reasons for attending or not attending to the 1984 presidential election campaign, and to identify (2) their principal sources of information about the campaign, (3) the types of political information that might be provided by the news media and other sources, (4) the types of information they found most and least interesting, and (5) the types of information they might use to judge the candidates and decide how to vote. Neutral probes were used to elicit more detailed information about these perceptions of the campaign and news media coverage. The interviews lasted about 20 minutes each. A copy of the open-ended questionnaire is provided in Appendix A.

The purpose of these interviews was to generate a list of terms or concepts most frequently mentioned by respondents in aggregate when they discussed or described their perceptions and evaluations of various types of information that might be provided by the news media and their campaign coverage. Transcripts of the open-ended interviews were compared to select the most frequently mentioned and widely shared concepts. Substantial efforts were also made to preserve the exact phrasing and natural language of the respondents. This provided additional assurance the items would be meaningful to other people sampled from this population in the second phase of this research.

The small sample size appeared to be adequate for the purpose of generating such a list of concepts. The ideas and phrases used by respondents to describe their perceptions became redundant after a small number of interviews. Few new concepts or phrasings were introduced as the sample size increased with each additional interview.

The following list of salient concepts was derived from the open-ended interview results:

- (1) candidate leadership abilities
- (2) voting records
- (3) campaign promises
- (4) mudslinging
- (5) who's ahead in the polls
- (6) interesting
- (7) believable
- (8) decide how to vote
- (9) television news
- (10) newspaper stories
- (11) yourself.

The first five concepts were used to designate the types of information that respondents most frequently mentioned as either available, interesting or useful to them. "Candidate leadership abilities" refers to those personal qualities like experience, personality and management style that are thought to have a bearing on the performance of a president. Leadership ability was mentioned specifically and frequently as a most desirable trait, as important substantively as any issue position. "Voting records" refers to the candidates' past voting record as well as current positions on issues. Respondents indicated they were more interested in how someone actually voted than in their "campaign promises." Candidate leadership abilities and voting records are presumed to be the two types of

"substantive" information useful in making a vote decision. "Campaign promises" were of interest to some respondents, but few seemed to take them seriously. For this reason, campaign promises was presumed to fulfill primarily "consummatory" gratifications, providing information likely to be judged more interesting than useful in deciding how to vote. "Mudslinging" was the term most commonly used in referring to negative campaigning, and represented the chief complaint about modern electoral politics among respondents. This was classified as "consummatory" information likely to be of more interest value than utility. In talking about news media coverage of the campaign, most respondents made some reference to "who's ahead in the polls," their term for news reports about horse race polls. These, too, were classified as "consummatory" types of information because they are presumably more interesting than useful.

The terms "television news" and "newspaper stories" represent the most frequently mentioned sources of information about public affairs and the election campaign. Very few respondents mentioned any other source of information. "Newspaper stories" was selected to differentiate news from the entire newspaper in the same way that "television news" is distinguished from the medium itself, television. It was anticipated that these two competing media would be perceived as different in both function and performance.

The concepts "interesting," "believable," and "decide how to vote" represent the attributes most frequently mentioned as desirable of the above-mentioned types of campaign information and information sources.

"Interesting" was the term used by respondents for "consummatory" information that possessed interest value or satisfied an intrinsic interest. Respondents made frequent reference to information that they used in "deciding how to vote." But the words "helpful" and "useful" were not volunteered by respondents and probes suggested these terms had ambiguous meanings. For this reason, the concept "decide how to vote" was used to describe "substantive" information--news possessing instrumental utility and perceived to be useful in making an informed vote decision. "Believable" was also frequently mentioned by respondents as an important attribute of campaign news and information. It was included in the subsequent Galileo interviews because it appeared to be an important "landmark" or reference concept necessary to complete the cognitive map. But the concept was not used in later analysis because it had no direct bearing on the research questions addressed in this dissertation. "Yourself" was assumed to represent the respondent's self-concept or perceived self as an object (Barnett et al., 1976; Serota et al., 1977; Woelfel and Fink, 1980).

The open-ended interviews themselves provided a rich base of qualitative data which seemed to lend credence to many of the concerns raised in the literature review. Respondents were frequently critical of news media coverage for providing information that was neither interesting nor useful to them. The results from this initial probe demonstrated the need for a more thorough, detailed and precise examination of these audience perceptions.

Sampling Procedures and Results

A second sample of Knoxville area households ($n = 149$) was drawn systematically from a current, local telephone directory. Respondents were once again selected at random within each household using the "last birthday" technique. A 66 percent response rate yielded a sample of 99 Knoxville area adult residents willing to participate in the study. Of these respondents, 83 completed the entire 20-minute Galileo instruction and interview session.

This response rate was typical of that obtained from other Knoxville and Tennessee area surveys (Miler and Hurd, 1984), and raised some concern about the representativeness of the obtained sample. However, the demographics of the sample compared favorably with known population parameters and represented the wide range of characteristics one would expect from residents of this heterogeneous area.

The Knoxville area has a significant rural and blue-collar population and a fairly large percentage of adult residents who have not completed high school (somewhat lower than the 45 percent statewide without high school degrees). On the other hand, Knoxville hosts the center for the state university system, Oak Ridge National Laboratories and the Tennessee Valley Authority. Many employees of these large local institutions have significant post-graduate training and advanced degrees, making for a heterogeneous mix.

The 83 respondents in the final sample ranged from age 18 to 81 and reported 4 to 21 years of formal education. The "typical" respondent was 43 years old with 14 years of education, including some

college. The sample was equally split on sex, with 51 percent female respondents. These characteristics approximated the demographic composition of the Knoxville area, and attests to the success of the sampling techniques.

Knoxville also has a well-developed news and mass media market, with three network television news affiliates, an independent local station, considerable cable penetration and two competing local daily newspapers--one owned at that time by Gannett Co., Inc. and the other owned by Scripps-Howard. In short, there seems no apparent reason to suggest that this modest, but representative sample of Knoxville adults should differ substantively from other samples of Americans with regard to their information needs, interests, abilities and use of news media content.

The Structured Interviews

The list of 11 salient concepts generated during the open-ended interviews yielded 55 non-redundant pairs of concepts which were entered into a structured questionnaire. This instrument was administered by telephone to 99 respondents in a 20-minute instruction and interview session during the last six weeks of the 1984 presidential election campaign. Interviews were conducted by trained communication graduate students.

Two concepts from the list were selected for use as a reference stimulus or "yardstick" against which other perceived differences or distances would be calibrated. The concepts "campaign promises" and "voting records" were chosen to form the yardstick because their social

meanings were believed to be clear and stable across respondents and over time (Woelfel and Fink, 1980). The two concepts were also thought to be neither very similar nor very different, and thus might serve as a useful yardstick of moderate length. The distance of 100 units was arbitrarily assigned to represent this length or difference between concepts. Respondents were then asked to use this yardstick to estimate the distance or difference between the two concepts in each of the remaining 55 pairs. (This number included a repeat of the reference pair to monitor respondents' correct use of the instrument.)

At the outset of the interview, respondents participated in a brief instruction session designed to familiarize them with the direct magnitude separation or estimation procedures. The exact instructions are reproduced in Appendix B. Respondents were told that "an apple and an orange differ by 100 units" and were asked to use that yardstick to estimate how different or far apart were other pairs of fruit. They were told to provide a number larger than 100 if the fruits were more different than an apple was from an orange. If they thought the fruits were less different than an apple and an orange, they were to provide a number smaller than 100. And if the fruits were "not at all different," they were to say "zero."

In other words, the greater the perceived difference between the two concepts, the larger the number respondents were to provide. And these estimates or distance judgments were to be made proportional to the standard distance or "yardstick" provided by the investigator. Respondents typically reported small differences (less than 30 units)

between a lemon and a lime, and differences larger than 100 between such fruits as a grape and a watermelon. Such responses were taken to indicate generally appropriate use of the yardstick, although respondents were reminded there were no correct or incorrect answers or perceptions.

After mastering several examples, most of the respondents ($n = 83$) were able and willing to proceed to the actual questionnaire. The paired-comparison questions were phrased in the following form:

If campaign promises and voting records differ by 100 units, how different are . . . (for example)

- . . . campaign promises and mudslinging?
- . . . campaign promises and interesting?
- . . . campaign promises and decide how to vote?
- . . . campaign promises and television news?
- . . . campaign promises and yourself?

In this manner, each respondent estimated the difference or distance between the two concepts in each of 55 pairs, using the reference pair or yardstick as his or her guide. A complete copy of the Galileo questionnaire is provided in Appendix C. After the brief instruction period, respondents appeared to have little difficulty expressing their perceptions of news media content, information needs and interests in terms of metric spatial separations or distances.

These procedures yielded ratio level data in the form of perceived distances between the 11 salient concepts in the cognitive domain of evaluating news media coverage of the campaign. These estimated distances were aggregated and used to derive multidimensional maps of

the spatial relationships among these cognitive objects and their attributes.

The structured questionnaire also included a large number of conventional survey items designed to measure such variables as news media use, political interest, political efficacy, attention to the campaign, attitudes toward the news media, and the usual demographics. The complete questionnaire is reproduced in Appendix C.

Conventional Measures and Results

The structured interviews were conducted by trained communication graduate students during the last six weeks of the 1984 presidential election campaign. During these telephone interviews, respondents were asked to estimate the conceptual distance between 11 salient concepts that were generated during the open-ended interviews. These data were later used to derive multidimensional cognitive maps designed to reveal audience perceptions of their information needs, interests and news media coverage during the campaign.

In addition to this information, data were also gathered with conventional survey measures that assessed respondents' views on politics and the news media as well as their political behavior and media use. Respondents were asked how often they used various sources of public affairs information, how interested they were in politics and how much attention they paid to the campaign. Other items asked respondents to indicate on a 5-point Likert-type scale the extent to which they agreed or disagreed with each of a series of statements regarding politics and the news media. This information provided a

broader context for understanding audience perceptions of the 1984 campaign and its coverage by the news media.

Nearly half of the respondents reported reading the newspaper every day. This, of course, raised the question of what constitutes newspaper "reading." Respondents were somewhat less likely to report reading stories about politics in specific sections of the paper other than the front page. Nevertheless, nearly two-thirds of all respondents said they read political stories inside the paper at least three days each week. Table 1 paints a more detailed picture of newspaper reading habits in this sample.

When asked how many times per week they usually watched specific types of television news programming, respondents appeared to watch TV news less frequently than they read the newspaper. While 71 percent said they read the newspaper at least four times a week, only 64 percent said they watched the local or national network news this often. Still, Table 2 shows that most respondents in the sample watch the news and read the paper regularly each week. About 80 percent said they usually watch at least one other news program each week, such as a segment of Nightline, 60 Minutes or Face the Nation. Nearly half watch cable news at least once a week, about one in four watch it regularly.

Table 3 demonstrates the extent to which newspaper reading and TV news viewing overlap. About 42 percent reported they watch the national network news and read stories about politics on the inside pages at least four times a week. Only 21 percent said they neither watch the national news nor read political stories inside the newspaper

Table 1. Newspaper Reading Habits of Respondents.

Days Per Week	Percent			
	Read the Newspaper	Read Politics On Front Page	Read Politics Inside Pages	Read Politics On Op/Ed Page
0-2	17	21	34	38
3-6	34	43	38	36
7	49	37	28	26
Average (Days)	5.0	4.4	3.9	3.5

Table 2. Frequency of Newspaper Reading and Television News Viewing.

Days Per Week	Percent				
	Read the Newspaper	Watch Early Local News	Network News	Watch Late Local News	View News On Cable
0-1	10	19	21	42	61
2-3	20	20	15	23	14
4-5	15	26	33	15	10
6-7	56	37	31	20	16
Mean Days	5.0	4.1	4.1	2.7	2.0
Median	6.0	5.0	5.0	2.0	0.0

Table 3. News Media Habits of Respondents.

Regular Activity*	Percent
Watch National Network News and Read about Politics on the Inside Pages of the Daily Newspaper	42
Watch National News, but don't Read about Politics on the Inside Pages of the Newspaper Regularly	22
Read about Politics on the Inside Pages of the Newspaper, but don't Watch Network News Regularly	15
Neither Watch Network News nor Read about Politics Inside the Newspaper Regularly	21

*Regular is defined as engaging in an activity at least 4 times each week.

regularly. There is some relationship between these two activities ($r = .41$, $p < .01$), although another 37 percent of the respondents reported that they use one source regularly, but not both. Tables, 4, 5 and 6 are correlation matrices that reveal in more detail the interrelationships among forms of news media use.

From these data one can safely surmise that news about politics reaches the vast majority of citizens, many of whom make some measurable effort to get this information regularly each week. An interest in politics appears to account for at least some of this information seeking. The vast majority of respondents showed some interest in politics. While 57 percent said they were only "somewhat interested" in politics, another 37 percent said they were "very interested."

Table 7 presents the correlates of political interest, news media use and attention to the campaign. Political interest was not significantly correlated with sex or age, but education did appear to cultivate an increased interest in politics ($r = .23$, $p < .05$). Political interest was significantly correlated with reading political stories on the inside pages of the newspaper ($r = .29$, $p < .01$), watching national network TV news ($r = .27$, $p < .01$). These forms of news media use did not vary with sex or education, although Table 7 indicates their frequency increased significantly with age.

While most respondents were only "somewhat interested" in politics, they nevertheless paid fairly close attention to news about the presidential election campaign. About 52 percent said they paid

Table 4. Correlations Among Newspaper Use Items.

	Days Read Newspaper	Read Politics On Front Page	Read Politics Inside Pages	Read Politics On Op/Ed Page
Days Read Newspaper	1.00	0.75	0.83	0.73
Read Politics On Front Page		1.00	0.77	0.67
Read Politics Inside Pages			1.00	0.82
Read Politics On Op/Ed Page				1.00

*All correlations are significant at the $\alpha < .001$ level.

Table 5. Correlations Among TV News Viewing Items.

	Watch Early Local News	Network News	Watch Late Local News	Cable News	Other News Programs
Watch Early Local News	1.00	0.87**	0.21*	0.11 ns	0.36*
Watch Network Evening News		1.00	0.16 ns	0.17 ns	0.33*
Watch Late Local News			1.00	0.28*	0.31*
Watch Cable Channel News				1.00	0.39**
Watch Other News Programs					1.00

* $p < .01$ ** $p < .001$

Table 6. Correlations Between Newspaper Reading and TV News Viewing.

	Days Read Newspaper	Read Politics On Front Page	Read Politics Inside Pages	Read Politics On Op/Ed Page
Watch Early Local News	0.20*	0.33**	0.37**	0.33**
Watch National Network News	0.30**	0.37***	0.42***	0.41***
Watch Late Local News	0.15	0.26**	0.25*	0.15
Watch Cable Channel News	0.27**	0.28**	0.21*	0.15
Watch Other News Programs	0.12	0.14	0.23*	0.17

* $p < .05$ ** $p < .01$ *** $p < .001$

Table 7. Correlates of News Media Use, Interest and Attention.

	Age	Education	Sex	Interest In Politics	Attention To Campaign
Days Read Newspaper	0.34***	0.14	0.01	0.17	0.28**
Read Politics On Front Page	0.25*	0.16	0.10	0.29**	0.36***
Read Politics Inside Pages	0.38***	0.18	0.02	0.29**	0.42***
Read Politics On Op/Ed Page	0.40***	0.20*	0.03	0.24*	0.32**
Watch Early Local News	0.36***	-0.19*	-0.13	0.23*	0.21*
Watch National Network News	0.38***	-0.08	-0.08	0.27**	0.29**
Watch Late Local News	0.19*	-0.19*	-0.19*	0.13	0.02
Watch Cable Channel News	0.07	0.03	0.03	0.07	0.12
Watch Other News Programs	0.34***	0.02	-0.08	0.27**	0.28**
Interest In Politics	0.10	0.23**	0.16	1.00	0.53***
Attention To The Campaign	0.30**	0.14	0.09	0.53***	1.00

* $p < .05$ ** $p < .01$ *** $p < .001$

"close attention" to campaign news, suggesting something more than passive exposure to the information in the news media they used. Another 46 percent said they paid only "some attention" to news about the campaign.

Attention to news about the campaign was strongly related to political interest ($r = .53$, $p < .01$) and correlated significantly with use of the news media and age. Respondents with high levels of political efficacy were more likely to pay close attention, while those who found the process complex and difficult to understand tended to pay less attention. It is also possible these political attitudes are the product of attention or inattention to political information. Attention did not vary with sex or education.

On the whole, respondents in the sample had positive views of the political process and participation. About 94 percent said they intended to vote in the upcoming presidential election, although 20 percent of these people were not yet decided for whom to vote-- President Ronald Reagan or former Vice President Walter Mondale. More than half were still undecided about the Senate race between Democrat Al Gore, Republican Victor Ashe and Independent Bob McAteer. The fact that 59 percent were undecided about one of the two races may have resulted in closer attention to campaign news.

Respondents seemed to take the political process and their responsibility seriously, as Table 8 demonstrates. More than 9 out of 10 agreed that "voting in elections is a good way to make your voice known." Nearly 6 in 10 strongly agreed with that statement.

Table 8. Attitudes Toward Elections, Politics and the News Media.

Statement	Percent				Strongly Disagree
	Strongly Agree	Agree	Neutral	Disagree	
Voting in elections is a good way to make your voice known.	59	35	5	1	0
Voting in elections gives people like me the chance to have a say about what government does.	34	54	7	4	1
People have a responsibility to vote even if they don't like either of the candidates.	24	56	5	12	2
Politicians are only interested in people's votes, not their opinions.	11	35	22	29	2
There is usually not much choice between candidates for President.	6	13	10	43	28
Sometimes politics and government seem so complicated, a person like me can't really understand what's going on.	13	32	10	35	10
People like me need to follow the news media if they really want to know what's going on.	24	60	6	10	0
The news media don't really report about the things that are important to people like me when we decide how to vote.	6	32	10	49	4

Respondents also expressed confidence that their vote gave them "a say about what government does," although only 34 percent strongly agreed. If respondents rated the process highly, they were less charitable with the candidates. Nearly half agreed or strongly agreed that "politicians are only interested in people's votes, not their opinions." These people were also more likely to complain about a lack of choice among candidates. Nevertheless, about 70 percent disagreed with the statement, "there is usually not much choice between the candidates for president." This may reflect the apparent differences between Ronald Reagan and Walter Mondale in both style and substance in 1984.

And despite the possible shortcomings of the available candidates, respondents felt voting is a civic duty. More than 80 percent agreed they have a "responsibility to vote even if they don't like either of the candidates." While voting was perceived as providing expression and having some impact, respondents were less sure the candidates themselves would listen. Perhaps this reflects a faith in the negative power of the democratic electorate--the ability to "throw the bums out" and give someone else the chance to govern as they wish, at least until the next election.

Together these responses suggest an attentive electorate that, while not intensely interested in politics, has high levels of political efficacy, a strong sense of civic duty and enough interest to make some effort to inform itself through the use of news media. Most respondents intended to vote, but many remained undecided and

presumably were in need of information to make that choice. Nearly half of the respondents agreed that "sometimes politics and government seem so complicated, a person like me can't really understand what's going on." But there was near universal agreement that people "need to follow the news media if they really want to know what's going on." While the political process is perceived as having important consequences, it is difficult for many people to understand, and they rely heavily on the news media for information and interpretation.

Unfortunately, respondents were decidedly split when it came to evaluating news media performance during the presidential election campaign. About 4 in 10 respondents agreed that "the news media don't really report about the things that are important to people like me when we decide how to vote."

Tables 9 and 10 point to important relationships among the perceived complexity of politics, the inability to reach an early decision for president and the tendency to be critical of news media performance. Undecided voters tended to be younger, less interested in politics and less frequent newspaper readers. They were more likely to report they found politics confusing and were more critical of the news media. Those who were confused by politics tended to be less educated, less interested, less attentive and less positive about politics and the election process. Those who were most critical of the news media were less educated, less decided and more likely to find politics too complicated. These relationships can be examined more closely in the correlation matrices in Tables 9 and 10.

Table 9. Correlates of Vote Decision, Political Efficacy and Perceptions of News.

	Age	Education	Sex	Interest In Politics	Attention To Campaign
Elections Make Your Voice Known	0.13	0.08	-0.04	0.14	0.23*
Vote Gives You A Say In Government	0.16	0.23*	-0.02	0.11	0.21*
Not Much Choice In Candidates	-0.22*	-0.07	0.21*	-0.07	-0.10
Candidates Just Want Your Vote	0.07	-0.24*	0.15	-0.10	-0.04
Citizens Have Duty To Vote	0.24*	0.04	-0.20*	-0.11	-0.03
Decided For Whom To Vote	0.09	-0.02	-0.04	0.15	-0.03
Politics Is Too Complex	0.11	-0.30**	-0.08	-0.32**	-0.27**
People Need To Follow The News	0.10	-0.17	-0.18	-0.06	0.06
Dissatisfied With The News	-0.07	-0.28**	-0.09	-0.08	-0.15

* $p < .05$ ** $p < .01$

Table 10. Correlations Among Measures of Attitudes Toward News Media and Politics.

	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
Q1 - Make Voice Known	1.00							
Q2 - Not Much Choice	-.05	1.00						
Q3 - Politics Too Complex	-.19*	.32**	1.00					
Q4 - Have A Say In Gov't.	.59**	.05	.27**	1.00				
Q5 - Need to Follow News	.26**	.09	.10	.28**	1.00			
Q6 - Just Want Votes	-.07	.29**	.31**	-.13	.18	1.00		
Q7 - Duty To Vote	.15	-.01	.03	.09	-.18	.06	1.00	
Q8 - Media Don't Report	-.17	.07	.29**	-.27**	-.12	.11	.02	1.00

* $p < .05$ ** $p < .01$

The results of these conventional measures paint a picture of an electorate that is more attentive than interested, makes some effort to inform itself and is often left unsatisfied with either its understanding or the performance of the news media on which it relies. This appears to be especially true of those people who need information the most--the less educated, the less interested, and the undecided. While this tends to support the notion that audience limitations constrain the news media, it also indicates there may be considerable room for improvement in news media performance and the quality of news. What is needed is a more detailed understanding of the perceived information needs of the audience and how they compare with the perceived nature of news media coverage during the campaign. This detailed and comparative analysis was the focus of the multidimensional scaling procedures.

CHAPTER IV

DATA ANALYSIS STRATEGY

The Derivation of Cognitive Maps

The multidimensional scaling data exist in the form of ratio-level estimates of the perceived distance between concepts, and reside with other conventional data on a data file that can be accessed by both the Galileo (TM) computer program and the Statistical Package for the Social Sciences (SPSS).

These MDS data were analyzed in several discrete steps. First, they were aggregated and used to derive a multidimensional map representing audience perceptions of campaign information and news media coverage. Each of the 11 concepts was treated as a point in multidimensional space whose location was determined by its mean interpoint distance from each of the other concepts in the domain. The Galileo program aggregated the separation estimates provided by respondents and calculated a mean perceived distance between each of the concepts in the 55 pairs. These mean interpoint distances were then used to derive a multidimensional map that preserved and revealed the perceived relationships among cognitive objects and their attributes. These spatial relationships are assumed to represent the social meaning assigned to the concepts (Woelfel and Fink, 1980).

This cognitive map was then interpreted to suggest how respondents evaluate the news media and the information provided in their campaign coverage. After a visual inspection, the map was broken down into its

component interpoint distances. These mean interpoint distances were used to describe respondent perceptions and test several hypotheses about the perceived interest value and instrumental utility of the five types of information and the extent to which they were perceived to be emphasized in newspaper and television coverage. A direct comparison of these perceptions of information attributes and news media content provided the basis for evaluating the extent to which news media coverage satisfied audience information needs and interests during the campaign.

Further analysis determined the reliability of the obtained measurements and attempted to validate the interpretation of these data. The validation process also explored the possible impact these audience perceptions or evaluations might have on news media use or campaign information seeking.

Operationalizations and Data Interpretation

Interpretation of the multidimensional Galileo maps requires several assumptions about how the meaning of a concept is assigned and expressed. Galileo theory posits that the meaning of a concept must be defined relative to the meaning of other concepts, most commonly in terms of their perceived similarity or difference. Woelfel and Fink (1980) contend that respondents can express these perceptions of conceptual similarity or difference as ratio-level estimates of the distance between concepts. The smaller the reported distance, the greater the perceived similarity or association among concepts.

When these estimates are made proportional to a standard yardstick, the relative meanings of objects and attributes can be ascertained. By aggregating these individual estimates, Galileo method seeks to preserve respondent perceptions of concept relations and provide a spatial representation of the social meaning assigned to these concepts. These meanings are revealed by the relative location of concepts in the multidimensional space. Interpretation of these maps is consistent with the instructions provided to respondents--the smaller the mean interpoint distance, the greater the perceived similarity or association (Woelfel and Fink, 1980).

This method offers considerable flexibility and efficiency in operationalization, although these same characteristics may lead to ambiguity in the interpretation of data. For example, what do respondents mean when they say they perceive two concepts to be similar? This potential problem may be especially acute when the cognitive domain mixes multiple objects with multiple attributes. The potential for ambiguity was reduced in this study by clarifying apriori the anticipated operationalizations, and ensuring they were consistent with the explicit and careful instructions given to respondents. Procedures were also developed for validating the interpretation of the cognitive maps.

It is customary in Galileo research to assume the distance between a cognitive object and an attribute represents the extent to which the object is perceived to possess that attribute. In this study, it was assumed that the distance between a type of information and the

attribute "interesting" indicates the relative intrinsic interest in that type of information. Similarly, the distance between a type of information and the concept "decide how to vote" was presumed to represent the perceived instrumental utility of that information--the extent to which it is useful in making a vote decision. The smaller the reported interpoint distance, the greater the perceived utility or interest value. It then became possible to compare the five types of campaign information and determine which ones were the most interesting or useful to respondents. One could also compare perceptions of a particular type of information and determine whether it was more useful or more interesting to respondents.

Galileo theory also suggests the distance between a cognitive object or attribute and the self-concept "yourself" represents an affective orientation toward the object or attribute. It could then be assumed the distance between a type of information and the concept "yourself" indicates the extent to which that information is valued by respondents. The smaller the mean interpoint distance, the greater the perceived value of that information. This provided a convenient and useful operationalization of "value" for testing expectancy-value theories of media uses and gratifications.

For the purpose of this study, it was also assumed that the distance between a type of information and a medium represents the extent to which such information was perceived to be provided by that medium. The smaller the interpoint distance, the greater its perceived association with the given medium. This seemed an appropriate

operationalization for the concept "expectation" or "belief" in expectancy-value theories (Galloway and Meek, 1982; Palmgreen, 1984). Types of information perceived to be conceptually close to a particular medium are likely to be those expected from the medium. This operationalization also made it possible to examine the two media and compare the extent to which they were perceived or expected to provide a particular type of information. Perhaps more important, various types of information could be compared to determine those which were perceived as most and least available from news media coverage of the campaign.

The above assumptions are consistent with the theory underlying the Galileo method as well as the explicit instructions given to respondents. These assumptions allowed for an interpretation of the aggregate Galileo multidimensional maps that suggested (1) the value respondents assign to each type of information, (2) the extent to which each type of information is perceived to possess interest value or instrumental utility, and (3) the extent to which each type of information is perceived to be available from the news media. In this manner, the information needs, desires and interests of the audience could be identified, and then compared with their perceptions of the extent to which news media provided these types of information.

The literature review suggested these cognitive maps were likely to contradict the conventional wisdom. "Substantive" campaign information necessary to make an informed vote decision should be perceived by respondents as more useful, valuable and even more

interesting than non-instrumental or "consummatory" news about the campaign. The literature also suggested, however, that respondents would perceive that news media coverage emphasized "consummatory" news at the expense of more substantive and useful campaign information. In this manner, the news media could be expected to fail in satisfying the perceived needs and interests of the audience/electorate. These expectations provided the basis for the more detailed hypotheses that follow.

Hypotheses and Statistical Tests

A review of the literature has suggested numerous hypotheses about the pattern of results likely to be obtained with these methods. These hypotheses can be divided into three categories. First are descriptive hypotheses detailed below which pertain to audience information needs, interests and perceptions of news media content. Second are hypotheses that the obtained data were reliable. These expectations are outlined in a later section describing procedures necessary to assess the quality of measurement. Finally, a third group of hypotheses regard the possible impact these audience perceptions might have on news media use or campaign information seeking. These hypotheses also serve as a check on the validity of the obtained measurements and their interpretation, and are outlined in a subsequent section.

The descriptive hypotheses regarding audience perceptions of news media coverage and campaign information were tested primarily through the use of multivariate analysis of variance techniques available in the SPSS procedure, MANOVA. Most of these hypotheses can be stated in

terms of the mean interpoint distances one might expect to obtain among a series of concepts. The corresponding statistical tests determined whether apparent differences among these distances were significant, and not due to chance. For this reason, some form of analysis of variance (ANOVA) seemed most appropriate.

The SPSS procedure ANOVA tests the significance of differences among the means obtained on a dependent variable for two or more groups. These groups are defined by the levels of one or more categorical variables, or "between-subject factors." This procedure allows for the estimation of both main effects and interactions of these factors. The familiar t-test is a special case of ANOVA in which two means are compared to determine whether they are significantly different. This comparison might be between the sample means derived from two groups on a single dependent variable. A second procedure called a paired t-test is required when the two means are obtained from measurements of two different variables for a single group.

This was essentially the case in this research, but methods more sophisticated than the paired t-test were often necessary to analyze these data. Measurements were taken from each subject on 55 dependent variables, one for each of the 55 concept pairs. Twenty-five of these dependent variables were relevant to the key hypothesis tests. Their measurements represent the perceived distances between these concepts. The substantive hypotheses were expressed in terms of the relative locations of several concepts simultaneously. In this manner, the

hypothesis required the comparison of means for more than two dependent variables, all of which were obtained from the same single group.

While it might have been possible to test such hypotheses with a series of individual paired t-tests, such a strategy would have had numerous disadvantages. First, it would have resulted in the calculation of many t-statistics, making it difficult to provide a single, unambiguous and parsimonious answer to each research question. Perhaps more important, a series of t-tests would have expended far more degrees of freedom than required by a multivariate approach. The MANOVA procedure allowed for the specification of user-defined cell mean contrasts that require fewer degrees of freedom, resulting in greater statistical power. Furthermore, the danger of committing a Type I error increases with the number of serial t-tests performed unless adjustments are made in the designated alpha level at which significance is attained. Such adjustments, however, can increase the probability of Type II error--failing to recognize a significant result. In short, the multivariate approach provided more power, parsimony and precision in interpretation.

Finally, the multivariate approach was more useful because the substantive hypotheses required a research design that specified no between-subjects factors--each subject had been measured for each of the 55 dependent variables. Instead, this research was concerned with the "within-subject factors" representing the conditions that lead to response variations within each individual. In this case, the within-subjects factors were the type of information evaluated (candidate

leadership abilities, voting records, campaign promises, mudslinging, who's ahead in the polls) and the object or attribute with which it was associated (television news, newspaper stories, yourself, interesting, decide how to vote).

Changes in these conditions were hypothesized to account for variation in the magnitude of an individual's separation estimates. When confronted with one pair of concepts, a respondent would provide one estimate. When confronted with another pair of concepts representing a different condition, the respondent was expected to provide an estimate of different magnitude. This research formulated hypotheses that predicted systematic response patterns that vary with specified conditions. It treated respondent estimates as "repeated measurements" of the same dependent variable under changing conditions. The appropriate tests for such designs were employed through the SPSS repeated measures MANOVA procedures.

The data essential to the descriptive hypotheses may be arrayed in a 5 x 5 matrix, as shown in Table 11. This matrix possesses one column for each of the five types of campaign information and a row for each object or attribute associated with such information. Sample means representing the perceived distances between these types of information and the objects or attributes are then located in the row-by-column intersections. By convention each cell mean is represented by a two-digit number, the first digit indicating the row and the second digit indicating the column.

Table 11. Sample Cell Means Matrix Displaying the Levels of Principal Within-Subject Factors.

Attribute	Type of Information				Who's Ahead In The Polls
	Candidate Leadership Abilities	Voting Records	Campaign Promises	Mudslinging	
Interesting	u11	u12*	u13	u14	u15
Decide How to Vote	u21	u22	u23	u24	u25
Yourself	u31	u32	u33	u34	u35
Television News	u41	u42	u43	u44	u45
Newspaper Stories	u51	u52	u53	u54	u55

*u12 denotes the cell mean for row 1 and column 2 of the table, or the mean interpoint distance obtained when respondents were asked to estimate the conceptual distance between "voting records" and "interesting."

The perceived interpoint distances expressed by respondents were treated as a single dependent variable measured on each respondent repeatedly under 25 different conditions--one condition for each pair or combination of concepts created at the intersections in Table 11. In this way, the row and column headings are by themselves neither independent variables nor levels of separate variables. Instead they represent endpoints of a line segment connecting concepts, and might be thought of as dummy variables invoking a particular condition. MANOVA procedures in SPSS were used to create from these conditions within-subjects factors whose levels are represented by these endpoints. The first factor is "information type" with five levels. The second factor was labelled "attribute" with a level for each of the five concepts that might be linked to a type of information. The levels of this factor include the attributes "interesting" and "decide how to vote," the two media and the self-concept, "yourself." The repeated measurements on the dependent variable were expected to vary with changes in these conditions as respondents moved from one level to another of one or both of these within-subject factors.

The descriptive hypotheses were tested by comparing various combinations of these cell means. By arraying the data in this 5 x 5 matrix, it becomes easier to visualize these comparisons. MANOVA procedures were used to specify cell mean contrasts that were appropriate to test the hypotheses. Each hypothesis was phrased several ways. First, it was stated in terms of its substantive meaning. Then it was rephrased in terms of the expected spatial

locations of concepts and their mean interpoint distances. Finally, appropriate cell mean contrasts were specified, using the notation from Table 11.

Hypothesis 1

Respondents will perceive "substantive" information to be significantly more useful than "consummatory" information when it comes to making a vote decision. It then follows that the mean interpoint distances between each of the substantive news concepts (candidate leadership abilities and voting records) and the concept "decide how to vote" will be significantly smaller than the mean distances between each of the consummatory news concepts (campaign promises, mudslinging and who's ahead in the polls) and the vote decision concept. This hypothesis can be expressed as the following cell means contrast:

$$u_{21} + u_{22} < u_{23} + u_{24} + u_{25}.$$

This hypothesis could be tested in repeated measures MANOVA by first declaring five dependent variables, one for each of the cell means, and using them to construct a single five-level within-subjects factor that would represent "information type." It would then be possible to specify a contrast that would compare the perceived vote utility of the "substantive" and "consummatory" types of information.

Hypothesis 2

This hypothesis will test the conventional wisdom that respondents will perceive consummatory information to be significantly more interesting than substantive information. If, however, people are more

interested in substantive information than in the superficial and titillating, respondents will perceive substantive information to be significantly more interesting.

In either case, it follows that the mean interpoint distances from the concept "interesting" to each of the substantive information concepts (candidate leadership abilities and voting records) will be significantly different than the distances from "interesting" to each of the three concepts representing consummatory information (campaign promises, mudslinging and who's ahead in the polls). This hypothesis can be tested with procedures similar to those described for Hypothesis 1, after specifying the following contrast:

$$u_{11} + u_{12} = u_{13} + u_{14} + u_{15}.$$

Hypotheses 1 and 2 can be tested simultaneously to determine whether "candidate leadership abilities" and "voting records" are both more interesting and more useful than the other three types of campaign information. This can be expressed in terms of cell means:

$$u_{11} + u_{12} + u_{21} + u_{22} < u_{14} + u_{15} + u_{23} + u_{24} + u_{25}.$$

In this case it will be necessary to array all 10 dependent variables or mean interpoint distances in a 2 x 5 factorial design defined by two within-subject factors. The first factor, "attribute," will be defined by two levels, the concepts "interesting" and "decide how to vote." The second factor, "information type," will be defined by five levels. Both the main effects and interactions of the two within-subjects factors can be assessed.

The within-subjects factors correspond to two conditions or "treatments"--the type of information the respondents have evaluated and the attribute or dimension along which the evaluation was made. The main effects and interactions of interest will be collapsed across several levels of the "information type" factor. The hypothesis being tested here is that substantive information will be evaluated differently than the three types of consummatory information. Differences between these two categories of campaign news will be greater than the apparent differences within each category.

If the concepts representing substantive information are perceived to be both more interesting and more useful, a significant main effect will be obtained for "information type," but the main effect of "attribute" will not be significant. A significant "attribute" main effect would indicate significant differences between the instrumental utility and the interest value assigned to the types of information overall.

Hypothesis 3

Respondents will perceive substantive information to be significantly more useful than interesting. It then follows that the mean interpoint distances from the concepts "candidate leadership abilities" and "voting records" to the concept "interesting" would be significantly greater than the distances between the two types of information and the concept "decide how to vote." This can be expressed as:

$$u_{11} + u_{12} > u_{21} + u_{22}.$$

The specification of two within-subjects factors and a 2 x 2 factorial design are required. The first factor "attribute" is defined by the concepts "interesting" and "decide how to vote." The second factor is defined by the two types of information. Neither the "information type" main effect nor the interaction are predicted to attain significance. Instead, a significant main effect for the "attribute" factor is predicted because the hypothesis suggests that the separation estimates will be unaffected by a change in information type, but significantly altered by a change in the attribute to be evaluated. In other words, it will not matter what kind of substantive information is being evaluated, but they both will be perceived as relatively more useful than interesting, and thus closer to the concept "decide how to vote."

Hypothesis 4

Respondents will perceive consummatory types of information to be significantly more interesting than they are useful in making a vote decision. This would suggest that the mean interpoint distances from the concepts "campaign promises," "mudslinging" and "who's ahead in the polls" to the concept "interesting" will be significantly smaller than the distances from each of the three types of consummatory information to the concept "decide how to vote." This can be expressed as:

$$u_{13} + u_{14} + u_{15} < u_{23} + u_{24} + u_{25}.$$

The appropriate design would be a 2 x 3 factorial defined by a two-level "attribute" within-subjects factor and a three-level "information type" within-subjects factor. The hypothesis suggests a

significant main effect of "attribute" and no difference by type of information.

Hypotheses 3 and 4 could be tested simultaneously by specifying a 2 x 5 factorial design defined by the same two within-subjects factors, a two-level "attribute" effect and a five-level factor representing "information type." The appropriate cell means contrast would be:

$$u_{11} + u_{12} + u_{23} + u_{24} + u_{25} > u_{21} + u_{22} + u_{13} + u_{14} + u_{15}.$$

After transforming the matrix, a significant interaction will be detected between the information type factor and the attribute factor if respondents perceive substantive types of information to be very useful and less interesting, and rate consummatory types of information in precisely the opposite manner.

Hypothesis 5

Respondents will value substantive information significantly more than they value consummatory information about the campaign. This would result in mean interpoint distances from the concept "yourself" to each of the substantive concepts (candidate leadership abilities and voting records) that are significantly less than the distances from "yourself" to each of the consummatory information concepts (campaign promises, mudslinging and who's ahead in the polls). This hypothesis requires a 1 x 5 factorial design and a significant main effect after creating a five-level within-subjects factor to represent "information type." The hypothesis can be expressed and tested with the following cell means contrast:

$$u_{31} + u_{32} < u_{33} + u_{34} + u_{35}.$$

Hypothesis 6

Contrary to the conventional wisdom, the perceived usefulness of campaign information will correspond more closely with audience demand than will the perceived interest value of campaign news. In other words, respondents will value campaign information perceived to be useful, but not necessarily campaign news that is merely interesting.

This would require that respondents perceive significant differences between the interest value and the personal value assigned to types of information. As a result, the mean interpoint distance between the concept "interesting" and each of the types of campaign information will be significantly different than the corresponding distances from "yourself" to each of the information concepts.

On the other hand, the conventional wisdom would suggest that perceptions of utility would be distinct from the personal value that respondents assign to campaign news. This would result in significant differences in the mean interpoint distances from the information concepts to "yourself" and to the concept "decide how to vote."

These hypotheses can be tested by employing 2 x 5 factorial designs with a five-level within-subjects factor representing "information type" and a two-level factor representing the attributes being considered (personal value and either decisional utility or interest value), and specifying the following cell means contrasts:

$$u_{31} + u_{32} + u_{33} + u_{34} + u_{35} = u_{41} + u_{42} + u_{43} + u_{44} + u_{45}$$

$$u_{31} + u_{32} + u_{33} + u_{34} + u_{35} = u_{51} + u_{52} + u_{53} + u_{54} + u_{55}$$

Hypothesis 7

Respondents will perceive that television news coverage of the campaign emphasizes consummatory information significantly more than it does substantive information, as suggested by media critics and the content analyses reviewed here. It then follows that the mean interpoint distances from "television news" to each of the consummatory information concepts (campaign promises, mudslinging and who's ahead in the polls) will be significantly less than the distances from television news to the substantive news concepts "candidate leadership abilities" and "voting records." This calls for a 1 x 5 factorial design and a significant main effect for the five-level within-subjects factor representing "information type." The hypothesis can be expressed and tested with the following contrast:

$$u_{41} + u_{42} > u_{43} + u_{44} + u_{45}.$$

Hypothesis 8

Respondents will perceive that newspaper coverage of the campaign, in contrast with television, is more useful than interesting and provides more substantive information than consummatory news. This hypothesis is derived from some content analyses that suggest that newspaper reporting of election campaigns is more responsible and substantive than television. This suggests that the mean interpoint distances from "newspaper stories" to "candidate leadership abilities" and "voting records" will be significantly less than the mean interpoint distances from "newspaper stories" to the three consummatory news concepts (campaign promises, mudslinging and who's ahead in the

polls). As in Hypothesis 7, this requires a 1 x 5 factorial design, a significant main effect for the five-level within-subjects factor and specification of the following cells means contrast:

$$u51 + u52 < u53 + u54 + u55.$$

On the other hand, newspapers could be perceived as suffering from the same problems and inadequacies as television when it comes to covering the presidential campaign. In that case, the main effect would remain significant, but in the opposite direction--newspaper stories would be closer to consummatory concepts than to substantive concepts.

This could be true even if newspapers were perceived as performing relatively better than television. Newspaper coverage could be perceived as emphasizing consummatory news more than substance, but still providing more substance and less consummatory news than television. Newspaper performance can be compared directly with television coverage by combining Hypotheses 7 and 8. A 2 x 5 factorial design could be specified, defined by two within-subject factors, a two-level "medium" factor and a five-level factor representing "information type." A significant "medium" main effect would indicate respondents perceive the two media to be different in terms of their delivery of information. A significant main effect of "information type" would indicate the two media are both perceived to emphasize some types more than others. A significant interaction would suggest that information emphasized by one medium is de-emphasized by the other, and

vice versa. The cell means contrast for testing this interaction would be:

$$u41 + u42 + u53 + u54 + u55 = u51 + u52 + u43 + u44 + u45.$$

Hypothesis 9

This hypothesis combines previous expectations and calls for a direct comparison of the perceived utility of campaign information and the extent to which it is provided by or available from the news media. This will concisely determine whether the need and perceived usefulness of substantive news is significantly greater than its availability, and whether the supply of consummatory news significantly exceeds its perceived usefulness.

This hypothesis predicts that substantive news concepts will be located significantly closer to "decide how to vote" than to either of the news media, and that consummatory news concepts will be located significantly closer to the two news media than to the decisional utility concept. The test can be conducted separately for television and newspapers, but the pattern of results is expected to be the same. Any difference in the two findings will indicate the extent to which the audience perceived that one medium satisfied their information needs better than another.

The hypothesis calls for 2 x 5 factorial designs defined by two within-subjects factors--a five-level "type of information" factor and a two-level "attribute" factor, with one level representing the availability from a medium and the other representing the decisional utility of the information. The hypothesis also requires that the

interaction of these two factors be significant. It can be tested by specifying the following cell means contrasts:

$$u_{21} + u_{22} + u_{43} + u_{44} + u_{45} < u_{23} + u_{24} + u_{25} + u_{41} + u_{42}$$

$$u_{21} + u_{22} + u_{53} + u_{54} + u_{55} < u_{23} + u_{24} + u_{25} + u_{51} + u_{52}$$

Hypothesis 10

Assuming the audience is highly interested in the more useful and substantive news coverage, we might expect respondents to perceive substantive news to be more interesting than available, and that the available supply of consummatory news significantly exceeds its interest value. The Galileo method allows for a direct comparison of these audience perceptions, as it did in Hypothesis 9. In this case the comparison will be made between the perceived interest value of campaign information and its availability from the news media.

More specifically, this hypothesis predicts that the substantive news concepts (candidate leadership abilities and voting records) will be located significantly closer to the concept "interesting" than to either news medium, and that the consummatory news concepts (campaign promises, mudslinging and who's ahead in the polls) will be located significantly closer to the two news media than to "interesting," as indicated by the mean interpoint distances between concepts. Again, perceptions of television and newspaper coverage can be tested separately to detect differences in audience perceptions of the performance of the two media and their ability to satisfy their interests.

As in Hypothesis 9, this calls for 2 x 5 factorial designs defined by two within-subjects factors--a five-level "type of information" factor and a two-level "attribute" factor, with levels representing the interest value of campaign information and its availability from a medium. The interaction of these two factors again must be significant and can be tested by specifying the following cell means contrasts:

$$u_{11} + u_{12} + u_{43} + u_{44} + u_{45} < u_{13} + u_{14} + u_{15} + u_{41} + u_{42}$$

$$u_{11} + u_{12} + u_{53} + u_{54} + u_{55} < u_{13} + u_{14} + u_{15} + u_{51} + u_{52}$$

Non-significant findings, on the other hand, would support the conventional wisdom by suggesting that there was no disparity between audience interests and news media content, and that respondents were not interested in receiving significantly more substantive news. This view might go further and predict significant findings in the opposite direction, indicating that the audience had an even greater interest in consummatory news than was being fulfilled by the news media, and perceived that it was receiving more "substantive" news than it was interested in.

Hypothesis 11

Finally, Galileo theory has been interpreted here to suggest that actual audience demand for campaign news is best operationalized by its distance from the self-concept "yourself." It has also been hypothesized that this "personal value" assigned to news will correspond more closely with the information needs of the audience than with its perceived interest value. Thus, we would expect respondents to value and demand substantive types of campaign news and perceive it

to be in relatively short supply from the media, and perceive the available supply of consummatory news to significantly exceed the personal value they assign it.

The pattern of findings for this comparison between personal value and the availability of campaign news should be the same as was expected for the decisional utility of news in Hypothesis 9. Specifically, the substantive news concepts (candidate leadership abilities and voting records) will be located significantly closer to the concept "yourself" than to either news medium, and that the consummatory news concepts (campaign promises, mudslinging and who's ahead in the polls) will be located significantly closer to the two news media than to "yourself." Television and newspaper coverage will be tested separately to detect differences in audience perceptions of the ability of the two media to meet their demands for campaign information.

This hypothesis requires 2 x 5 factorial designs defined by two within-subjects factors--a five-level "type of information" factor and a two-level "attribute" factor, with levels representing the personal value of campaign information and its availability from a medium. The interaction of these two factors again must be significant after specifying the following cell means contrasts:

$$u_{31} + u_{32} + u_{43} + u_{44} + u_{45} < u_{33} + u_{34} + u_{35} + u_{41} + u_{42}$$

$$u_{31} + u_{32} + u_{53} + u_{54} + u_{55} < u_{33} + u_{34} + u_{35} + u_{51} + u_{52}$$

CHAPTER V

RESULTS

The Aggregate Cognitive Map

The multidimensional scaling of the Galileo data yielded a cognitive map with 11 dimensions, one for each of the salient concepts. The first three of these dimensions accounted for more than 77 percent of the "real" variance. In other words, the resulting cognitive map represents most of the available information on the respondents' perceptions of news media coverage of the election campaign. This is fortunate because it is difficult for people to visualize more than three dimensions at one time. Figure 1 contains the cognitive map depicting the locations and spatial relationships of the 11 salient concepts in the first three principal planes. These interrelationships may be easier to visualize in the two-dimensional map provided in Figure 2. However, information is invariably lost when dimensionality is further reduced. The first two principal planes or dimensions shown in Figure 2 explain only 61 percent of the real variance.

A visual inspection of these cognitive maps seemed to bear out many of the relevant hypotheses. Concepts representing substantive news about the leadership abilities and voting records of the candidates are located relatively close to "decide how to vote," suggesting these types of information were perceived as relatively useful in making a vote decision. Concepts representing consummatory news about mudslinging, popularity polls and campaign promises are

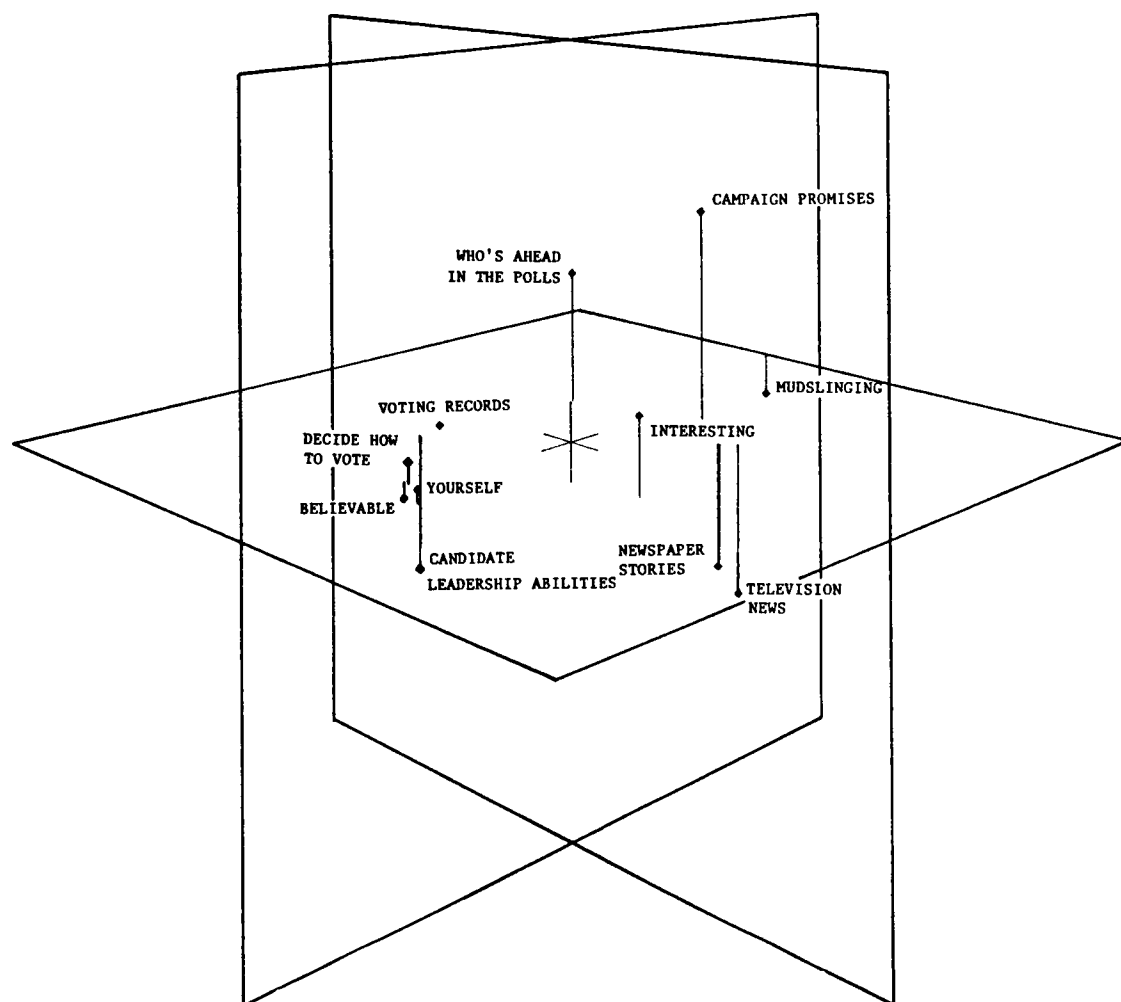


Figure 1. The Aggregate Cognitive Space in Three Dimensions.

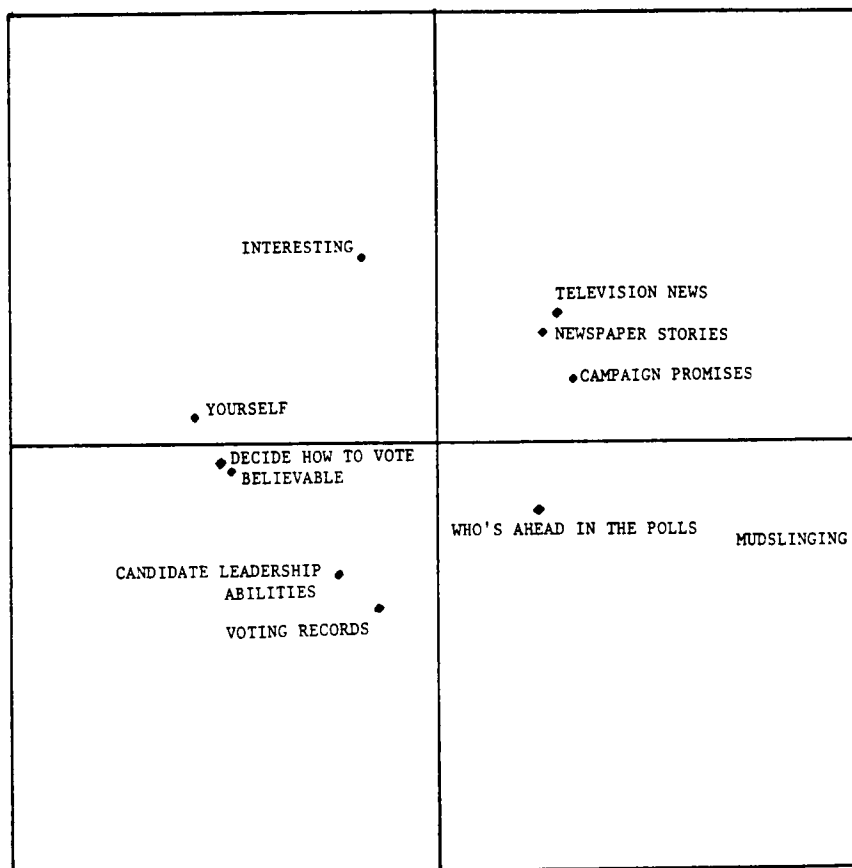


Figure 2. The Aggregate Cognitive Space in Two Dimensions.

located much further away from the vote decision concept. It is difficult to judge with the unaided eye which types of information were perceived as more interesting. However, it is clear that the consummatory news concepts were more closely associated with the news media than were the concepts representing substantive news that is useful in making a vote decision.

In short, it would appear from Figures 1 and 2 that respondents perceived the news media place more emphasis on the dramatic, entertaining and superficial aspects of the campaign than on the substantive types of information presumed to be most useful in making a vote decision. Statistical tests, however, were necessary to examine these perceptions in more detail and determine whether the concept relations were non-random and conformed to the patterns suggested by the apriori hypotheses.

Most of these statistical tests involved comparisons among the mean interpoint distances between pairs of concepts. The most relevant mean distances are provided in Table 12. Each cell in the table marks the intersection of two concepts, and indicates the mean interpoint distance between them. Small means are presumed to indicate a type of information is strongly associated with the attribute or object in the pair. Comparisons of these means can then be made to determine whether such associations are significantly different. Hypotheses have been stated in terms of these distances and were tested with appropriate analysis of variance techniques.

Table 12. Mean Interpoint Distances for Selected Concept Pairs.

Attribute	Type of Information				Who's Ahead In The Polls
	Candidate Leadership Abilities	Voting Records	Campaign Promises	Mudslinging	
Interesting	97	111*	77	136	100
Decide How to Vote	69	68	110	158	130
Yourself	91	69	109	169	129
Television News	105	109	92	91	92
Newspaper Stories	100	102	95	102	92

*Denotes the mean interpoint distance obtained when respondents were asked to estimate the distance between the concepts "voting records" and "interesting."

**Sample n = 83. Size may vary slightly for individual means due to missing data. Means may vary slightly from table to table due to pairwise exclusion of missing data.

Perceptions of Campaign Information--Decisional Utility

Each of the five types of campaign information was evaluated to determine the extent to which respondents perceived it to be useful in making a vote decision. These perceptions were measured by asking respondents to estimate the distance from the concept "decide how to vote" to each of the concepts representing five types of campaign information. These perceived distances were then aggregated to obtain sample means for the interpoint distances between items in each of the five pairs of concepts.

A relatively small interpoint distance was presumed to indicate that the two concepts were perceived to be associated or similar in meaning. Thus, a small perceived distance between a type of information and the vote decision concept would indicate that the particular type of information was perceived as highly useful in deciding how to vote. Large distances would indicate that the type of information was perceived as less useful and possessed a relatively low level of instrumental or decisional utility.

The perceived decisional utility of the five types of campaign information is reported in Table 13 and displayed graphically in Figure 3. Slight variations in the reported mean interpoint distances may result from differences in the treatment of missing data. The analysis behind Table 13 required listwise deletion of missing values; Figure 3 did not. Two concepts representing presumably substantive types of campaign information were located closest to the vote decision concepts. The mean distance from "voting records" and "candidate

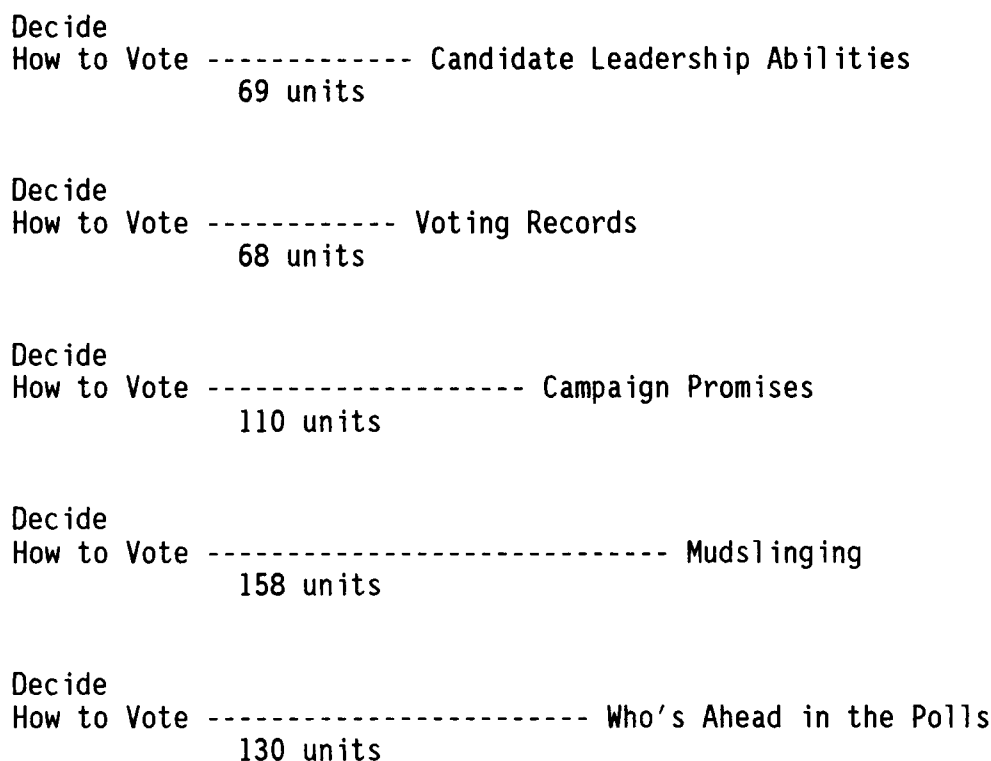
Table 13. Perceived Decisional Utility of Five Types of Information.

Attribute	Class of Information				Analysis of Variance Results		
	Substantive News		Consummatory News		Effect	F-Value	Degrees of Freedom
	Candidate Leadership Abilities	Voting Records	Campaign Promises	Who's Ahead in the Polls			
Decisional Utility	67	66	111	154	130	8.19	(4, 308)
					Effect of Information		
					Main Effect	8.19	(4, 308)
							p < .001
					Class of Information		
					Main Effect	16.47	(1, 77)
							p < .001

*Cell values indicate mean interpoint distances between concepts representing a type of information possesses a high level of the attribute. Decisional utility is represented by the distance from the concept "decide how to vote."

**An averaged test of significance was used to determine the main effect of Type of Information, based on four cell means contrasts using unique sums of squares.

***The Class main effect was tested with a single-degree-of-freedom contrast (3 3 -2 -2 -2).



*Mean interconcept distances represent the perceived decisional utility of the five types of campaign information, expressed in terms of the proximity of each type of information to the concept "decide how to vote."

**Scale: one dash = 5.5 units.

***Sample size (n = 83) may vary due to exclusion of missing data.

****Significance tests of the differences among these interconcept distances are presented in Tables 13 and 14.

Figure 3. Mean Interpoint Distances Representing the Perceived Decisional Utility of Five Types of Information.

leadership abilities" to the concept "decide how to vote" was 68 units and 69 units, respectively (see Figure 3). This suggests that respondents perceived the two types of campaign information were highly useful in deciding how to vote. Information about campaign promises, horse race polls and mudslinging was perceived as considerably less useful than news about voting records and candidate leadership abilities. The mean interpoint distance from "decide how to vote" to "campaign promises" was 110 units. The mean distances to "who's ahead in the polls" and "mudslinging" were 130 units and 158 units, respectively.

These five types of campaign information were used to represent the five levels of a within-subjects factor called "Type of Information." Repeated measurements were obtained from each respondent on all five levels of this factor. The dependent variable is the magnitude of the separation estimate, in this case the distance from a type of information to the concept "decide how to vote." The independent variable is the within-subjects factor representing the five conditions under which these estimates are expected to vary--namely, the five different types of information respondents were asked to evaluate. Table 13 reports the results of a one-way analysis of variance on these five repeated measurements. The sums of squares for the effect of "Type of Information" and the sum of squares for the error were obtained by summing over the hypothesis sum of squares and the error sum of squares, respectively, for each variable. This "averaged F tests" indicated that the separation estimates varied

significantly ($F = 8.19$, (4, 308) df, $p < .001$) when respondents were asked to evaluate different types of information.

These five types of information were then placed into one of two "Classes of Information"--substantive news and consummatory news. Hypothesis 1 stated that substantive news would be perceived as more useful and possess more instrumental or decisional utility than consummatory news. It further stated the mean distance from "decide how to vote" to the substantive news concepts would then be significantly less than the distance to the concepts representing consummatory news. The main effect of "class" was tested by specifying a single-degree-of-freedom contrast (3 3 -2 -2 -2) of the five levels. The result confirmed Hypothesis 1, demonstrating that respondents perceived substantive news about the leadership abilities and voting records of the candidates to be significantly more useful in making a vote decision than consummatory news about mudslinging, campaign promises and popularity polls.

The univariate tests reported in Table 14 provide a more detailed understanding of these perceptions of campaign information. If small interpoint distances are taken to indicate a high degree of decisional utility, paired t-tests could be used to determine whether one type of information was perceived as significantly more or less useful than another type. The more useful type of information would be characterized by a significantly smaller mean distance from the concept "decide how to vote." These t-tests are reported in Table 14 and

Table 14. Significance Tests of Differences in the Perceived Decisional Utility of Five Types of Information.

	Candidate Leadership Abilities	Voting Records	Campaign Promises	Mudslinging	Who's Ahead in the Polls
Candidate Leadership Abilities (69)**	---- ---- ----	t = 0.32 79 df NS	t = 2.40 80 df p < .01	t = 4.37 79 df p < .001	t = 3.03 78 df p < .01
Voting Records (68)		---- ---- ----	t = 2.61 81 df p < .01	t = 4.41 80 df p < .001	t = 2.99 79 df p < .01
Campaign Promises (110)			---- ---- ----	t = 2.25 81 df p < .05	t = 1.12 80 df NS
Mudslinging (158)				---- ---- ----	t = 1.24 80 df NS
Who's Ahead in the Polls (130)					---- ---- ----

*Significance tests correspond to the mean interpoint distances reported in Figure 3.

**Value in parentheses is the mean interpoint distance between a type of information and the concept "decide how to vote," and represents the perceived decisional utility of that information. Small values indicate high levels of the attribute.

***Reported t-tests indicate statistical significance of the difference between the perceived decisional utility of two types of campaign information. The decisional utilities are expressed in the form of the distance from a type of information to the concept "decide how to vote." All significance tests are based on the reported one-tailed probabilities.

correspond to the distances reported in Figure 3. One-tailed probabilities are reported for the purposes of hypothesis testing.

Table 14 indicates the means distances for voting records (68 units) and candidate leadership abilities (69 units) were not significantly different. Thus, we cannot conclude that news about the candidates' voting records was thought to be any more or less useful than news about their leadership abilities. These two forms of campaign information would appear to possess an equally high degree of decisional utility. News about candidate voting records and leadership abilities was perceived as significantly more useful than information about campaign promises, popularity poll results and mudslinging, as indicated by their significantly smaller distances from the vote decision concepts. For example, the mean perceived distance from "decide how to vote" to "candidate leadership abilities" (69 units) was significantly less than its distance to "campaign promises" (110 units; $t = -2.40$, 80 df, $p .01$). Table 14 reveals even greater differences each time the decisional utility of news about "candidate leadership abilities" or "voting records" was compared to the perceived utility of other types of campaign information. One-tailed probabilities are reported because the direction of these differences was predicted apriori. These results are consistent with Hypothesis 1 that substantive information would be perceived as more useful in making a vote decision than would consummatory types of campaign news.

Perceived Interest Value of Campaign Information

The perceived interest value of each of the five types of campaign information was measured and assessed in a similar manner. Respondents estimated the distance between the concept "interesting" and each of the five types of information. A small mean distance between a type of information and the concept "interesting" was presumed to indicate a high level of interest among respondents. Less interesting information would be located further from the interest concept in the multidimensional cognitive space. Multivariate and univariate tests were used to determine whether these perceptions of interest value, in the form of mean interpoint distances, differed significantly from one type of information to another.

The perceived interest value of the five types of campaign information is reported in Table 15 and displayed graphically in Figure 4. The one-way analysis of variance is reported in Table 15 and indicates significant differences overall in the perceived interest value of the five types of information (averaged $F = 3.33$, (4, 312) df, $p < .05$). These differences were not as strong as the differences in the perceived usefulness of campaign news. More important, a significant difference was not detected between the interest value of substantive and consummatory news. In other words, while respondents were able to detect significant differences between the five types of information, they did not perceive consummatory news to be either more or less interesting than substantive news. Hypothesis 2 was not

Table 15. Perceived Interest Value of Five Types of Information.

Attribute	Class of Information				Analysis of Variance Results		
	Substantive News		Consummatory News		Effect	F-Value	Degrees of Freedom
	Candidate Leadership Abilities	Voting Records	Campaign Promises	Who's Ahead in the Polls			Level of Significance
Interest Value	98	111	76	138	Type of Information Main Effect	3.33	(4, 312) p < .05
					Class of Information Main Effect	0.00	(1, 78) NS

*Cell values indicate mean interpoint distances between concepts representing a type of information and an attribute. Small means are presumed to indicate the information possesses a high level of the attribute. Interest Value is represented by the distance from the concept "interesting."

*An averaged test of significance was used to determine the main effect of Type of Information, based on four cell means contrasts using unique sums of squares.

***The Class main effect was tested with a single-degree-of-freedom contrast (3 3 -2 -2).

Interesting -----	Voting Records
111 units	
Interesting -----	Candidate Leadership Abilities
97 units	
Interesting -----	Campaign Promises
77 units	
Interesting -----	Mudslinging
136 units	
Interesting -----	Who's Ahead in the Polls
100 units	

*Mean interconcept distances represent the perceived interest value of the five types of campaign information, expressed in terms of the proximity of each type of information to the concept "interesting."

**Scale: one dash = 5.5 units.

***Sample size (n = 83) may vary due to exclusion of missing data.

****Significance tests of the differences among these interconcept distances are presented in Tables 15 and 16.

Figure 4. Mean Interpoint Distances Representing the Perceived Interest Value of Five Types of Information.

confirmed--the two classes of information may be of equal interest to respondents.

The univariate tests are reported in Table 16 and correspond to the distances reported in Figure 4. Minor deviations in the mean estimates may occur due to pairwise exclusion of missing data. Respondents appear to be most interested in campaign promises, as indicated by its small mean distance (77 units) to the concept "interesting." This distance was not significantly different than that representing the interest value of the second ranked type of information, "candidate leadership abilities" (97 units). However, campaign promises was rated as significantly more interesting than "voting records," "mudslinging" and "who's ahead in the polls." Candidate leadership abilities did not appear to be significantly more interesting than the third and fourth ranked items, "who's ahead in the polls" (100 units) and "voting records" (111 units). Mudslinging was perceived as the least interesting type of information, significantly less interesting than the top three ranked items.

Comparing Interest Value to Decisional Utility

Based on these perceptions, it was also possible to evaluate each type of campaign information by comparing its perceived interest value with its decisional utility to determine whether a particular type of information was perceived to be more useful than interesting or more interesting than useful. Hypothesis 3 predicted that substantive types of campaign information would be perceived as more useful than

Table 16. Significance Tests of Differences in the Perceived Interest Value of Five Types of Information.

	Candidate Leadership Abilities	Voting Records	Campaign Promises	Mudslinging	Who's Ahead in the Polls
Candidate Leadership Abilities (97)**	---- ---- ----	t = 0.97 80 df NS	t = 1.35 81 df NS	t = 1.98 79 df p < .05	t = 0.14 80 df NS
Voting Records (111)		---- ---- ----	t = 2.50 81 df p < .01	t = 1.16 79 df NS	t = 0.72 80 df NS
Campaign Promises (77)			---- ---- ----	t = 4.11 80 df p < .001	t = 1.81 81 df p < .05
Mudslinging (136)				---- ---- ----	t = 1.97 80 df p < .05
Who's Ahead in the Polls (100)					---- ---- ----

*Significance tests correspond to the mean interpoint distances reported in Figure 4.

**Value in parentheses is the mean interpoint distance between a type of information and the concept "interesting," and represents the perceived interest value of that information. Small values indicate high levels of the attribute.

***Reported t-tests indicate statistical significance of the difference between the perceived interest value of two types of campaign information. The interest values are expressed in the form of the distance from a type of information to the concept "interesting." All significance tests are based on the reported one-tailed probabilities.

interesting; and Hypothesis 4 suggested the opposite would be true for consummatory news.

These expectations lent themselves readily to statistical tests. If the mean perceived distance from a type of information to the concept "interesting" was less than its distance to the concept "decide how to vote," the information was presumed to be perceived by respondents as more interesting than useful. A paired t-test of the difference between these two mean distances would indicate whether the apparent difference was great enough to attain statistical significance. If, on the other hand, respondents perceived a type of information to be more useful than interesting, the type of information would be located significantly closer to the concept "decide how to vote" than to the concept "interesting."

Similar comparisons could be made between substantive and consummatory news overall, as reported in Table 17. The average interest value for substantive news (103 units) was calculated by averaging across the estimates for "candidate leadership abilities" and "voting records"--that is, the distance to the concept "interesting." Similar procedures were used to determine the average decisional utility of substantive news (66 units). For consummatory news, the average interest value (102) and decisional utility (133) was obtained by averaging across the corresponding estimates for three types of information--"campaign promises," "mudslinging" and "who's ahead in the polls."

Table 17. Perceived Interest Value and Decisional Utility of Two Classes of Campaign Information.

Attribute	Class of Information		Effect	Analysis of Variance		Results Level of Significance
	Substantive News	Consummatory News		F-Value	Degrees of Freedom	
Interest Value	103	102	Attribute (row) Main Effect	0.09	(1, 74)	NS
Decisional Utility	66	133	Class (column) Main Effect	7.05	(1, 74)	p < .01
			Attribute by Class Interaction	13.37	(1, 74)	p < .001

*Cell values indicate mean interpoint distances between concepts representing a type of information and an attribute. Small means are presumed to indicate the information possesses high levels of the attribute.

**Means for "substantive news" are values averaged across two types of information: "candidate leadership abilities" and "voting records." Means for "consummatory news" are values averaged across three types of information: "campaign promises," "mudslinging" and "who's ahead in the polls."

***Decisional Utility is represented by the distance from the concept "decide how to vote." Interest Value is represented by distance from the concept "interesting."

A visual inspection of Table 17 confirmed the results of earlier hypothesis tests. Substantive news appeared to be more useful than consummatory news, but equally as interesting. There was no main effect of attribute because when the row marginals were compared there was no significant difference between the ratings of the interest value and the decisional utility of information, averaged across all types of information. In other words, campaign information taken as a whole is equally interesting and useful. However, a significant main effect of class was detected ($F = 7.05$, (1, 74) df, $p < .01$), indicating that respondents perceived a significant difference between the two classes of information averaged across attributes. In other words, they evaluated the two classes of campaign news differently--with respondents giving substantive news significantly more favorable ratings overall. This difference appears to be due to the large discrepancy in decisional utility of the two classes of information--substantive news was determined to be more useful than consummatory news.

Most telling is the significant row-by-column or "attribute-by-class" interaction, suggesting an inverse relationship between the decisional utility and interest value of the two classes of information. A significantly better estimate of the mean separation (distance) can be made if we know both the class of information to be evaluated as well as the attribute along which the evaluation is to be made. While the row main effect may not be significant by itself, the interaction indicates this effect is differentiated by class. In other

words, there is a significant tendency for substantive and consummatory news to be evaluated in precisely opposite ways. Substantive news is perceived as more useful than interesting, while consummatory news is more interesting than useful ($F = 13.37$, (1, 74) df, $p < .001$). That significant finding supports Hypotheses 3 and 4 simultaneously.

This pattern may be more apparent in Table 18 where the univariate tests are reported. These tests compare the perceived interest value and decisional utility for each of the five types of information. One-tailed probabilities are used again because the expected direction of these differences have been hypothesized apriori. The results reported in Table 18 indicate that news about the leadership abilities of the candidates was perceived as both interesting and useful, and apparently equally so. One must caution against making too much of null findings, but it can be said that no significant difference was detected where other types of information were perceived as being either significantly more interesting or more useful. Information about the voting records or issue positions of the candidates was perceived as highly useful in making a vote decision, and significantly more useful than interesting ($t = 2.99$, 80 df, $p < .01$).

On the other hand, consummatory news about campaign promises and popularity poll results was perceived as significantly more interesting than useful ($t = -2.16$, 80 df, $p < .05$; $t = -2.06$, 80 df, $p < .05$). Finally, mudslinging was perceived to be neither interesting nor useful; less interesting and less useful, in fact, than any of the other types of campaign information respondents were asked to evaluate.

Table 18. Comparisons of the Perceived Decisional Utility and Interest Value of Five Types of Information.

Type of Information	Decisional Utility	Interest Value	Significance of Difference	
	Mean Distance to Decide How to Vote	Mean Distance to Interesting	t-value	df
Candidate Leadership Abilities	68	98	1.47 ns	79
Voting Records	68	111	2.99**	80
Campaign Promises	110	77	-2.16*	82
Mudslinging	158	136	-1.82*	80
Who's Ahead in the Polls	130	99	-2.06*	80

*p < .05

**p < .01

***p < .001, all reported probabilities are one-tailed.

****Mean interpoint distances are presumed to indicate the extent to which a type of information is perceived to possess an attribute. Small means indicate high levels of the attribute.

Mudslinging was considered even less useful than interesting, a difference that was statistically significant ($t = -1.82$, 80 df, $p < .05$). These findings provide fairly consistent support for Hypotheses 3 and 4. Audience members apparently perceive that substantive news is more useful than interesting, and consummatory news is more interesting than it is useful.

Respondents' Preferences for Campaign Information

Respondents were also asked to estimate the conceptual distance from each of the five types of campaign information to the self-concept "yourself." Galileo theory assumes these perceived distances represent an affective orientation--the affinity respondents have for a cognitive object. Small distances between the self-concept and a cognitive object would indicate a strong positive orientation, just as large distances would suggest a less positive or negative orientation or affect toward the object.

For the purposes of this research, the mean interpoint distances between "yourself" and the five types of campaign information were presumed to represent the degree to which each type of information was valued or desired by the respondents. This attribute was called "personal value," a characteristic that may be distinct from other attributes of campaign information, such as "interest value" and "decisional utility." This could be determined empirically because the procedures for assessing personal value were identical to those used to determine the extent to which the five types of campaign information possessed other attributes, and thus direct comparisons could be made.

The personal value that respondents assigned to each of the five types of campaign information is reported in Table 19 and displayed graphically in Figure 5. The one-way analysis of variance across the five-level, within-subjects factor indicates significant differences overall in the personal value assigned to the five types of campaign information (averaged $F = 7.02$, (4, 304) df, $p < .001$). This indicates that respondents differentiated among the five types of information when asked to assess their value. The main effect for the two-level factor "class of information" was also significant ($F = 19.67$, (1, 76) df, $p < .001$). This confirmed Hypothesis 5 that respondents would value substantive news about the leadership abilities and voting records of the candidates significantly more than they value consummatory news about popularity polls, mudslinging and campaign promises.

The univariate tests reported in Table 20 correspond to the distances displayed in Figure 5, and provide a more detailed understanding of the personal value assigned to different types of campaign information. "Voting records" (69 units) and "candidate leadership abilities" (91 units) were rated first and second most valuable by respondents. The difference in value between these two types of campaign information was statistically significant ($t = 1.88$, 79 df, $p < .05$). Judging by their greater distance from the concept "yourself," "campaign promises" (109 units) and "who's ahead in the polls" (129 units) appear to be valued third and fourth. Each of these were rated as significantly less valuable than either of the

Table 19. Perceived Personal Value of Five Types of Information.

Attribute	Class of Information				Analysis of Variance Results		
	Substantive News		Consummatory News		Effect	F-Value	Degrees of Freedom
	Candidate Leadership Abilities	Voting Records	Campaign Promises	Mudslinging Ahead in the Polls			
Personal Value	89	66	108	168	Type of Information Main Effect	7.20	(4, 304) p < .001
					Class of Information Main Effect	19.67	(1, 76) p < .001

*Cell values indicate mean interpoint distances between concepts representing a type of information and an attribute. Small means are presumed to indicate the information possesses a high level of the attribute. Interest Value is represented by the distance from the concept "yourself."

**An averaged test of significance was used to determine the main effect of Type of Information, based on four cell means contrasts using unique sums of squares.

***The Class main effect was tested with a single-degree-of-freedom contrast (3 3 -2 -2 -2).

Yourself ----- Voting Records
69 units

Yourself ----- Candidate Leadership Abilities
91 units

Yourself ----- Campaign Promises
109 units

Yourself ----- Mudslinging
169 units

Yourself ----- Who's Ahead in the Polls
129 units

*Mean interconcept distances represent the perceived personal value of the five types of campaign information, expressed in terms of the proximity of each type of information to the concept "yourself."

**Scale: one dash = 5.5 units.

***Sample size (n = 83) may vary due to exclusion of missing data.

****Significance tests of the differences among these interconcept distances are presented in Tables 19 and 20.

Figures 5. Mean Interpoint Distances Representing the Perceived Personal Value of Five Types of Information.

Table 20. Significance Tests of Differences in the Perceived Personal Value of Five Types of Information.

	Candidate Leadership Abilities	Voting Records	Campaign Promises	Mudslinging	Who's Ahead in the Polls
Candidate Leadership Abilities (91)**	---- ---- ----	$t = 1.88$ 79 df $p < .05$	$t = 2.00$ 79 df $p < .05$	$t = 3.06$ 77 df $p < .01$	$t = 1.93$ 77 df $p < .05$
Voting Records (69)		---- ---- ----	$t = 3.08$ 82 df $p < .01$	$t = 4.52$ 80 df $p < .001$	$t = 3.21$ 80 df $p < .01$
Campaign Promises (109)			---- ---- ----	$t = 2.43$ 80 df $p < .01$	$t = 1.07$ 80 df NS
Mudslinging (169)				---- ---- ----	$t = 1.48$ 79 df NS
Who's Ahead in the Polls (129)					---- ---- ----

*Significance tests correspond to the mean interpoint distances reported in Figure 5.

**Value in parentheses is the mean interpoint distance between a type of information and the concept "yourself," and represents the perceived personal value of that information. Small values indicate high levels of the attribute.

***Reported t-tests indicate statistical significance of the difference between the perceived personal value of two types of campaign information. The personal values are expressed in the form of the distance from a type of information to the concept "yourself." All significance tests are based on the reported one-tailed probabilities.

substantive types of campaign news, but they were not significantly different from each other. Mudslinging was valued least (169 units), significantly less than all but the fourth ranked type of information, horse race poll results.

Table 20 indicates that most of the values assigned to the types of information were significantly different. These perceived differences were more pronounced than when respondents were asked to assess how interesting or useful the five types of information were. This might indicate strong and clear preferences on the part of respondents individually, as well as greater consensus when it comes to overall audience demand.

It might then be useful to compare audience preferences with their assessments of interest value and decisional utility, to determine which coincides most closely with the personal value assigned to types of campaign news. Analysis of variance techniques again provided multivariate and univariate tests to determine whether the personal value assigned to a type of information departed significantly from its perceived interest value or decisional utility.

Comparing Personal Value to Interest and Utility

Conventional wisdom suggests that audiences may recognize the utility of media content, but still prefer messages and programs that are more interesting or entertaining than informative. The literature reviewed earlier, however, could also be interpreted to suggest an alternative view. These competing propositions can be tested rather directly with these data. The perceived interest value and personal

value of the five types of campaign information are compared in Tables 21 and 22.

The five types of information were again collapsed down to two classes--substantive news and consummatory news. Table 21 suggests that substantive news was valued more than consummatory news (78 units; 138 units), but the two classes of information were viewed as equally interesting (105 units; 103 units). The class main effect was significant and indicated that respondents perceived the two classes of news differently when averaged across the two attributes. The row main effect did not attain significance, suggesting that interest value and personal value may coincide, at least when averaged across the two classes of news. The significant interaction, however, indicates the effect is differentiated by class. Substantive news is considered significantly more valuable than interesting while consummatory news is more interesting than valued. This interaction suggests that personal value and interest value do not coincide.

These differences may be more apparent from the results of the univariate tests reported in Table 22. Here again, each of the three types of consummatory news (campaign promises, mudslinging and who's ahead in the polls) was rated significantly more interesting than valuable. On the other hand, "voting records" was rated as significantly more valuable than interesting ($t = 3.20$, 81 df, $p < .01$). These findings generally contradict the conventional wisdom about the stated preferences of the audience. Information that is rated as interesting is not considered to be most valuable. Interest

Table 21. Perceived Interest Value and Personal Value of Two Classes of Campaign Information.

Attribute	Class of Information		Effect	Analysis of Variance Results		
	Substantive News	Consummatory News		F-Value	Degrees of Freedom	Level of Significance
Interest Value	105	103	Attribute (row) Main Effect	0.23	(1, 74)	NS
Personal Value	78	138	Class (column) Main Effect	5.64	(1, 74)	p < .05
			Attribute by Class Interaction	17.13	(1, 74)	p < .001

*Cell values indicate mean interpoint distances between concepts representing a type of information and an attribute. Small means are presumed to indicate the information possesses high levels of the attribute.

**Means for "substantive news" are values averaged across two types of information: "candidate leadership abilities" and "voting records." Means for "consummatory news" are values averaged across three types of information: "campaign promises," "mudslinging" and "who's ahead in the polls."

***Interest Value is represented by the distance from the concept "interesting." Personal Value is represented by distance from the concept "yourself."

Table 22. Comparisons of the Perceived Interest Value and Personal Value of Five Types of Information.

Type of Information	Interest Value	Personal Value	Significance of Difference	
	Mean Distance to Interesting	Mean Distance to Yourself	t-value	df
Candidate Leadership Abilities	99	93	0.41 ns	78
Voting Records	111	69	3.20**	81
Campaign Promises	77	109	-2.39**	82
Mudslinging	136	169	-2.59**	80
Who's Ahead in the Polls	99	129	-2.11*	80

*p < .05

**p < .01

***p < .001, all reported probabilities are one-tailed.

****Mean interpoint distances are presumed to indicate the extent to which a type of information is perceived to possess an attribute. Small means indicate high levels of the attribute.

value and personal value appear to be distinct and inversely related. The only exception appears to be "candidate leadership abilities" which respondents rated as both relatively interesting and valuable.

Such differences between attributes were not evident when personal value was compared with decisional utility. Tables 23 and 24 indicate considerable overlap between these characteristics of news. Table 23 reveals that substantive news is considered both more useful (66 units) and more valuable (77 units) than consummatory news (133 units; 135 units). The effect of class was significant, but the main effect of attribute was not. Nor was the interaction significant. This indicates that respondents perceived the two classes of information as significantly different, and these differences are the same whether they are asked to evaluate the decisional utility or the personal value of the information.

Although respondent's interests appear to be distinct from what they value, no such differences were found between what they found useful and considered valuable. This is also apparent in Table 24, where no significant differences could be found. While one must caution against inferring too much from null findings, it can be said that any such differences were not great enough to attain significance, nor did they exceed the differences that were observed between what respondents found interesting and valuable.

The correspondence between personal value and decisional utility is perhaps most evident in Table 25, which compares how respondents ranked the interest value, decisional utility and personal value of the

Table 23. Perceived Decisional Utility and Personal Value of Two Classes of Campaign Information.

Attribute	Class of Information		Effect	Analysis of Variance Results		
	Substantive News	Consummatory News		F-Value	Degrees of Freedom	Level of Significance
Decisional Utility	66	133	Attribute (row) Main Effect	0.74	(1, 74)	NS
Personal Value	77	135	Class (column) Main Effect	19.97	(1, 74)	p < .001
			Attribute by Class Interaction	0.62	(1, 74)	NS

*Cell values are mean interpoint distances between concepts representing a type of information and an attribute. Small means are presumed to indicate the information possesses high levels of the attribute.

**Means for "substantive news" are values averaged across two types of information: "candidate leadership abilities" and "voting records." Means for "consummatory news" are values averaged across three types of information: "campaign promises," "mudslinging" and "who's ahead in the polls."

***Decisional Utility is represented by the distance from the concept "decide how to vote." Personal Value is represented by distance from the concept "yourself."

Table 24. Comparisons of the Perceived Decisional Utility and Personal Value of Five Types of Information.

Type of Information	Decisional Utility	Personal Value	Significance of Difference	
	Mean Distance to Decide How to Vote	Mean Distance to Yourself	t-value	df
Candidate Leadership Abilities	68	92	-1.55 ns	78
Voting Records	68	67	0.07 ns	81
Campaign Promises	110	109	0.06 ns	82
Mudslinging	158	169	-0.69 ns	80
Who's Ahead in the Polls	130	129	0.13 ns	80

*p < .05

**p < .01

***p < .001, all reported probabilities are one-tailed.

****Mean interpoint distances are presumed to indicate the extent to which a type of information is perceived to possess an attribute. Small means indicate high levels of the attribute.

Table 25. The Rankings of Five Types of Campaign Information on Audience Interest, Value and Perceived Usefulness

Type of Information	Interest Value Ranking	Personal Value Ranking	Decisional Utility Ranking
Candidate Leadership Abilities	2.5	2.0	1.5
Voting Records	3.0	1.0	1.5
Campaign Promises	1.0	3.0	3.0
Mudslinging	4.0	5.0	5.0
Who's Ahead in the Polls	2.5	4.0	4.0

*Ranks are based on mean interpoint distances between the type of information and the attribute being evaluated.

five types of campaign information. There is near perfect correspondence between perceptions of utility and personal value, whereas there appears to be little relationship between the interest value of campaign news and its personal value to the respondent. In short, respondents appear to value campaign information that is useful in making a vote decision, and do not necessarily value campaign news that is merely interesting.

Perceptions of News Media Coverage

Audience perceptions of news media content were also examined to assess the perceived availability of the five types of campaign information from television and newspaper coverage. Respondents were asked to estimate the distance from the concepts "television news" and "newspaper stories" to concepts representing each of the five types of campaign information. A small mean interpoint distance was taken to indicate that the respondents perceived that the information was emphasized in media coverage and was therefore more readily available to the reader or viewer. Large distances would indicate the information was less associated with the news media and thus perceived to be less emphasized and less available.

Content analyses have suggested that news media coverage of presidential election campaigns focuses on consummatory information--the dramatic, the sensational and the superficial--at the expense of substantive news necessary to make an informed vote decision. It is not known whether non-elite audience members themselves share these

observations or criticisms. The data analyzed here allow for such a determination and the testing of related hypotheses.

Table 26 presents the mean interpoint distances that represent the perceived availability of five types of campaign information from television news. (These perceptions are displayed graphically in Figure 6, although the means vary slightly due to differences in the treatment of missing data.) Respondents appear to perceive that consummatory news (campaign promises, mudslinging and who's ahead in the polls) is more available (89 units; 92 units; 91 units) than substantive news about candidate leadership abilities (105 units) or voting records (106 units). The one-way analysis of variance, however, indicated these separation (distance) estimates do not vary significantly across the five types of information. Nor was the main effect significant when these types were reduced to two classes of information, substantive and consummatory. Therefore, we cannot conclude that consummatory news is more prevalent than substantive news, at least from the vantage point of these television news viewers.

Differences in the perceived availability of the various news items were even less apparent when respondents were asked to consider newspaper coverage of the election campaign. The mean interpoint distances reported in Table 27 and Figure 7 suggest that newspapers, like television, may provide somewhat more news about polls and campaign promises than substantive information necessary to make a vote decision. However, these apparent differences did not attain significance. The one-way analysis of variance revealed no main effect

Table 26. Perceived Availability of Five Types of Campaign Information from Television News.

Attribute	Class of Information				Analysis of Variance Results		
	Substantive News	Candidate Leadership	Voting Records	Consummatory News	F-Value	Degrees of Freedom	Level of Significance
	Abilities	Who's Ahead in the Polls	Campaign Promises	Mudslinging			
Availability from TV News	105	106	89	92	91		
					Type of Information		
					Main Effect	0.65	(4, 312) NS
					Class of Information		
					Main Effect	1.98	(1, 78) NS

*Cell values indicate mean interpoint distances between concepts representing a type of information and an attribute. Small means are presumed to indicate the information possesses a high level of the attribute. Availability from Television News is represented by the distance from the concept "television news."

**An averaged test of significance was used to determine the main effect of Type of Information, based on four cell means contrasts using unique sums of squares.

***The Class main effect was tested with a single-degree-of-freedom contrast (3 3 -2 -2).

Television News	-----	Voting Records
	109 units	
Television News	-----	Candidate Leadership Abilities
	105 units	
Television News	-----	Campaign Promises
	92 units	
Television News	-----	Mudslinging
	91 units	
Television News	-----	Who's Ahead in the Polls
	92 units	

*Mean interconcept distances represent the perceived availability of the five types of campaign information, expressed in terms of the proximity of each type of information to the concept "television news."

**Scale: one dash = 5.5 units.

***Sample size (n = 83) may vary due to exclusion of missing data.

****Individual paired t-tests failed to detect significant differences among these interconcept distances. Multivariate tests were also non-significant and are presented in Table 26.

Figure 6. Mean Interpoint Distances Representing the Perceived Availability of Five Types of Information from TV News.

Table 27. Perceived Availability of Five Types of Campaign Information from Newspapers.

Attribute	Class of Information				Analysis of Variance Results		
	Substantive News		Consummatory News		F-Value	Degrees of Freedom	Level of Significance
	Candidate Leadership Abilities	Voting Records	Campaign Promises	Who's Ahead in the Polls			
Availability from Newspapers	99	101	95	103	0.36	(4, 320)	NS
	Type of Information				0.30	(1, 80)	NS
	Main Effect						
	Class of Information				0.30	(1, 80)	NS
	Main Effect						

*Cell values indicate mean interpoint distances between concepts representing a type of information and an attribute. Small means are presumed to indicate the information possesses a high level of the attribute. Availability Newspapers is represented by the distance from the concept "newspaper stories."

**An averaged test of significance was used to determine the main effect of Type of Information, based on four cell means contrasts using unique sums of squares.

***The Class main effect was tested with a single-degree-of-freedom contrast (3 3 -2 -2).

Newspaper Stories	-----	Voting Records
	102 units	
Newspaper Stories	-----	Candidate Leadership Abilities
	100 units	
Newspaper Stories	-----	Campaign Promises
	95 units	
Newspaper Stories	-----	Mudslinging
	102 units	
Newspaper Stories	-----	Who's Ahead in the Polls
	92 units	

*Mean interconcept distances represent the perceived availability of the five types of campaign information, expressed in terms of the proximity of each type of information to the concept "newspaper stories."

**Scale: one dash = 5.5 units.

***Sample size (n = 83) may vary due to exclusion of missing data.

****Individual paired t-tests failed to detect significant differences among these interconcept distances. Multivariate tests were also non-significant and are reported in Table 27.

Figure 7. Mean Interpoint Distances Representing the Perceived Availability of Five Types of Information from Newspapers.

for information type or class of news (see Table 27). We cannot conclude that newspapers provided more substantive news than consummatory news, or vice versa.

Univariate tests are not reported here for television news or newspaper coverage because they also failed to detect any systematic or significant differences in audience perceptions. As a result, neither Hypothesis 7 nor 8 were supported by these data. While audience members in this sample were able to detect significant differences between the five types of information with regard to their interest value and decisional utility, they could not do so when they were asked to assess the availability of this information from the news media.

Comparing Newspaper Coverage to Television News

The literature provided some suggestion that performance of newspapers might be evaluated more positively than television news. But few differences in audience perceptions were found when it came to the availability of the five types of campaign information. Table 28 presents averages for the perceived availability of substantive and consummatory news from the two media. It would appear that both media are perceived to provide relatively more consummatory news (91 and 95 units) than substantive news (105 and 99 units), and that the discrepancy is greatest for television (14 units compared with 4 units). But these apparent tendencies were not statistically significant. Without main effects for either class or medium (attribute), we cannot conclude that one class of information was more or less available than another. Nor can we conclude that the two media

Table 28. Perceived Availability from Television News and Newspapers for Two Classes of Campaign Information.

Attribute (Medium)	Class of Information		Analysis of Variance Results		
	Substantive News	Consummatory News	Effect	F-Value	Degrees of Freedom Level of Significance
Availability from Television News	105	91	Medium (row) Main Effect	0.03	(1, 78) NS
Availability from Newspapers	99	95	Class (column) Main Effect	1.26	(1, 78) NS
			Medium by Class Interaction	2.13	(1, 78) NS

*Cell values are mean interpoint distances between concepts representing a type of information and an attribute. Small means are presumed to indicate the information possesses high levels of the attribute.

**Means for "substantive news" are values averaged across two types of information: "candidate leadership abilities" and "voting records." Means for "consummatory news" are values averaged across three types of information: "campaign promises," "mudslinging" and "who's ahead in the polls."

***Availability from Newspapers is represented by the distance from the concept "newspaper stories." Availability from Television News is represented by distance from the concept "television news."

were perceived to differ in their campaign coverage or performance. And despite appearances, there is no evidence here to suggest an interaction in which substantive news is most available from newspapers and consummatory news is most available from television.

The mean interpoint distances representing the availability of the five types of campaign information from newspapers and television coverage are reported again in Table 29, along with univariate tests of the perceived differences between the two media. Here the lack of differentiation is again apparent. The concept "voting records," for example, is located an average of 103 units from "newspaper stories" and 109 units from "television news," suggesting this type of campaign information is perceived to be slightly more available from newspaper coverage than it is from television. But this difference between the mean interpoint distances did not attain statistical significance.

In fact, only one significant difference was detected. "Mudslinging" was perceived to be emphasized significantly more by television than by newspaper coverage of the campaign. The other types of information, however, were apparently perceived to be available in roughly equal quantities and the two media did not appear to differ in this regard.

Perceived Utility and News Media Content

The most critical issue in this research is not audience perceptions of news media coverage in isolation, but the evaluation of this content in the context of the information needs, interests and abilities of the audience. The data analyzed here allowed for direct

Table 29. Comparisons of the Perceived Availability of Five Types of Information.

Type of Information	Availability from Newspapers	Availability from Television News	Significance of Difference	
	Mean Distance to Newspaper Stories	Mean Distance to Television News	t-value	df
Candidate Leadership Abilities	101	105	0.49 ns	81
Voting Records	103	109	0.61 ns	81
Campaign Promises	95	92	-0.41 ns	80
Mudslinging	101	91	-1.86*	80
Who's Ahead in the Polls	91	92	0.27 ns	79

*p < .05

**p < .01

***p < .001, all reported probabilities are one-tailed.

****Mean interpoint distances are presumed to indicate the extent to which a type of information is perceived to possess an attribute. Small means indicate high levels of the attribute.

comparisons between audience perceptions of the decisional utility of five types of campaign information and the extent to which they were made available by the two news media. Similar comparisons were possible for the perceived interest value and personal value assigned to campaign information, and provided the basis for evaluating news media content and performance.

Table 30 presents the perceived utility and availability of substantive and consummatory news from television. Here again substantive news appears to be perceived as more useful than consummatory news, and television appeared to provide more of the latter. On the average, concepts representing substantive news were located 67 units from the concept "decide how to vote," while consummatory news was located much further (132 units). However, consummatory news was located only 91 units from "television news," indicating it was perceived to be more available than substantive news, located 106 units away.

Statistical tests were performed to determine whether this pattern in audience perceptions could be attributed to something other than chance. Had the main effect of attribute been significant, one could have concluded that campaign news in general was perceived to be either more useful or less useful than it was available. This was not the case. However, the main effect of information class did attain statistical significance, indicating that respondents perceived significant differences between consummatory and substantive news averaged across both attributes. This indicates that respondents'

Table 30. Decisional Utility and Perceived Availability from Television News for Two Classes of Campaign Information.

Attribute	Class of Information		Effect	Analysis of Variance Results		
	Substantive News	Consummatory News		F-Value	Degrees of Freedom	Level of Significance
Decisional Utility	67	132	Attribute (row) Main Effect	0.00	(1, 76)	NS
Availability from Television News	106	91	Class (column) Main Effect	6.32	(1, 76)	p < .05
			Attribute by Class Interaction	17.62	(1, 77)	p < .001

*Cell values are mean interpoint distances between concepts representing a type of information and an attribute. Small means are presumed to indicate the information possesses high levels of the attribute.

**Means for "substantive news" are values averaged across two types of information: "candidate leadership abilities" and "voting records." Means for "consummatory news" are values averaged across three types of information: "campaign promises," "mudslinging" and "who's ahead in the polls."

***Decisional Utility is represented by the distance from the concept "decide how to vote." Availability from Television News is represented by distance from the concept "television news."

ratings depended on the class of information they were asked to evaluate.

Of greatest theoretical relevance is the significant row by column interaction. This indicates that substantive news is perceived to be significantly more useful than available from television, while just the opposite is true for consummatory news--its availability significantly exceeds its decisional utility. Table 31 reveals essentially the same pattern for newspaper coverage of the campaign. Respondents perceived substantive news was more useful than available, and consummatory news was more available than useful.

This pattern of findings confirmed Hypothesis 9, and may be explored more fully in Tables 32 and 33 which report the results of univariate tests. Here it becomes apparent that while both media may have paid roughly equal attention to the two classes of news, this did not compensate for the significant disparities in the audience's need for various types of news. Information about the leadership abilities and voting records of the candidates was perceived as very useful, and significantly more useful than it was available from either medium. On the other hand, the perceived availability of mudslinging and horse race polls significantly exceeded their decisional utility, if not their demand. While these types of consummatory information were perceived to be equally available as substantive news, they were clearly perceived to be much less useful in making a vote decision. News about campaign promises also appeared to be more available than

Table 31. Decisional Utility and Perceived Availability from Newspapers for Two Classes of Campaign Information.

Attribute	Class of Information		Effect	Analysis of Variance Results	
	Substantive News	Consummatory News		F-Value	Degrees of Freedom Level of Significance
Decisional Utility	66	132	Attribute (row) Main Effect	0.01	(1, 77) NS
Availability from Newspapers	100	95	Class (column) Main Effect	10.05	(1, 77) $p < .01$
			Attribute by Class Interaction	17.26	(1, 77) $p < .001$

*Cell values are mean interpoint distances between concepts representing a type of information and an attribute. Small means are presumed to indicate the information possesses high levels of the attribute.

**Means for "substantive news" are values averaged across two types of information: "candidate leadership abilities" and "voting records." Means for "consummatory news" are values averaged across three types of information: "campaign promises," "mudslinging" and "who's ahead in the polls."

***Decisional Utility is represented by the distance from the concept "decide how to vote." Availability from Newspapers is represented by distance from the concept "newspaper stories."

Table 32. Comparisons of the Decisional Utility of Five Types of Information and Its Perceived Availability from Newspapers.

	Decisional Utility	Availability from Newspapers	Significance of Difference	
Type of Information	Mean Distance to Decide How to Vote	Mean Distance to Newspaper Stories	t-value	df
Candidate Leadership Abilities	69	101	-1.92*	80
Voting Records	68	101	-3.14***	81
Campaign Promises	111	95	0.79 ns	81
Mudslinging	156	107	3.58***	81
Who's Ahead in the Polls	130	90	2.30*	80

*p < .05

**p < .01

***p < .001, all reported probabilities are one-tailed.

****Mean interpoint distances are presumed to indicate the extent to which a type of information is perceived to possess an attribute. Small means indicate high levels of the attribute.

Table 33. Comparisons of the Decisional Utility of Five Types of Information and Its Perceived Availability from TV News.

	Decisional Utility	Availability from Television News	Significance of Difference	
Type of Information	Mean Distance to Decide How to Vote	Mean Distance to Television News	t-value	df
Candidate Leadership Abilities	69	106	-1.96*	79
Voting Records	68	108	-4.24***	80
Campaign Promises	112	93	0.98 ns	80
Mudslinging	157	91	4.23***	80
Who's Ahead in the Polls	131	92	2.26*	79

*p < .05

**p < .01

***p < .001, all reported probabilities are one-tailed.

****Mean interpoint distances are presumed to indicate the extent to which a type of information is perceived to possess an attribute. Small means indicate high levels of the attribute.

useful, but this difference did not attain significance for either medium.

Interest Value and News Media Content

One might expect from earlier findings that the news media satisfy audience interests better than they meet audience information needs. The perceived interest value and availability of substantive and consummatory news from media were compared, using the same approach that was used to compare the decisional utility and availability of campaign information.

Table 34 presents the results of these comparisons for television. Substantive news appears to have been perceived to be about as interesting as consummatory news, but less available. On the average, concepts representing substantive news are located 103 units from the concept "interesting," while consummatory news is located an average of 102 units away. However, consummatory news is located closer (92 units) to television than is substantive news (107 units). To reach this conclusion, however, the row-by-column interaction must attain statistical significance, as predicted by Hypothesis 10. It did not. Nor were the main effects significant. This indicates that respondents evaluated the two classes of information in a similar manner, and did not perceive a disparity between their interest value and their availability. In other words, television appears to have satisfied the audience's interest in these types of campaign information. The same pattern was apparent for newspapers (see Table 35). These non-significant findings also suggest that the disparity between audience

Table 34. Perceived Interest Value and Availability from Television News for Two Classes of Campaign Information.

Attribute	Class of Information		Effect	Analysis of Variance Results		
	Substantive News	Consummatory News		F-Value	Degrees of Freedom	Level of Significance
Interest Value	103	102	Attribute (row) Main Effect	0.12	(1, 75)	NS
Availability from Television News	107	92	Class (column) Main Effect	0.72	(1, 75)	NS
			Attribute by Class Interaction	0.63	(1, 75)	NS

*Cell values are mean interpoint distances between concepts representing a type of information and an attribute. Small means are presumed to indicate the information possesses high levels of the attribute.

**Means for "substantive news" are values averaged across two types of information: "candidate leadership abilities" and "voting records." Means for "consummatory news" are values averaged across three types of information: "campaign promises," "mudslinging" and "who's ahead in the polls."

***Interest Value is represented by the distance from the concept "interesting." Availability from Television News is represented by distance from the concept "television news."

Table 35. Perceived Interest Value and Availability from Newspaper for Two Classes of Campaign Information.

Attribute	Class of Information		Effect	Analysis of Variance Results	
	Substantive News	Consummatory News		F-Value	Degrees of Freedom Level of Significance
Interest Value	104	104	Attribute (row) Main Effect	0.24	(1, 77) NS
Availability from Newspapers	102	97	Class (column) Main Effect	0.09	(1, 77) NS
			Attribute by Class Interaction	0.11	(1, 77) NS

*Cell values are mean interpoint distances between concepts representing a type of information and an attribute. Small means are presumed to indicate the information possesses high levels of the attribute.

**Means for "substantive news" are values averaged across two types of information: "candidate leadership abilities" and "voting records." Means for "consummatory news" are values averaged across three types of information: "campaign promises," "mudslinging" and "who's ahead in the polls."

***Interest Value is represented by the distance from the concept "interesting." Availability from Newspapers is represented by distance from the concept "newspaper stories."

interests and news media content was not as great as the significant gap between the perceived usefulness of campaign information and what the news media actually provided.

More detailed results are presented in Tables 36 and 37, which report the mean interpoint distances that represent the interest value and perceived availability of five types of campaign information from newspapers and television news, respectively. These tables also include univariate tests of the possible discrepancies between the interest value and the availability of this information. Once again, the differences between audience interest and the content of television and newspaper coverage were generally not significant. However, the availability of "mudslinging" from the two media significantly exceeded its interest value. And information about campaign promises was perceived to be more interesting than available, at least from newspapers. But these appear to be the only discrepancies between audience interest and news content great enough to attain statistical significance. In other words, the news media appear to have satisfied the audience's interests better than its information needs.

Comparing News Media Content to Audience Demand

This, of course, leaves the important question of how well the news media satisfied the audience's actual desires for campaign information. It was observed earlier that the personal value assigned to various types of campaign news corresponded more closely with the perceived utility of that information than with audience interest in it. One might then expect to find the same kind of disparities between

Table 36. Comparisons of the Perceived Interest Value of Five Types of Information and Its Availability from Newspapers.

Type of Information	Interest Value	Availability from Newspapers	Significance of Difference	
	Mean Distance to Interesting	Mean Distance to Newspaper Stories	t-value	df
Candidate Leadership Abilities	97	101	-0.21 ns	81
Voting Records	111	103	0.51 ns	81
Campaign Promises	77	95	-1.71*	81
Mudslinging	136	101	2.73**	80
Who's Ahead in the Polls	100	92	0.70 ns	81

*p < .05

**p < .01

***p < .001, all reported probabilities are one-tailed.

****Mean interpoint distances are presumed to indicate the extent to which a type of information is perceived to possess an attribute. Small means indicate high levels of the attribute.

Table 37. Comparisons of the Perceived Interest Value of Five Types of Information and Its Availability from Television News.

Type of Information	Interest Value	Availability from Television News	Significance of Difference	
	Mean Distance to Interesting	Mean Distance to Television News	t-value	df
Candidate Leadership Abilities	98	106	-0.45 ns	80
Voting Records	112	109	0.21 ns	80
Campaign Promises	77	92	-1.50 ns	80
Mudslinging	135	91	3.65***	80
Who's Ahead in the Polls	99	92	0.62 ns	79

*p < .05

**p < .01

***p < .001, all reported probabilities are one-tailed.

****Mean interpoint distances are presumed to indicate the extent to which a type of information is perceived to possess an attribute. Small means indicate high levels of the attribute.

audience desires and news media content as were observed between the perceived utility and availability of news from television and newspapers.

Table 38 compares the personal value and perceived availability of substantive and consummatory news from television. Similar data for newspaper coverage are reported in Table 39. It is apparent from either table that substantive news was valued more than consummatory news, but that consummatory news was perceived to be more available from the news media than was substantive news. This discrepancy in availability appears to be greater for television news (16 units) than for newspapers (5 units).

The non-significant main effect of attribute indicates that when all types of campaign information are considered, their average value was neither more nor less than their average availability. However, the significant main effect of class indicates that respondents evaluated substantive and consummatory news very differently. Most important is the significant row-by-column interaction which confirms Hypothesis 11. It demonstrates that substantive news was perceived to be more valuable than available from either medium, but that the availability of consummatory news significantly exceeded its personal value and demand. In other words, while the news media may have provided substantive news and consummatory news in roughly equal quantities, they provided more consummatory news than was desired and less substantive news than the audience wanted or needed.

Table 38. Personal Value and Perceived Availability from Television News for Two Classes of Campaign Information.

Attribute	Class of Information		Effect	Analysis of Variance Results		
	Substantive News	Consummatory News		F-Value	Degrees of Freedom	Level of Significance
Personal Value	77	134	Attribute (row) Main Effect	0.38	(1, 75)	NS
Availability from Television News	106	90	Class (column) Main Effect	5.55	(1, 75)	p < .05
			Attribute by Class Interaction	19.03	(1, 75)	p < .001

*Cell values are mean interpoint distances between concepts representing a type of information and an attribute. Small means are presumed to indicate the information possesses high levels of the attribute.

**Means for "substantive news" are values averaged across two types of information: "candidate leadership abilities" and "voting records." Means for "consummatory news" are values averaged across three types of information: "campaign promises," "mudslinging" and "who's ahead in the polls."

***Personal Value is represented by the distance from the concept "yourself." Availability from Television News is represented by distance from the concept "television news."

Table 39. Personal Value and Perceived Availability from Newspapers for Two Classes of Campaign Information.

Attribute	Class of Information		Effect	Analysis of Variance Results	
	Substantive News	Consummatory News		F-Value	Degrees of Freedom Level of Significance
Personal Value	77	134	Attribute (row) Main Effect	0.40	(1, 75) NS
Availability from Newspapers	100	95	Class (column) Main Effect	9.45	(1, 75) $p < .01$
			Attribute by Class Interaction	18.85	(1, 75) $p < .001$

*Cell values are mean interpoint distances between concepts representing a type of information and an attribute. Small means are presumed to indicate the information possesses high levels of the attribute.

**Means for "substantive news" are values averaged across two types of information: "candidate leadership abilities" and "voting records." Means for "consummatory news" are values averaged across three types of information: "campaign promises," "mudslinging" and "who's ahead in the polls."

***Personal Value is represented by the distance from the concept "yourself." Availability from Newspapers is represented by distance from the concept "newspaper stories."

Tables 40 and 41 provide a more detailed view of this discrepancy. Information about "mudslinging" and "who's ahead in the polls" was perceived to have received significantly more attention than its value or demand warranted. On the other hand, the availability of news about the issue positions and voting records of the candidates did not nearly meet the value placed on such useful campaign information. The difference between the perceived value and availability of news about "campaign promises" was not significant, perhaps indicating that a proper balance had been struck. The same might be said for information about candidate leadership abilities, although this appears to have been considered more valuable and less available than "campaign promises."

Summary of Audience Perceptions

Respondents perceived that news media coverage of the campaign may have satisfied their interests, but not their needs and apparent desires for specific types of information. First, substantive news about the leadership abilities and voting records of the candidates was perceived to be significantly more useful in making a vote decision than consummatory news about horse race polls, mudslinging and campaign promises. Substantive news was perceived to be neither significantly more interesting nor less interesting than consummatory news, in contrast to the conventional wisdom. If the public perceives substantive information to be equally interesting, but significantly more useful in making a vote decision, there would appear to be little reason to dissuade the news media from placing greater emphasis on the

Table 40. Comparisons of the Personal Value of Five Types of Information and Its Perceived Availability from Newspapers.

Type of Information	Personal Value	Availability from Newspapers	Significance of Difference	
	Mean Distance to Yourself	Mean Distance to Newspaper Stories	t-value	df
Candidate Leadership Abilities	91	101	0.48 ns	79
Voting Records	69	102	3.50***	82
Campaign Promises	110	95	-0.85 ns	81
Mudslinging	169	101	-3.38***	80
Who's Ahead in the Polls	129	90	-2.30*	80

*p < .05

**p < .01

***p < .001, all reported probabilities are one-tailed.

****Mean interpoint distances are presumed to indicate the extent to which a type of information is perceived to possess an attribute. Small means indicate high levels of the attribute.

Table 41. Comparisons of the Personal Value of Five Types of Information and Its Perceived Availability from TV News.

Type of Information	Personal Value	Availability from Television News	Significance of Difference	
	Mean Distance to Yourself	Mean Distance to Television News	t-value	df
Candidate Leadership Abilities	91	106	0.65 ns	79
Voting Records	70	109	4.05***	81
Campaign Promises	111	92	-1.03 ns	80
Mudslinging	169	91	-4.12***	79
Who's Ahead in the Polls	130	92	-2.31*	79

*p < .05

**p < .01

***p < .001, all reported probabilities are one-tailed.

****Mean interpoint distances are presumed to indicate the extent to which a type of information is perceived to possess an attribute. Small means indicate high levels of the attribute.

more informative and substantive aspects of its campaign coverage. These results, of course, contradict the conventional wisdom that an emphasis on consummatory types of news is necessary to maintain audience interest and attention.

The results also revealed that respondents evaluated the two types of campaign coverage in precisely opposite ways. News about the leadership abilities and voting records of the candidates, labelled *apriori* as examples of "substantive news," was rated by respondents as significantly more useful than interesting. Respondents perceived "consummatory" news about campaign promises, mudslinging and popularity polls to be significantly more interesting than useful in deciding how to vote. But again, it is worth noting that consummatory news was not significantly more interesting to respondents than substantive news.

These data also suggest that the audience valued and desired the same information that it considered useful--substantive news about the leadership abilities and voting records of the candidates. But no such relationship was found between the audience's interests and what they valued or desired from news media coverage. Respondents rated the interest value of different types of campaign news stories significantly different than the "personal value" they placed on them. Respondents had a more positive affective orientation toward substantive news, and these perceptions corresponded more closely with the perceived usefulness of campaign information. In other words, the audience appears to value substantive news significantly more than consummatory news, and these perceptions may influence audience demand.

These data do not suggest that the audience perceived the news media placed significantly more emphasis on consummatory news than on substantive information necessary to make an informed vote decision. At the same time, however, the media were not perceived as providing more substance than consummatory fare either. By providing substantive and consummatory news in apparently equal proportions, the news media failed to compensate for the significantly greater need and desire that respondents expressed for substantive news. In fact, when direct comparisons were made, it became clear that substantive information was perceived to be more useful than available, and that the perceived availability of consummatory news exceeded its perceived utility and demand. No such differences were found between audience interests and the perceived availability of specific types of campaign information from the news media. In other words, the news media appear to have satisfied audience interests, but they failed to provide enough of the substantive information that respondents valued and found most useful in making a vote decision.

In sum, there was no evidence to suggest that a lack of audience interest in substantive news represents a real constraint on the ability of the news media to provide more substantive, informative coverage. Although decisional utility did not necessarily translate into increased interest value, it cannot be said the audience found consummatory news to be more interesting than substantive news. This would suggest that news media could improve their coverage of presidential campaigns and provide more substantive, informative news

without jeopardizing the interest and attention of the mass audience or the advertising revenue that it represents.

Of course, much depends on actual audience demand and the operationalizations that approximate it in this research. Subsequent sections of this dissertation examine the validity of these methods and interpretations, as well as the possible impact that audience perceptions of news media might have on information-seeking and news media use during a campaign.

CHAPTER VI

ASSESSING QUALITY OF MEASUREMENT

The Issue of Measurement Quality

These findings would have greater significance and value if the methods used to gather the data and the assumptions underlying their interpretation were validated. The analysis thus far has raised important methodological questions, especially with regard to the proper interpretation of the cognitive maps. Some of the findings have been compelling, but to what extent do they capitalize on measurement error? Other results did not attain statistical significance--would a larger sample or better measurement have produced more persuasive results? And how can we be assured that the relationships among the concepts and their interpoint distances have been interpreted in a manner that accurately reflects the intent and actual perceptions of the respondents? To answer these questions, special attention was devoted to assessing the reliability and validity of the obtained data.

Assessing Reliability

Quality of measurement acts as an inevitable constraint on research findings. Data can only be valid to the extent they are reliable or non-random, indicating that something systematic has been recorded during the measurement process. Galileo theory contends that respondents can be rendered able and willing to express their perceptions of phenomena in terms of direct magnitude separation estimates of the distance between salient concepts. But considerable

skepticism exists, even among social scientists, as to whether people are capable of making reliable judgments at the ratio level (Woelfel and Fink, 1980). Miller (1986) notes that skeptical reviewers often doubt the quality of Galileo data because the procedures seem unusual and demanding. These critics argue that the direct magnitude estimates in the Galileo protocol might be seriously contaminated by random measurement error, and that subjecting them to "the elaborate mathematical algorithms of the Galileo computer program might capitalize on error and lead to erroneous conclusions" (Miller, 1986). Given these concerns, Miller (1986) argues that "it is reasonable to require the Galileo researcher to report explicitly the quality of the data under consideration."

At the heart of this skepticism are suspicions that the Galileo interviews fail to elicit meaningful estimates of perceived concept similarity, and instead result in the generation of largely random numbers. If this were true, a respondent would provide an essentially random distribution of perceived differences among concepts. These random estimates would vary, with the respondent at times choosing large numbers and at other times small numbers. But if these responses were genuinely random, they would be distributed normally about some moderate-sized mean. As a result, this suspected tendency to generate random numbers would be difficult to detect by examining the responses of a single person because the resulting distribution across items would be identical to that expected from a systematic response pattern--numbers that vary among concept pairs, some large numbers and

some small, all distributed about some modern-sized mean. However, a truly random response pattern could be distinguished from systematic responses once the data have been aggregated across respondents.

To the extent that the Galileo data are contaminated with random measurement error, the aggregated interpoint distances would be characterized by relatively large standard errors. It would then be impossible to detect statistically significant differences among their means. In aggregate, this lack of differentiation among concepts would ultimately result in a symmetric multidimensional space in which all concepts were located approximately equidistant from one another. By contrast, reliable data would result in an asymmetric multidimensional space, significantly different mean interpoint distances and relatively small standard errors.

A visual inspection of the multidimensional maps obtained from the Galileo data indicated an asymmetrical cognitive space with concepts distributed in a non-random manner. The average distances between concepts varied greatly and significantly, as noted earlier in the hypothesis test results. Moreover, these mean interpoint distances were characterized by relatively small standard errors. The average standard error for estimating the mean distance between pairs of concepts was 13.7 units. In other words, the mean perceived distances between concepts are accurate, on average, within plus or minus 26.9 units at the 95 percent confidence level. This indicates there is some variance in perceptions among observers, but the standard error is still relatively small given that the yardstick for measurement was 100

units, the average of all estimates was 97.5 units and there was no upper bound on the measurements--some estimates approached 1,000 units. Similarly, the average coefficient of variation was only 13.4. This was calculated by taking 100 times the standard error and dividing by the mean, and then averaging. The result indicates that the standard errors, on average, are less than one-eighth of the mean interpoint distances. The obtained Galileo results also conformed to a systematic, interpretable pattern consistent with most of the apriori hypotheses. This may be most important. If the data were the product of random number generation, such significant and predictable differences would not have been detected.

Of course, more formal and systematic techniques exist for assessing the reliability and quality of measurements, including those obtained with the Galileo method. These assessments are particularly useful when innovative measurement techniques have been employed. Barnett et al. (1976) note the Galileo scaling procedures have been pre-tested extensively, obtaining test-retest and split sample reliability coefficients that often exceed .90. Miller (1986), however, notes some serious limitations in the procedures typically used to assess the quality of Galileo measurements, and suggests an appropriate alternative.

The two most common methods involve test-retest or split sample correlations either between aggregated means (interpoint distances) or among eigenvectors (concept loadings) of items on each of the dimensions derived from the multidimensional scaling procedure. Miller

(1986) calls these methods "arduous" and "unconventional," and therefore less likely to be calculated by researchers or widely accepted among scholars. He also notes:

. . . such procedures either ignore useful information in the data, or subject the data to elaborate mathematical manipulation before examining measurement quality, or both.
(p. 4)

Both the test-retest and split sample correlation techniques also require large amounts of data, potentially undermining an important advantage of the Galileo method--economy and efficiency in data collection. (Miller, 1986)

It is difficult to distinguish, for example, between unreliability and instability--actual changes in perceptions over time--from the test-retest correlations observed in such demonstrations as Gillham and Woelfel (1977) and Craig (1977). And by relying on correlations between mean interpoint distances, these approaches ignore valuable information--perceptions at the individual level and variance around the means (Miller, 1986). But the other common approach also poses potential problems. Correlations among eigenvectors are usually calculated after a least-squares rotation of two or more spaces to congruence. Miller (1986) notes such rotation procedures "maximize the similarities between spaces in a manner that could capitalize on error" and artificially inflate estimates of reliability. Craig (1977) also demonstrated these estimates are sensitive to rotation procedures and can vary widely as a result. Moreover, the complexity of these mathematical manipulations also make it difficult to interpret these coefficients or provide an intuitive explanation. This approach

results in many correlation coefficients, and not a single measure of reliability. Miller (1986) outlines procedures for calculating such a measure from the individual correlations among eigenvectors and dimensions, but these procedures appear strenuous and require detailed information rarely reported by researchers.

Miller (1986) demonstrated an alternative approach to assessing the quality of Galileo measurement, one that appears to be easily executed, readily interpreted and based on a well developed psychometric literature and thus likely to be more widely accepted among diverse social scientists. His approach also appears consistent with the assumptions underlying Galileo theory and measurement, as outlined in Woelfel and Fink (1981).

Galileo is distinct from most conventional measurement techniques in that it uses individuals as measuring instruments rather than measuring the individuals themselves. In the Galileo protocol, respondents become raters of stimuli in the form of pairs of concepts, and are asked to rate the perceived differences among the pairs. In other words, the property being evaluated is the differences among pairs, a trait possessed theoretically by the concepts and not the rater. For this reason, Miller (1986) recommends that measurement quality be evaluated by assessing the "dependability" of the data and calculating an intraclass correlation coefficient which measures the degree to which raters detect systematic differences among stimuli. An intraclass correlation coefficient is a univariate measure of the relative homogeneity of scores within a class as a proportion of the

total variance. In this case, Miller (1986) was concerned with the relative homogeneity of the perceived distances between pairs of concepts, and "assessing the degree to which raters detect systematic differences among stimuli." This differs significantly from the traditional focus of reliability estimation which attempts to detect systematic differences among individuals.

Miller (1986) demonstrated this alternative approach and evaluated the "dependability" of several Galileo data sets, including the data analyzed for this dissertation. For each set, he calculated a random effects dependability coefficient (Cronbach et al., 1963, 1972). He argued the random effects coefficient was appropriate because the respondents or raters in this study were assumed to represent a sample from the universe of all possible persons in the audience/electorate. He also based his calculations on a fully-crossed analysis of variance design because each rater evaluated all possible pairs of concepts. The resulting dependability coefficient can be interpreted both as the average of all possible split-half correlations and as the percent of variance in the observed mean scores due to the variance in the "universe score," or actual differences in the pairs. This estimate also accounts for error due to differences among raters as well as "yardstick error" due to the rater-by-pair interaction.

Miller (1986) used the formula provided by O'Brien (1984) for calculating the dependability coefficients from the output of standard repeated measures analysis of variance programs:

$$Dr = (PMS - EMS)/(PMS + ((RMS - EMS)/n))$$

where D_r is the random effects dependability coefficient, PMS is the mean square between pairs, EMS is the error mean square, RMS is the mean square between raters and n is the number of persons. Table 42 is taken from Miller (1986) and shows the mean squares for the data analyzed in this dissertation. These data yielded a coefficient of $D = .63$, somewhat lower than the .70 value that is commonly selected as a standard, albeit an arbitrary one, for "acceptability." While the reliability of these data was less than other Galileo data sets and might be considered "marginal" by some researchers, Miller (1986) suggested they nonetheless compare favorably with much of the data gathered by more conventional means. Lower reliability estimates are not uncommon in survey research, and they are often not calculated at all.

In this case, it is likely that the relatively small sample size has made the data more susceptible to the effects of outliers, increasing the standard error of measurements and reducing estimates of reliability. In fact, the Spearman-Brown Prophecy Formula was used here to calculate the estimated reliability based on larger, hypothetical samples:

$$R_{mx} = (m \times r_x) / 1 + (m - 1)r_x$$

where R_{mx} is the reliability estimate when the sample is increased by a factor of m , and r_x is the observed reliability estimate (Thorndike, 1982). According to these calculations, a sample of at least 114 respondents would be needed to attain a reliability coefficient of $r = .70$ or greater, and a sample of 200 would have yielded $r = .80$. In

Table 42. Repeated Measures Analysis of Variance of Audience Perceptions of Campaign News.

Source	DF	Sum of Squares	Mean Squares	F-Ratio*
Model	136	2,759.90	20.29	11.47
Error	4329	7,658.99	1.77	

Concept Pairs	54	292.46	5.42	3.06
Raters/Persons	82	2,467.45	30.09	17.01

*All F-values are significant at the $p < .001$ level.

**Table taken from Miller (1986).

other words, sample size could be an important factor limiting the reliability of these data.

Miller (1986) attributes the "marginal" reliability of these data to the use of telephone interviewing techniques and the highly abstract nature of the concepts in this study. Reliability may have, in fact, been compromised by the specification of a complex and insufficiently distinct domain of concepts. However, the existence of measurement error generally does not preclude researchers from interpreting their data, and Miller (1986) recommends proceeding, albeit with caution. It should also be noted that the presence of measurement error merely detracts from the ability to make accurate predictions and provide adequate tests of hypotheses (Barnett et al., 1976). In other words, unreliability becomes an issue only to the extent that it prevents results from attaining statistical significance. And that does not appear to be the case with much of this research.

Assessing Validity

It is one thing to suggest that the data are reliable, systematic and meaningful, and quite another to ascertain precisely what meaning should be ascribed to them. This is particularly true for the innovative measurement techniques used in this research. As noted before, some of the flexibility and economy in operationalization may have come at the expense of clarity in data interpretation. Attempts were made to minimize this possible ambiguity by selecting the concepts carefully and specifying operationalizations apriori. Nevertheless, additional steps were taken to ensure that the meaning attributed to

the spatial relationships among the concepts was valid and accurately reflected what the respondents intended to express.

The open-ended pre-test interviews were designed to provide additional assurance that the concepts selected for the Galileo questionnaire would be meaningful to respondents in subsequent phases of the research. These initial results also served as a validity check, helpful in interpreting the results of the structured interviews. Validity was also assessed in a more formal and systematic manner, by checking Galileo measurements against those obtained with more conventional methods. Lometti et al. (1977) applied a similar approach, using unidimensional gratification items to guide and validate their interpretation of multidimensional maps of audience perceptions. The authors used multidimensional scaling techniques to determine the extent to which people could differentiate eight communication channels, including radio, television, newspapers and books. Respondents were asked to assess the perceived similarity of each of these channels on a five point scale. The resulting data were treated as interpoint distances, and aggregated to locate the channels in a Euclidean multidimensional space. From this space, Lometti et al. (1977) inferred the dimensions along which the media were differentiated by the respondents. But to describe these dimensions accurately, the authors also obtained univariate gratification measures for each channel on attributes or dimensions expected to emerge in the multidimensional space. Lometti et al. (1977) then regressed the three dimensions on each of the univariate gratification items. Strong

positive regression coefficients were obtained when dimensions successfully predicted mean scores on the univariate items, indicating that the dimension could be described by the type of gratification with which it was correlated.

The research conducted for this dissertation did not seek to label the dimensions of the multidimensional space, but univariate measures were related to that space to validate its interpretation. Numerous conventional measures were appended to the Galileo questionnaire, including a series of 5-point Likert scales. One of these items asked respondents to indicate the extent to which they agreed or disagreed with the following statement:

The news media don't really report about the things that are important to people like me when we decide how to vote.

This measure was used to help determine whether the multidimensional maps had been interpreted properly. The distribution of responses to this item was clearly bimodal, with 45 percent agreeing, 45 percent disagreeing and 10 percent saying they were neutral. The sample was split at the median for this item, so as to form two groups of respondents--(1) those who disagreed with the statement and appeared satisfied with news media coverage of the campaign and (2) those who disagreed and were dissatisfied or critical of news media coverage. Separate multidimensional cognitive maps were generated for each of these groups to identify differences in the relationships they perceived among the 11 concepts.

These two groups were predicted to differ with regard to the location of concepts representing the types of information perceived to

be available from the two media. Satisfied respondents were expected to perceive that substantive types of information were more available from news media than critical respondents would. One would predict that, when compared with critical respondents, satisfied respondents would either (1) locate substantive types of information closer to the news media because they perceive the media do a better job of providing it, or (2) find significantly more utility or value in the "consummatory" types of campaign news and information. These determinations were first made visually, and then by statistical tests to determine the significance of any apparent differences between the two groups and the patterns of mean interpoint distances.

Figures 8 and 9 present the three-dimensional aggregate cognitive maps for the "satisfied" and "critical" respondents, respectively. While the two cognitive maps clearly differ, the nature of these differences is perhaps more evident in Figures 10 and 11 which reveal the location of concepts in two dimensions. First, the location of the self-concept and the attributes "interesting" and "decide how to vote" are fairly stable across the two groups. Second, it is also clear that "voting records" and "candidate leadership abilities" are important to the vote decisions of both groups, and equally so. Each group also appeared to perceive all campaign news as equally interesting, and substantive news to be more useful than consummatory news in making a vote decision. The key differences between the two maps appear to be in the perceptions of the information available from news media, and not in their evaluations of the interest value and vote utility of the five

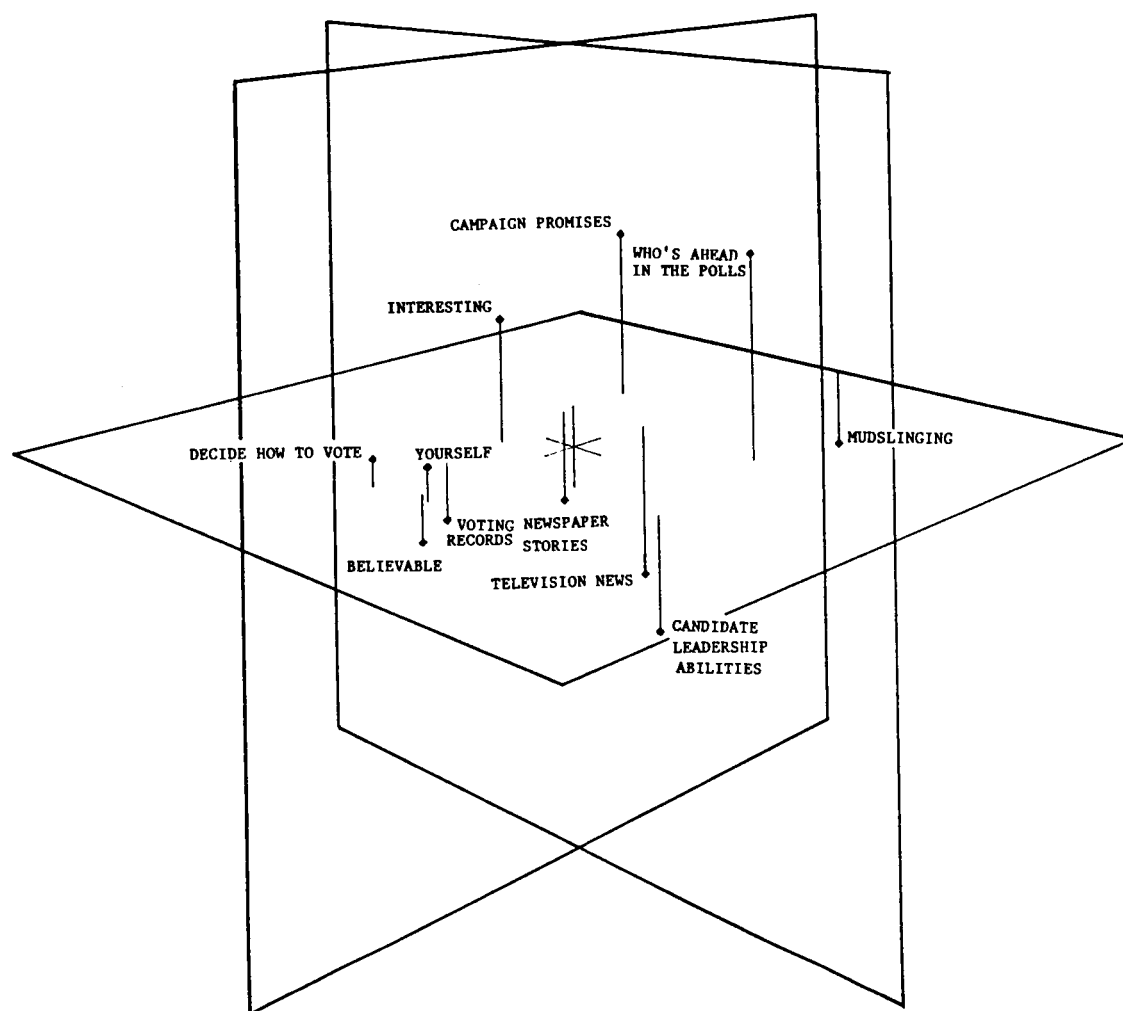


Figure 8. Three-Dimensional Cognitive Space for "Satisfied" Group.

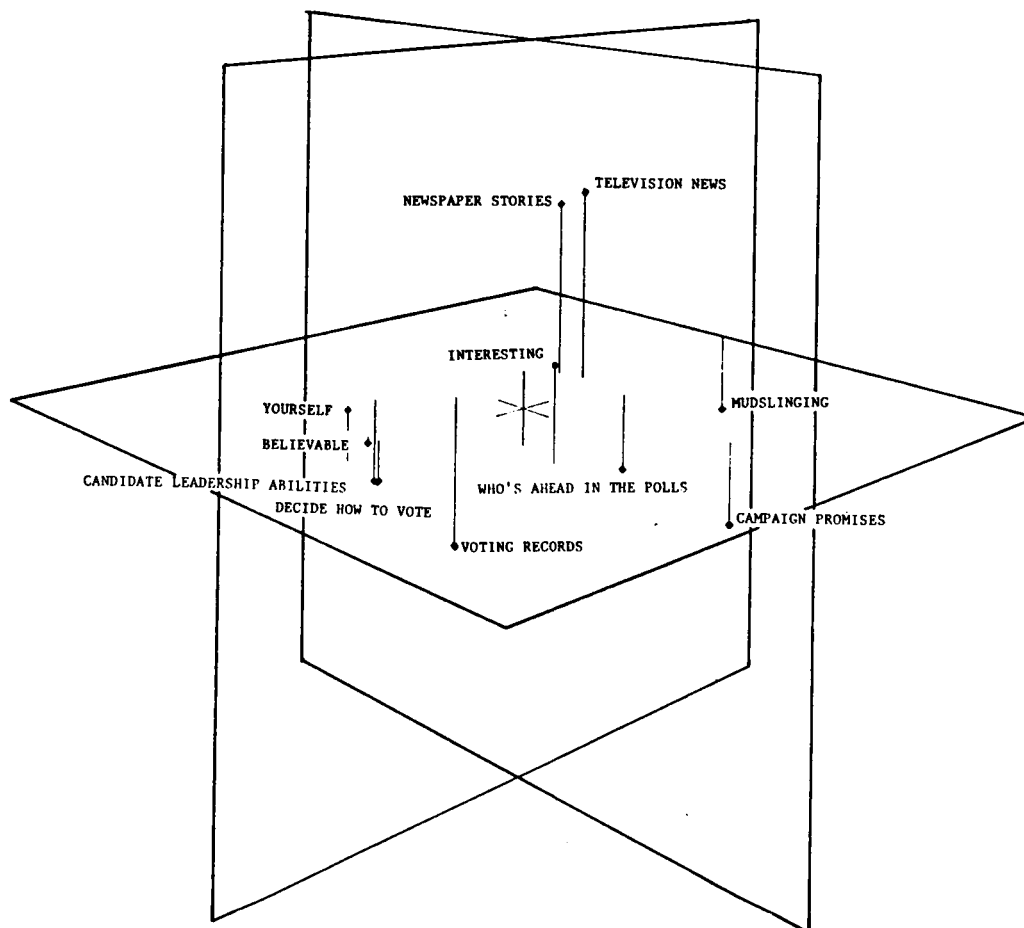


Figure 9. Three-Dimensional Cognitive Space for "Critical" Group.

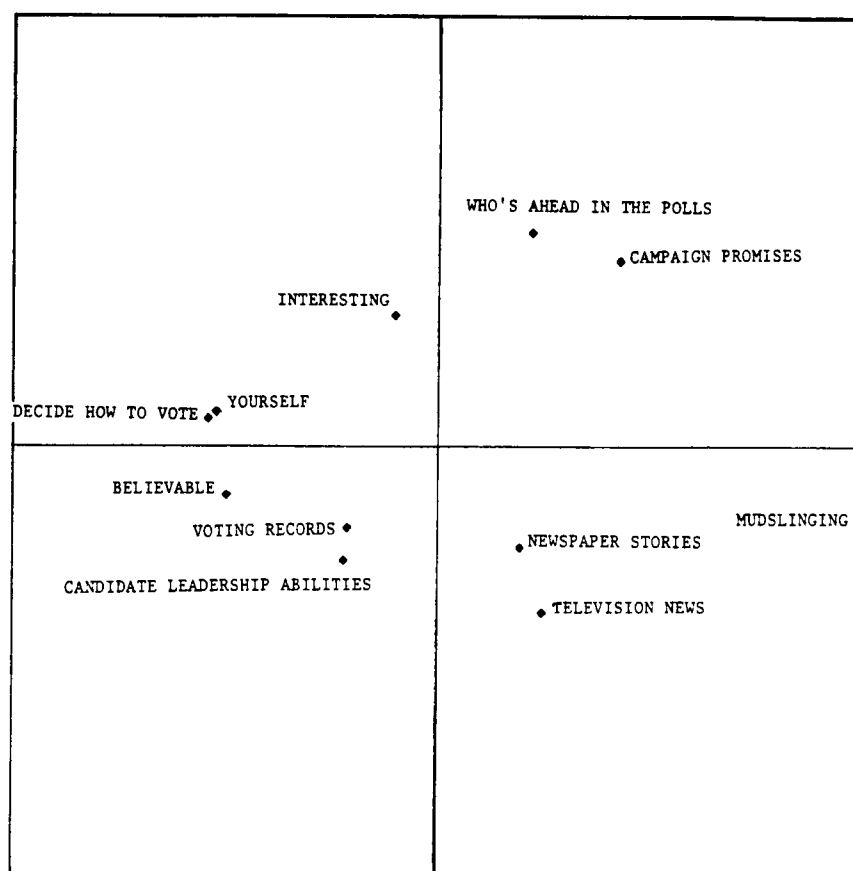


Figure 10. Two-Dimensional Cognitive Space for "Satisfied" Group.

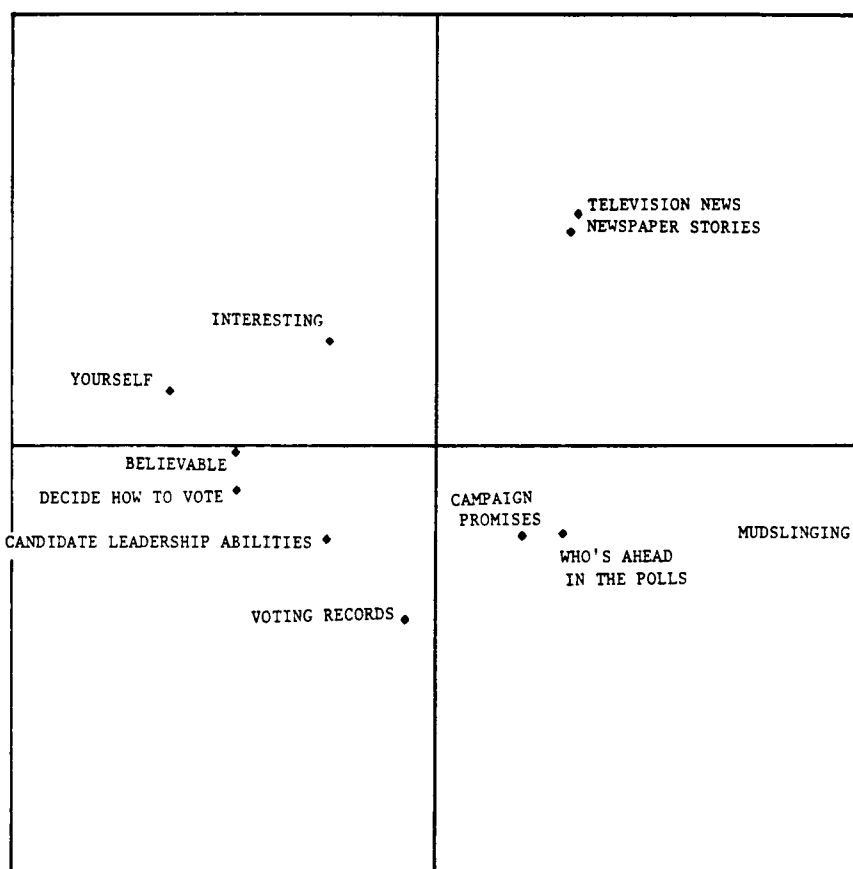


Figure 11. Two-Dimensional Cognitive Space for "Critical" Group.

types of information. Respondents who said they were satisfied with news media coverage appear to perceive substantive news to be more available from news media than consummatory news. By contrast, those who were not satisfied with the coverage associate the news media more closely with consummatory types of campaign news than with substantive information. It also appears that satisfied respondents located substantive news closer to the news media than did critical respondents. In this way, the conventional measure corroborates the initial interpretation of the Galileo maps, and suggests there is some link between dissatisfaction with news media and the perception that its coverage is less substantive.

The apparent differences in the two groups' perceptions were subjected to statistical tests to determine whether they were significant or could be attributed instead to mere sampling error. For each group, mean interpoint distances were calculated from the five types of information to the concept "television news." T-tests were then conducted to determine the significance of differences between the two groups of respondents. Satisfied respondents were expected to locate substantive types of information significantly closer to TV news than would critical respondents. Satisfied respondents were also expected to locate consummatory news significantly further from the news media than the critical respondents would. Similar procedures were repeated for perceptions of newspaper coverage.

Tables 43 and 44 present the results of these hypothesis tests. The small subsample size made it extremely difficult to attain

Table 43. Perceived Availability of Campaign Information from Television News by Satisfaction with Campaign Coverage.

Type of Information	<u>Perceived Availability</u>		<u>Significance of Difference</u>	
	<u>Mean Distance to Television News</u>			
	Satisfied Respondents	Critical Respondents	t-value	df
Candidate Leadership Abilities	80	110	-1.74*	78
Voting Records	90	106	-0.92 ns	78
Campaign Promises	85	102	-1.04 ns	78
Mudslinging	95	89	0.22 ns	78
Who's Ahead in the Polls	99	81	0.85 ns	77

*p < .05 (one-tailed)

**Mean interpoint distances to "television news" are presumed to indicate the extent to which a type of information is perceived to be available from, or emphasized by, campaign coverage on television. Small means indicate a high degree of availability or emphasis.

Table 44. Perceived Availability of Campaign Information from Newspaper Stories by Satisfaction with Campaign Coverage.

Type of Information	<u>Perceived Availability</u>		<u>Significance of Difference</u>	
	<u>Mean Distance to Newspaper Stories</u>			
	Satisfied Respondents	Critical Respondents	t-value	df
Candidate Leadership Abilities	79	113	-1.62 ns	80
Voting Records	70	115	-2.28*	79
Campaign Promises	79	113	-1.74*	79
Mudslinging	103	102	0.05 ns	79
Who's Ahead in the Polls	93	88	0.27 ns	79

*p < .05 (one-tailed)

**Mean interpoint distances to "newspaper stories" are presumed to indicate the extent to which a type of information is perceived to be available from, or emphasized by, campaign coverage in newspapers. Small means indicate a high degree of availability or emphasis.

statistical significance even when seemingly substantial and noteworthy differences were apparent. Nevertheless, the pattern of results appeared to be consistent with apriori expectations of validity and several were statistically significant. Satisfied respondents perceived that television news provided significantly more information about candidate leadership abilities than did respondents who were not satisfied and critical of news media coverage. Satisfied respondents also seemed to perceive greater availability of substantive information from newspaper coverage of the campaign, including significantly more information on voting records than was perceived by critical respondents.

Table 45 was derived by collapsing the results in Tables 43 and 44, so as to examine perceptions of the availability of campaign information classified as either substantive or consummatory. Satisfied and critical respondents do not appear to differ greatly with regard to the perceived availability of consummatory information from television and newspaper coverage. Satisfied respondents said the distance between consummatory types of information and "television news" was 93 units on the average; the average distance for critical respondents was 91 units. The two groups do, however, have different perceptions of the availability of substantive news, as well as its availability relative to consummatory news. Satisfied respondents perceived that substantive news received more attention from news media than did the critical respondents. The average distance between substantive news and television, for example, was 85 units for

Table 45. The Perceived Availability of Two Classes of Campaign Information Among Satisfied and Critical Respondents.

Group	Perceived Availability From Television News		Perceived Availability From Newspapers	
	Substantive Information	Consummatory Information	Substantive Information	Consummatory Information
Satisfied with News	85	93	77	92
Critical of News	108	91	118	101

*Cell values represent mean interpoint distances between a type of information and a news medium. These distances are presumed to indicate the perceived availability of that information from the medium.

**Means for substantive information are values averaged across the two relevant types of campaign news: "candidate leadership abilities" and "voting records." Means for consummatory information are values averaged across three types of news: "campaign promises," "mudslinging" and "who's ahead in the polls."

satisfied respondents and 108 units for respondents who were critical of news media coverage. Satisfied respondents also appeared to think that substantive news was emphasized more than consummatory information, whereas critical respondents had precisely the opposite perception. Satisfied respondents located substantive news 85 units from television, and located consummatory news further away (93 units). In contrast, critical respondents located consummatory news 91 units from television, and located substantive news further away--108 units from television.

This difference is even more apparent in Table 46 which shows how the two groups would rank order the availability of the five types of campaign news and information from the media, based on their perceptions as measured by the Galileo techniques. A Spearman's rho correlation coefficient was calculated and indicated an inverse relationship between the rankings for satisfied and critical respondents ($\rho = -.60$ for newspapers; $-.90$ for television, $p < .05$). That these two groups have precisely the opposite perceptions of what kinds of campaign information were emphasized by the news media might very well explain why one group was satisfied with the coverage and the other group was not. The critical factor appears to be the perceived availability of substantive campaign news and information.

These results conform to the apriori expectations that would indicate valid measurement and interpretation. The results of the Galileo method appear to agree with those obtained independently by conventional measurement techniques, indicating they have succeeded in

Table 46. Rank Orderings of the Availability of Five Types of Campaign Information for Two Groups of Respondents.

<u>Availability from Television News and from Newspaper Stories</u>	
Satisfied Respondents	Critical Respondents
Availability from Television News	
1. Candidate Leadership Abilities	1. Who's Ahead in the Polls
2. Campaign Promises	2. Mudslinging
3. Voting Records	3. Campaign Promises
4. Mudslinging	4. Voting Records
5. Who's Ahead in the Polls	5. Candidate Leadership Abilities
Availability from Newspaper Stories	
1. Voting Records	1. Who's Ahead in the Polls
2. Campaign Promises	2. Mudslinging
3. Candidate Leadership Abilities	3. Campaign Promises
4. Who's Ahead in the Polls	4. Voting Records
5. Mudslinging	5. Candidate Leadership Abilities

measuring the same phenomena. Some people agreed that news media coverage of the campaign provided them with the information they want and need to decide how to vote. These same people provided Galileo responses indicating they perceived a greater media emphasis on substantive campaign news and information than did people who were not satisfied with the coverage. While the magnitude of these differences was not always enough to overcome the small sample size and attain significance, the general pattern of results appear to have validated the Galileo method. Nevertheless, a more rigorous test of validity was also conducted, and is reported in a subsequent section of this dissertation.

The results here also revealed an important advantage of the Galileo method--the metric multidimensional scaling techniques captured the component perceptions that underlie overall audience evaluations of news media. While Galileo method provides essentially the same information as conventional methods, it can also provide much more. In this case, the techniques provided some additional insight into the underlying dimensions and causes of dissatisfaction with news media coverage of the campaign in an economical fashion.

Construct Validation

The uses and gratifications literature indicates that measurements of audience perceptions or evaluations of media have seldom been validated (Becker, 1979; McLeod and Becker, 1981). Most uses and gratifications studies have been merely descriptive--taking measurements, presuming that they are valid, and then describing

audience perceptions of mass media. McLeod and Becker (1981) note that some studies have provided evidence of reliability and "pragmatic" validity in the course of their investigation, by demonstrating consistency and stability of measurements. For example, Becker (1979) used factor analysis to determine that the underlying dimensions for measures of gratifications sought from media are fairly stable across data sets and over time, but that they vary somewhat with the choice of items and the context in which the media are used. McLeod and Becker (1981) also cited efforts by Blumler and others to employ and compare gratification measures in a wide variety of cultures and non-political contexts. Lometti et al. (1979) demonstrated that audience members can differentiate among media and apparently do so according to their ability to satisfy different needs and desires. The authors found these dimensions were consistent with the items and dimensions developed in early uses and gratifications studies, thereby providing evidence of their validity.

But few studies have examined the validity of gratifications measures systematically (Becker, 1979; McLeod and Becker, 1981). The most comprehensive and demanding strategy is called construct validation, a process that uses established theory to predict expected interrelationships among a series of measurements. Construct validation is difficult to distinguish from theory construction because it plays such an integral part. It is an ongoing process in which methods and conditions are varied to establish generalizability, and patterns of findings are established and replicated. Hypotheses about

these expected patterns and relationships are derived from existing theory and then tested. Both the methods and the theory must be correct to support the hypotheses. If either are invalid, the predicted relationships will not emerge. In this way, theory and method are validated simultaneously.

McLeod and Becker (1981) found little evidence of such systematic investigation of measurement quality in their review of the uses and gratifications literature. They concluded:

Construct validation, evaluation of the items through the testing of hypotheses, has been thwarted by the failure to integrate gratifications into communication theory and to examine their effects.
(p. 83)

The authors demonstrated, however, that one can find examples in the literature from which valid measurement of audience gratifications and perceptions can be inferred because some studies demonstrated significant effects or relationships with other variables. Becker (1976) found that surveillance-seeking motives for using political content from media predicted exposure and attention to the televised 1973 Senate Watergate Hearings, even after party affiliation and habitual public affairs TV viewing were held constant through statistical controls. This suggested that the gratification measures were reliable, and were both conceptually and empirically distinct from mere exposure to the media. On the other hand, McLeod, Durall, Ziemke and Bybee (1979) found that habitual use of public affairs media was the best predictor of viewing the 1976 presidential debates. Significant correlations between debate viewing and seeking either

surveillance or campaign excitement gratifications became non-significant after controlling for demographics, political interest and habitual media use. Surveillance gratifications did, however, significantly predict the use of news media during the campaign.

McLeod and Becker (1981) reviewed a work in progress (McLeod et al., 1982), reporting that individual gratification items successfully predicted debate viewing during the 1976 presidential election. Debate viewing was correlated with such gratifications as wanting to enjoy the excitement of the election race ($r = .24$), to learn about the personal qualities of the candidates ($r = .21$), and to learn where the candidates stand on the issues ($r = .20$). But these relationships were also differentiated by the needs of viewers, in a logical pattern that suggested validity. The debate viewing of people who had already decided for whom to vote was most influenced by a desire to enjoy the excitement of the race ($r = .26$). The debate viewing of undecided voters, on the other hand, was most influenced by a desire to make up their minds ($r = .39$).

In a similar manner, McLeod, Becker and Byrnes (1974) found that information seekers were less likely to show an agenda-setting effect from newspaper reading than readers who sought other, non-surveillance gratifications. This established gratifications sought as a potential contingent condition for media effects, while indicating again that the concepts and their traditional measures were empirically distinct from media exposure. This also confirmed an earlier study by Blumler and McQuail (1969) that found that gratifications sought interacted with

media exposure to produce significant effects. British voters were provided with 8 reasons for watching party broadcasts and 9 reasons for avoiding them, and were asked how much each reason applied to them personally. These responses were aggregated to produce an index of "strength of motivation" for viewing. The index not only correlated with the number of broadcasts viewed by these respondents, but it also interacted with campaign exposure to predict gains in political knowledge and shifts in party attitudes. Voters who said they watched "to remind me of my party's strong points" showed higher levels of selective exposure than those seeking surveillance gratifications. Although Blumler and McQuail (1969) do not appear to have intended this to be a test of validity, this pattern of theoretically consistent findings could not have been attained with invalid measurement.

The same can be said for most of these studies. But the only systematic attempt at construct validation appears to have been a 1974 study by McLeod and Becker, which used political communication effects to validate traditional gratification measures. The authors called for a compromise between the powerful and limited effects models of mass media. In their "transactional model," audience orientations would combine additively or multiplicatively with media content to produce a wide range of possible audience effects. Within this framework, McLeod and Becker (1974) derived hypotheses designed to validate the measures and explicate the theory.

Respondents in their sample of 356 young and older voters were provided with the usual list of items representing gratifications

sought from media use and reasons for avoiding media. Zero-order correlations between these gratification dimensions and media exposure never exceeded $r = .20$, indicating relative independence. Gratifications sought were interrelated, but their correlations were not so high as to preclude an understanding of their differentiated impact on media effects. The average intercorrelation was $r = .32$. Gratifications sought were not related to the avoidance items.

This provided some evidence for reliability, convergent validity and discriminant validity. But the critical question was whether these clusters of gratification items would add anything to the prediction of 14 political effects variables, beyond the variance accounted for by mere exposure to the news media. This would determine whether the gratification measures were more than simply surrogates for media use, and represented concepts of theoretical relevance and value. McLeod and Becker (1974) specified a multiple regression model in which 14 possible political effects were treated as separate dependent variables. The independent variables included items measuring media exposure, gratifications sought and avoidances. The authors maintained the individuality of specific items by entering groups of variables into the regression as a block. The first block to be entered included all of the media exposure items. Although each of the 14 political effects were chosen because they were known or thought to be related to media use, mere exposure was a significant predictor of political effects in only 10 of the 28 tests. Media exposure had the strongest effect on issue accuracy ($R = .28$, $p < .01$) and on watching the

convention ($R = .35$, $p < .01$). In the second step, the block of gratifications items was added to each of the regressions. Gratifications sought from media use accounted for more variance than media exposure, and were significant predictors in 18 of the 28 tests. In each of these cases, F-tests indicated that the gratification measures accounted for significant variance in the political effects variables, over and above the effects of mere news media exposure. The effects included election night media use and convention viewing ($R = .51$; $R = .50$), political discussion ($R = .49$), campaign activity and interest ($R = .49$; $R = .42$), issue accuracy ($R = .39$) and probability of voting ($R = .37$).

The authors also investigated the strongest effect predictions for each gratification dimension separately, partialling for relevant exposure and control variables. Most of these significant relationships held even after controlling for education and political variables considered to be causally prior to the 14 effects examined. Of the 11 significant zero-order correlations between media exposure and political effects, only six remained significant after controls for political interest and education were introduced. By contrast, 24 zero-order correlations between gratifications sought and political effects were significant, and 18 remained significant after controlling for political interest, education and media exposure. This provided a rigorous, systematic demonstration that the gratification items measured concepts that were distinct from news media exposure and were of theoretical and practical value in their own right. In this way,

McLeod and Becker (1974) simultaneously validated their measures while advancing theoretical knowledge of the factors that motivate news media use and political behavior.

McLeod and Becker (1974; 1981) promoted the use of media effects analysis to validate measures of audience gratifications and perceptions because, they argued, gratifications research was not sufficiently developed as a theory. As a result, the authors chose to treat gratifications as independent variables that might supplement or interact with other factors to produce effects.

This dissertation relied on the McLeod and Becker (1974) study as an example of systematic, construct validation, but it differs in one important regard. This dissertation is concerned with the impact of audience evaluations on subsequent information seeking and news media use, and therefore news media exposure or use was treated as dependent variables--effects that could be predicted from audience perceptions and evaluations of media coverage. Fortunately, a considerable body of theoretical knowledge has developed in the uses and gratifications perspective since 1981, providing a basis for the specification of hypotheses necessary in construct validation. While the uses and gratifications perspective still falls short of "established" theory, an expectancy-value model provided an appropriate and convenient set of expected interrelationships among variables with which to assess construct validity. It also provided the necessary key to understanding the impact that audience perceptions might have on news media exposure, campaign information seeking, and ultimately, meaningful participation in the democratic process.

CHAPTER VII

EFFECTS ANALYSIS AND CONSTRUCT VALIDATION

Exploring the Impact of Audience Perceptions

The value of this research would be greatly enhanced if the audience perceptions described thus far were shown to have some actual influence on news media use, campaign information seeking or other relevant behavior. This research has assessed the perceived value of five types of campaign information and their availability from the news media. By comparing the information that respondents value with what they perceive to be available from the news, it was possible to conclude that news media coverage of the presidential election campaign did not fully satisfy the audience's need and desire for substantive information. This raises the question of what the possible consequences might be when the news media fail in their responsibility to satisfy the information needs of the audience/electorate, or what the news media might have to gain by providing more substantive campaign coverage.

Recent developments in media uses and gratifications research may hold the key to understanding the effects of news media performance on the ability and willingness of the electorate to inform itself and participate in the democratic process. This contemporary research suggests, in effect, that individuals will expose themselves to campaign coverage in the news media to the extent that they expect this activity will satisfy their needs or interests. Thus, audience

perceptions or evaluations of news media coverage may have a decisive impact on news media use and information seeking during a campaign. If audience needs and interests are not fully satisfied, as these data clearly suggest, the news media may actually inhibit democratic participation by inadvertently discouraging people from following the campaign in the news. This might also provide an incentive for news media to improve their campaign coverage, and would suggest they have greater freedom and cause to do so than generally thought. By exploring the impact of audience perceptions on news media use during the campaign, it was possible to better understand the nature of this suspected problem and how it might be remedied.

Validation Through Effects Analysis

This analysis of possible effects also provided an opportunity for construct validation, by comparing observed interrelationships among variables with patterns predicted by theory. Although they have not yet achieved the status of "established" theory, expectancy-value models of media consumption make fairly clear predictions about the impact of audience perceptions on media use--individuals will expose themselves to mass media if they expect such activity will result in outcomes they value (Galloway and Meek, 1981; Palmgreen and Rayburn, 1982; Rayburn and Palmgreen, 1984). In this manner, the theory or model provides a way to explore the actual impact of audience perceptions and at the same time validate the methods used here to measure them.

The expectancy-value approach to media uses and gratifications suggests that when the audience evaluates a medium, it takes into account both the outcomes that it values and its expectations of obtaining those outcomes as a result of using that medium. The methodological implications should be clear--the theory requires that media users assess not only their expectations of the medium and its content, but also their own needs, values and interests. Such an evaluation of news media content was made possible in this research by comparing the types of campaign information that respondents perceived to be most useful, interesting and valuable with the types of information they perceived the news media to emphasize most in their coverage of the campaign. To the extent that news media content failed to satisfy the audience's needs or interests, expectancy-value models would predict decreased information seeking or news media use. In this way, the test can be used to advance our knowledge of the problem as well as communication theory and methods.

The operationalizations used in this research were easily restated in the precise language of expectancy-value theory. Audience "expectations" were measured by examining their perceptions of the availability of particular types of information or the extent to which it was emphasized by coverage in a news medium. These expectations were taken to represent the perceived likelihood of obtaining a particular type of information from a medium. Measurements were also taken to determine the perceived "value" of this information, including its decisional utility and interest value. To the extent that these

expectations and values were measured with validity, the theory suggests that their products will predict news media use or exposure. This dependent variable provided a good external criterion for validity because it is a self-reported behavior and was measured with a conventional survey item.

These procedures, of course, raised the question of whether it was theory or the method that was being tested. Typically, one assumes that the measures are valid and then tests the theory, or vice versa. The construct validation approach, however, provides an alternative which makes no such assumptions and validates theory and method simultaneously. Woelfel and Fink (1980) note that measurement rules necessarily represent an integral part of a successful theory. These measurement rules are typically implied by the theory or derived directly from it. Such choices of measurement rules, in turn, have important implications for theory development and the potential capability of providing empirical support. Both the theory and methods are validated together when the measurements succeed in rendering the phenomena of interest observable, objective, simple and law-governed (Woelfel and Fink, 1980). This is achieved when systematic and predictable interrelationships are observed among variables. This validation through effects analysis promised to yield information that would be useful in developing better theory and methods. But this approach also provided a more important, "real world" test of the potential impact of news media performance and audience perceptions in a democratic society and re-market media system.

Operationalizations and Procedures

Convenient operationalizations for the expectancy and value concepts were apparent from the Galileo questionnaire. Three types of audience "values" were examined: (1) Instrumental Utility or Decisional Value, operationalized by the distance between a type of campaign information and the concept "decide how to vote," (2) Interest Value, the distance between a type of information and the concept "interesting," and (3) Personal Value, the distance between a type of campaign information and the concept "yourself." Each of these operationalizations were consistent with Galileo theory, and the latter operationalization was derived directly from it (Woelfel and Fink, 1980). Again, the smaller the perceived distance, the greater the presumed value along that particular dimension. For example, the smaller the perceived distance from the concept "decide how to vote," the more useful that information was perceived to be.

The "expectations" that people associate with news media use can be conceived in terms of the likely outcomes of that activity--the perceived likelihood of receiving a particular type of campaign information. This was operationalized as the distance between concepts representing a news medium and a type of information. The smaller the perceived distance, the greater the presumed expectation of receiving that type of information from the medium.

Expectancy-value theory posits that neither expectations nor values alone will predict media use or exposure, but that products of these two variables will reveal such a functional relationship

(Galloway and Meek, 1981; Palmgreen, 1984). These expectancy-value products were formed by first multiplying a respondent's expectancy score for a particular type of information by the corresponding value score. Again, these "scores" were expressed as estimated distances between concepts. This resulted in five expectancy-value products for each respondent--one for each type of information available from a medium. These five products were then summed to form an index representing, essentially, the extent to which one's values (V_i) and expectations (E_i) were congruent. The general formula for these expectancy-value indexes can be written as:

$$EV = (E_1 * V_1) + (E_2 * V_2) + (E_3 * V_3) + (E_4 * V_4) + (E_5 * V_5)$$

where E_1 represents the extent to which one expects to obtain "Type 1" information and V_1 represents the extent to which one values that particular type of information. Expectancy-value products ($E_i * V_i$) were calculated for each of the five types of information and then summed, producing an expectancy-value index.

Interpreting these products and their sums requires a review of the Galileo measurement procedures. Under these rules, a respondent would indicate that he or she greatly valued "Type 1" information by providing a small "value score" or estimate of the distance between the concepts representing that information and "interesting." In other words, the respondent would signify that the concepts were similar or associated by locating them close together. If that respondent also expected to receive that type of information from a news medium, he or she would perceive a small conceptual distance between that information

and the medium and report a small "expectation score." The concept representing "Type 1" information would then be located close to both "interesting" and the news medium, indicating that the respondent thought it was both interesting and available. The product of these two small numbers would be a relatively low expectancy-value score. If, on the other hand, this same respondent did not expect to receive this valued type of information, he or she would perceive a large conceptual distance between "Type 1" this information and the news medium. The product of this small value score and relatively large expectation score would be a relatively large expectancy-value score. In other words, the product of a small number and a larger number will be greater than the product of two small numbers. In this manner, the summed expectancy-value products or index will be small for respondents who expect to receive information they value and large for those whose expectations and values are not congruent.

Separate expectancy-value indexes were computed for newspapers and television news, and for each of the three different operationalizations of "value," interest value, decisional value and personal value. This created six expectancy-value indexes, representing: (1) the Interest Value of campaign information provided by Television News, (2) the Interest Value of campaign information provided by Newspaper Stories, (3) the Decisional Value or instrumental utility of Television News coverage, (4) the Decisional Value or instrumental utility of Newspaper coverage, (5) the Personal Value assigned to Television News coverage, and (6) the Personal Value

assigned to Newspaper coverage of the campaign. Each respondent was assigned a score for each of the six indexes, using the above formula.

The six indexes of expectancy-value products were then correlated with several variables representing possible effects or validation criteria, including newspaper use, exposure to television news, attention to news about the campaign, and satisfaction with campaign coverage in the news media. Satisfaction with News Coverage was measured with the 5-point Likert scale discussed earlier. Attention to Campaign News was measured with a three-level ordinal scale. A Television News Exposure index was constructed by summing the responses to items which asked how many times per week respondents watched four different types of TV news programs--the local 6 o'clock news, the national network evening news, the local 11 o'clock news, and "other TV news shows like Nightline, Face the Nation and 60 Minutes." A Newspaper Use index was also constructed by summing three similar items which asked how many days per week respondents read stories about politics on the front page, the editorial and opinion pages, and the inside pages of the daily newspaper. Reliability estimates for the news media use and exposure indexes yielded Cronbach's alpha coefficients that exceeded .80. These estimates can be interpreted as the average of all possible split-half correlations, and were calculated using SPSS procedures.

Indexes of the values and expectations associated with television coverage were expected to predict exposure to television news, and expectancy-value indexes for newspaper coverage were expected to

predict newspaper use. These relationships were predicted to be stronger than the correlations between use of a news medium and the non-corresponding expectancy-value indexes. This would provide a measure of discriminant validity. On the other hand, the expectancy-value indexes for both television and newspaper coverage were expected to correlate with News Satisfaction and Attention to Campaign News, dependent variables that were not medium-specific.

Expectancy-value theory suggests that audience members who have come to expect that news media will provide them with campaign information they value would continue to expose themselves to election news. On the other hand, audience members who have not been gratified should evaluate the news negatively and would be discouraged from continued exposure, having learned not to expect outcomes they value. The first phase of this research was designed to determine specifically what respondents valued most in news media coverage of the campaign. To the extent that respondents valued substantive campaign news and received consummatory information, as these initial results suggest, one would predict negative evaluations of news media, decreased satisfaction and perhaps even decreased news media use. But predicting such a decrease in news media use would require that high quality information be readily available at reasonable cost from other sources--an assumption that may be somewhat dubious. Ungratified media users who desire substantive political information may have no real alternative, a factor that may lead to continued news media use.

Standardization--Rationale and Procedures

Correlations of expectancy-value products with these external criteria, however, first required a minor transformation of the data to compensate for possible error in the use of the Galileo yardstick. Discussions with the interviewers indicated that respondents understood the concept of metric separation estimates and expressed judgments that were relative or proportional to one another. Interviewers were less certain, however, that these estimates were made proportional to the specific yardstick that was provided. These comments and an examination of the raw data suggested that the measurements might be proportional within raters, but that between-rater measurements might not be comparable due to individual differences in the "size" of yardstick used.

To control or compensate for this possible source of systematic error, a z-transformation was performed on the sets of measurements provided by each respondent or rater. A mean and standard deviation was calculated for each individual rater, based on his or her distribution of all perceived distances. Each distance estimate was then transformed or standardized by subtracting the individual's mean and dividing by his or her standard deviation in measurement. In effect, the mean and variance for each rater was held constant so as to ensure their estimates were comparable or to scale with other raters.

Data transformations are not normally required by the Galileo method--if sufficient care is taken to select an appropriate yardstick and acquaint respondents with the Galileo procedures. It should also

be noted the transformation procedures resulted in a within-person standardization and not the more conventional application in which measurements are standardized across respondents for a single variable, converting each person's score to a score relative to the sample mean. Instead, all of the scores for each respondent were converted to a score relative to that respondent's overall mean for all distance estimates.

Moreover, this transformation was only necessary when comparing Galileo estimates with conventional measurements. The yardstick problem should have no substantive effect on the aggregate cognitive maps themselves because these particular individual differences are systematic across the entire set of distance estimates for each respondent, affecting each of his or her paired comparisons in the same way. When two of these perceived distances are correlated with each other, each side of the equation is affected equally by the same source of error. Such systematic individual differences would then cancel out in the correlation procedures. This is not the case, however, when Galileo estimates are correlated with non-metric measurements. There is little reason to believe the non-metric measures would be influenced by the size of yardstick used in the Galileo procedures. As a result, this source of error would affect only one side of the equation, attenuating the resulting correlations. This error would be greatly multiplied during the calculation of expectancy-value products and indexes. For this reason the data were transformed prior to the formation of indexes based on sums of expectancy-value products.

Correlating Audience Perceptions with Effects

Once the data had been transformed, six expectancy-value indexes were calculated to represent the products of audience "expectations" of two news media and three conceptualizations of "value." These indexes were then correlated with conventional measures of external validation criteria representing possible effects of audience perceptions or evaluations of news media, including news media exposure, attention to the campaign, and satisfaction with campaign coverage. This analysis assessed not only the validity of these measurements, but also the extent to which these audience perceptions influenced news media use and attention to campaign information. In addition, these data provided opportunities for more rigorous testing of the expectancy-value model and a more thorough exploration of the impact of audience evaluations of news media coverage.

Interpreting these correlations correctly, however, required a careful consideration of how the transformation procedures would affect the measurements and their summed products. Consider again the respondent who expects to receive from a news medium the types of information he or she values most. Galileo measurements of these perceptions would produce small numbers for both the expectation scores and the value scores. After data transformation these relatively small numbers would become large negative values, because they would fall below the respondent's mean for all distance estimates. The product of these large negative values (and the sum of these products) would be a large positive score on the new, transformed index because the product

of two negative numbers is positive. The same large positive score on the index would be obtained by a respondent who did not expect to receive information he or she did not value. Galileo measurements of his or her perceptions would result in large positive numbers for both the expectation scores and the value scores because they would be larger than the average of all of his or her distance estimates. After transformation, these numbers would still be relatively large and the sum of their products would be a large positive score. In this manner, expecting to receive valued information and expecting to avoid undesired information would result in the same positive score on the transformed expectancy-value index--a score presumed to represent a high level of motivation for news media use.

Consider on the other hand, the respondent who is not very satisfied with news media content--one who does not expect to receive information he or she values most or who expects to receive information he or she values least. This respondent would be assigned a small or possibly negative score on the transformed expectancy-value index, indicating low motivation for news media use. The Galileo measurements of this person's perceptions would match small numbers indicating high expectations with large numbers indicating low levels of value, or large numbers indicating low expectations with small numbers indicating high levels of value. After transformation, these expectancy-value pairings would match negative (or small positive) numbers with relatively large positive numbers and vice versa. The resulting products would be either negative or relatively small positive scores.

Summed across the five types of information, these perceptions would result in negative or relatively small positive scores on the expectancy-value indexes.

As a result, respondents whose values for information were not matched by their expectations of news media would have lower index scores than respondents who expected to receive what they wanted from news. One would then predict positive correlations between the expectancy-value indexes and dependent variables representing effects or validation criteria because respondents who expect to be gratified are more likely to use the news media, pay attention to the campaign and be satisfied with campaign coverage.

The Impact of Audience Perceptions--Correlation Results

The zero-order correlations between the expectancy-value (EV) indexes and several dependent variables are presented in Table 47. Each of the EV product indexes correlated significantly with satisfaction with news media coverage. This provided more corroboration of the validity of the Galileo techniques used to measure expectations and values, because they correlated with the conventional measure of satisfaction. These correlations were positive, as predicted, indicating that people who expected to receive from news media what they value most in campaign information also tended to be more satisfied with news media coverage of the campaign.

The small variation in the magnitude of these correlations suggested that each of the operationalizations of value were equally effective. Substantively, this suggests that audience perceptions of

Table 47. Zero-Order Correlations Between Expectancy-Value Products and News Media Attention, Satisfaction, Exposure and Use.

Expectancy-Value Index	Satisfaction with News	Exposure to TV News	Newspaper Use	Campaign Attention
Interest Value of Television News	.25 **	.17 *	-.02	.21 *
Decisional Value of Television News	.25 **	.04	-.10	.12
Personal Value of Television News	.28 **	.18 *	-.02	.20 *
Interest Value of Newspaper Stories	.28 **	.15	.04	.25 **
Decisional Value of Newspaper Stories	.29 **	.12	.02	-.07
Personal Value of Newspaper Stories	.26 **	.11	-.02	.17 *

*p < .10

**p < .05

NOTE:

Interest value was operationalized by the distance between the concept "interesting" and each of the five types of information.

Decisional value (or instrumental utility) was operationalized by the distance between "decide how to vote" and each information type.

Personal value was operationalized by the distance between the self-concept "yourself" and each type of information.

Expectations of each news medium were operationalized by the distance between that medium and each of the five types of information.

A z-transformation was performed on these measurements to facilitate comparisons between persons in the event of yardstick error.

Indexes were then computed by summing the expectancy-value products for the five types of campaign information.

the instrumental utility or decisional value provided by news media content had as much impact on satisfaction as perceptions of the interest value of campaign coverage. Despite the small sample size ($n = 83$), these correlations were all significant at the $\alpha = .05$ level. Statistical significance, however, is not a sufficient condition for theoretical or practical significance. Although the correlations were positive and significant, the expectancy-value indexes accounted for only 6 to 8 percent of the variance in satisfaction. This might be due to marginal reliability of the metric estimates, as reported by Miller (1986), or it might indicate that satisfaction with news should be attributed primarily to factors other than audience perceptions of the value of news content. A simple correction for attenuation (Thorndike, 1982), however, indicated that the use of reliable metric data could produce correlations greater than $r = .40$, and account for 16 to 21 percent of the variance in satisfaction.

Significant and positive correlations were also obtained between attention to campaign news and the EV product indexes based on interest value and personal value of news media content. People who said they found the news coverage interesting and valuable also tended to pay more attention to news about the campaign. This suggests a link between audience perceptions and actual behavior. But while attention to the campaign increased with interest in newspaper or television coverage, the perceived likelihood that the media would provide information with decisional utility appeared to have no significant impact on audience attention to the campaign.

Attempts to link expectancy-value scores with news media use or exposure were less successful. Small positive correlations were obtained between perceptions of the value of television news content and exposure to that medium. The perceived interest value and personal value of television news content appeared to be related to exposure to television news, but these correlations only attained significance at the $\alpha = .10$ level. It had not yet been necessary to relax the arbitrary standard for statistical significance, but at this point it seemed justified because of the small sample size, the exploratory nature of this particular exercise, and the fact that the risk of overlooking a relationship was greater than the risk of reporting a spurious one. In either case, it is worth pointing out once more that these audience perceptions accounted for little variance in the dependent variable--3 percent or less.

It should also be noted that audience perceptions of the value of television news content were not related to newspaper use, nor did perceptions of newspapers appear to influence exposure to television news. This might attest to the discriminant validity of the measurement techniques. However, this argument is weakened by the fact that significant correlations were not obtained between perceptions of the value of newspaper content and actual newspaper use.

Altogether, these results are less than conclusive. They indicate that people are satisfied with news media coverage to the extent that it provides the types of information they find most valuable, useful and interesting. And they pay attention to campaign coverage they

value and find interesting. But while the obtained correlations provide some evidence of valid measurement, they do not suggest that audience perceptions have a strong impact on news media use or exposure. Small sample size would certainly make it more difficult to attain statistical significance. But the relationships between audience perceptions and satisfaction or attention to campaign news were strong enough, however, to overcome this obstacle whereas the effects of audience perceptions on news media use were often not.

An Expectancy-Value Regression Model

The correlation procedures were a first step toward construct validity and exploring the impact of audience perceptions, but a multivariate approach was thought to be more appropriate and likely to produce more definitive results. It is quite possible that some information about audience expectations and values was lost when the EV products were simply and rather arbitrarily aggregated to form the various indexes. By using multiple regression techniques, it was possible to avoid this potential problem and build a model that more closely approximated expectancy-value theories of media use. The regression models allowed for separate weighting of each expectation and value term as well as the testing of interactions--individually weighted expectancy-value product terms. This also allowed for the creation of a model that maximized the predictive ability of these audience perception data.

Multiple regression analysis was used to assess the unique effects of audience "expectations" of the types of information available from a

news medium and the extent to which these types were "valued" (or found interesting or useful) by respondents on newspaper use and exposure to television news. These effects were also combined in an additive model which was tested and compared with a multiplicative model based on the expectancy-value products. This analysis had three objectives: (1) to further validate the Galileo measures and their interpretation, (2) to further test and validate expectancy-value theory of media use, and (3) to explore the potential impact of news media performance and audience perceptions on news media use and campaign information seeking.

Expectations and values were operationalized as before, using the Galileo distance estimates to represent audience perceptions of the availability of five types of campaign information from TV and newspaper coverage and the extent to which this information was perceived to be interesting, useful and valued. This produced a set of five expectations for television news and five expectations for newspaper stories as well as three sets of five value estimates--one set for the interest value of each of the five types of information, a second set representing their decisional utility, and a third set representing their personal value. Each set of five values or expectations was treated as a single block of variables to be entered hierarchically into a regression model, to examine their individual and combined effects on two separate dependent variables--newspaper use and exposure to television news.

A set of "values" was entered on the first step to determine the proportion of variance in the dependent variables accounted for by

value estimates alone. In this way, for example, it was possible to determine the extent to which newspaper reading or television news viewing was the result of audience interest in campaign information in and of itself. Similar assessments were made for the impact of decisional utility and personal value on news media use, and these assessments could then be compared. In the second step, the appropriate set of expectations (either TV or newspaper) was added to the model to determine whether their inclusion yielded a significant increase in the variance accounted for. For example, having determined the effect of audience interests on television news viewing, one could measure the incremental effect of audience expectations about the availability of that information from television news. These procedures were reversed to determine the individual effect of expectations alone and the incremental impact of audience perceptions of interest, value or utility.

When a set of expectations and a set of values were both included in the model, the combined effect provided a test of the adequacy of an additive model of expectancy value. Expectancy-value theory posits that neither expectations nor values alone predict news media use, but that a functional relationship will emerge when both are present. It is unclear, however, whether an additive or multiplicative model provides more explanatory power. A comparison of the variance accounted for by the additive and multiplicative models would provide such an answer. Multiplicative models were defined by the expectancy-value products ($E_i * V_i$), calculated again as they were in the

correlation procedures prior to their aggregation and the formation of the various indexes. These calculations produced six sets of five expectancy-value products, one set for each combination of expectations of television or newspapers with one of three types of "value." (It should be noted that the general theory or model required that each set include only the five corresponding expectancy-value products, not the entire 25 possible interactions between five values and five expectations in a particular regression model. There was no substantive or theoretical rationale for testing the effects of non-corresponding products such as the interaction of audience interest in voting records with its expectations that television will provide news about mudslinging.)

The expectancy-value products were also entered as a third step in the regression to see whether they yielded a significant increment over and above the variance accounted for by the additive model. This indicated whether the products provided additional information about the dependent variable that expectations and values alone cannot provide.

Expectancy-Value Regression Results

The set of five audience interest estimates were entered in the first step in a regression predicting exposure to television news. Table 48 shows that, together these five estimates accounted for 11 percent of the variance in television news exposure, and failed to produce a statistically significant main effect ($R = .33$; $F = 1.4$, 5 d; $p > .05$). The set of five audience expectations of television

Table 48. Hierarchical Regression Results for Expectancy-Value Models of Exposure to Television News.

Model, Step Number & Procedure	Multiple R	Overall R-Square	Overall F-Value	Change in R-Square	Incremental F-Value
Model -- Audience Interests & Expectations					
Step 1. Enter the Set of 5 Interest Value Estimates	.33	.11	1.4	---	---
Step 2. Add the Set of 5 Expectations of TV News	.57	.33	2.5 *	.22	3.3 *
Step 3. Add the Set of 5 TV News Expectation by Interest Products	.67	.44	2.4 *	.12	1.9
Model -- Decisional Utilities & Expectations					
Step 1. Enter the Set of 5 Decisional Utility Estimates	.32	.10	1.3	---	---
Step 2. Add the Set of 5 Expectations of TV News	.55	.30	2.2 *	.20	2.9 *
Step 3. Add the Set of 5 TV News Expectation by Utility Products	.62	.38	1.9	.08	1.1
Model -- Personal Value & Expectations					
Step 1. Enter the Set of 5 Personal Value Estimates	.19	.04	0.4	---	---
Step 2. Add the Set of 5 Expectations of TV News	.48	.23	1.6	.20	2.7*
Step 3. Add the Set of 5 TV News Expectation by Value Products	.54	.29	1.3	.06	0.7

*p < .05

news, however, was added to the model in the second step, yielding a significant increment (incremental $F = 3.3$; $p < .05$). This combination of audience expectations and values produced a model that significantly predicted exposure to television news ($R = .57$; $F = 2.5$, 10 d; $p < .05$), accounting for 33 percent of the total variance.

However, when the procedures were reversed, expectations alone yielded a significant main effect ($R = .43$; $F = 2.5$, 5 d; $p < .05$) on the first step and accounted for 18 percent of the variance in television news viewing. Adding the set of five audience interest estimates in the second step did not yield a significant increment. While it boosted the explanatory power of the model to 33 percent of the variance, this step required an additional 5 degrees of freedom. As a result, while the additive model of both expectations and values significantly predicted television news viewing, the set of five values appeared to contribute little to the model. Very similar results were obtained with an additive model of television news expectations and the perceived decisional utility of its campaign coverage.

Table 49 reveals that the set of five expectancy-value products was the best single predictor of exposure to television news ($R = .43$; $F = 2.6$, 5 d; $p < .05$), accounting for 19 percent of the variance. However, this was only a marginally better predictor than expectations alone, which accounted for 18 percent of the variance in television news viewing. Furthermore, Table 48 shows that the additive model that combined audience expectations and interests accounted for 33 percent of variance in news viewing, and the expectancy-value products did not

Table 49. The Main Effects of Expectation and Value Estimates and Products on Exposure to Television News.

Set of Variables	Multiple R	R-Square	F-Value
Interest Value Estimates	.33	.11	1.4
Decisional Utility Estimates	.32	.10	1.3
Personal Value Estimates	.19	.04	0.4
Expectations of TV News	.43	.18	2.5 *
Television Expectations and Interest Products	.43	.19	2.6 *
Television Expectations and Utility Products	.22	.05	0.6
Television Expectations and Personal Value Products	.36	.13	1.6

*p < .05 with 5 df.

**Each set of variables includes five estimates or products. Main effects were assessed after each set was entered into the regression model during step 1.

yield a significant increment when they were added as a third step in the hierarchical regression. Although the inclusion of this interaction term increased the explanatory power of the model to 44 percent of variance in the dependent variable, it also raised the required degrees of freedom to 15.

These regression procedures were repeated using audience perceptions of the decisional utility of campaign information provided by television news. When the five decisional utility estimates were entered into the regression, they failed to produce a significant main effect and accounted for only 10 percent of the variance in television news viewing. This was slightly less than the explanatory power of audience interests alone (see Table 49). But again, when audience expectations of television news were added in the second step in Table 48, both the increment and the overall model were significant (incremental $F = 2.9$; $p < .05$; overall $R = .55$; $F = 2.2$, 10 d; $p < .05$). This additive model based on decisional utility of television news coverage accounted for 30 percent of the variance in television news viewing, slightly less than the model based on audience interests.

The product of audience expectations and perceived utilities produced neither a significant main effect by itself nor a significant increment to the additive model. Considered alone, the expectancy-value products accounted for only 5 percent of the variance in television news viewing. When these interaction terms were added in the third step of the regression, the model accounted for an additional 8 percent of the variance. But the additional expenditure of 5 degrees

of freedom caused the overall model to become non-significant. In short, the additive model appeared to provide the best predictor of television news viewing, although again much of its explanatory power could be traced to audience expectations alone.

Another regression assessed the predictive ability of expectancy-value models based on the Galileo estimates of personal value and expectations of television news. During the first step, the set of five personal value estimates proved to be poor predictors of television news viewing and accounted for only 4 percent of the variance (see Table 48). Audience expectations which earlier produced a significant main effect on their own, also yielded a significant increment when added to the model in the second step (incremental $R = .20$; $F = 2.7$; $p < .05$). Nonetheless, Table 48 indicates the additive model was not a significant predictor of television news viewing. Although it accounted for 23 percent of the variance, the model required 10 degrees of freedom. Here again, expectations alone proved to be an adequate predictor of television news viewing, and the expectancy-value products produced neither a significant main effect nor a significant incremental contribution.

A similar regression analysis was performed using newspaper use as the dependent variable. The results are displayed in Tables 50 and 51, and indicate these efforts were less successful, with outcomes similar to those obtained during the correlation procedures. Neither audience interests, perceived utilities, nor personal values successfully predicted newspaper use. Of these three conceptualizations of value,

Table 50. The Main Effects of Expectation and Value Estimates and Products on Newspaper Use.

Set of Variables	Multiple R	R-Square	F-Value
Interest Value Estimates	.29	.09	1.1
Decisional Utility Estimates	.33	.11	1.4
Personal Value Estimates	.21	.05	0.5
Expectations of Newspapers	.18	.03	0.4
Newspaper Expectations and Interest Products	.30	.09	1.1
Newspaper Expectations and Utility Products	.30	.09	1.1
Newspaper Expectations and Personal Value Products	.21	.05	0.5

*None of the F-values were statistically significant at the $\alpha = .05$ level with 5 df.

**Each set of variables includes five estimates or products. Main effects were assessed after each set was entered into the regression model during step 1.

Table 51. Hierarchical Regression Results for Expectancy-Value Models of Newspaper Use.

Model, Step Number & Procedure	Multiple R	Overall R-Square	Overall F-Value	Change in R-Square	Incremental F-Value
Model -- Audience Interests & Expectations					
Step 1. Enter the Set of 5 Interest Value Estimates	.29	.09	1.1	---	---
Step 2. Add the Set of 5 Expectations Newspapers	.32	.10	0.6	.02	0.2
Step 3. Add the Set of 5 Newspaper Expectation by Interest Products	.40	.16	0.6	.06	0.6
Model -- Decisional Utilities & Expectations					
Step 1. Enter the Set of 5 Decisional Utility Estimates	.33	.11	1.4	---	---
Step 2. Add the Set of 5 Expectations of Newspapers	.42	.17	1.1	.06	0.8
Step 3. Add the Set of 5 Newspaper Expectation by Utility Products	.46	.21	0.8	.04	0.4
Model -- Personal Value & Expectations					
Step 1. Enter the Set of 5 Personal Value Estimates	.21	.05	0.5	---	---
Step 2. Add the Set of 5 Expectations of Newspapers	.37	.14	0.8	.09	1.1
Step 3. Add the Set of 5 Newspaper Expectation by Value Products	.43	.18	0.7	.05	0.5

*p < .05

audience perceptions of decisional utility accounted for the most variance (11 percent) in newspaper use, but failed to attain statistical significance. In this regard, the results were similar to those obtained during attempts to predict exposure to television news.

These results differed, however, in that audience expectations of newspaper coverage accounted for an insignificant 3 percent of the variance in newspaper use. It should be noted that these particular failings are not inconsistent with expectancy-value theory. However, the data failed to support the theory when additive and multiplicative combinations of expectations and values failed to predict newspaper use. Decisional utility estimates made for the best additive model, accounting for 17 percent of the variance in newspaper reading. However, this model required 10 degrees of freedom and failed to attain statistical significance. None of the incremental contribution or a significant main effect. In short, none of these models adequately predicted newspaper use.

Unreliability in the audience perception data and the news media indexes, however, could have played a significant role in suppressing the true strength of these relationships. Using the general correction for attenuation formula (Thorndike, 1982), it was possible to control for the effects of unreliability and provide estimates of the "true" multiple correlations. These calculations suggest that the multiplicative model could account for up to 35 percent of the variance in newspaper use, and the additive models could account for 40 to 69 percent of the variance.

Validation and Effects Analysis--Summary

The zero-order correlations between the expectancy-value product indexes and the measures of news media exposure, attention and satisfaction provide some evidence to validate the Galileo measures and their interpretation. But while many of these correlations were significant, they did not suggest that audience perceptions had a strong impact on news media use and campaign information seeking. Audience evaluations of news media coverage accounted for little variance in the dependent variables, using simple correlational techniques.

Each of the expectancy-value product indexes correlated significantly with an independent, conventional survey item that measured satisfaction with news media coverage of the campaign. This provided some of the clearest evidence of valid measurement. People who expected to receive from the news media the types of information they valued most tended to be more satisfied with news media coverage of the campaign. Audience expectations that news media would provide interesting information also resulted in increased attention to news about the presidential election campaign. But there was no apparent relationship between the perceived decision-making utility of news media coverage and attention to campaign news.

Small sample size and marginal reliability made it more difficult to obtain significant correlations between Galileo measurements of audience perceptions and actual news media use. However, when arbitrary standards for statistical significance were relaxed, these

measurements were found to predict exposure to television news, but not the frequency of reading about politics in the newspaper.

Multiple regression models, however, were much more successful in linking audience perceptions to actual behavior. These models more closely approximated the expectancy-value formulations and retained information that may have been lost when the expectancy-value products were aggregated to construct the indexes used in correlation procedures. Both the multiplicative and the additive models successfully predicted exposure to television news. The multiplicative model of expectancy-value products accounted for 19 percent of the variance, but only marginally more variance than explained by expectations alone (18 percent). The additive model of audience expectations and values was the best predictor of television news exposure, accounting for 29 to 33 percent of the variance, depending on which operationalization of value was used. Although they were significant predictors alone, the interaction or product terms did not contribute a significant increment in the variance explained by the additive model.

In this way, multiple regression techniques were successful where the zero-order correlations were not, producing an overall pattern of results that suggested not only valid measurement and interpretation, but also the potential impact of news media performance on the information seeking behavior of the audience during an election campaign.

Although it represents something less than the "established theory" required by construct validation, the expectancy value approach allowed for the detection of systematic relationships among variables that were largely consistent with and predicted from a large body of research findings. While the zero-order correlations were less than conclusive, the regression results indicate that audience evaluations of news media coverage had a strong influence on exposure to television news. The extent to which the audience valued certain types of information appears to have had no significant impact on the frequency of television news exposure. But respondents did watch TV news to the extent that they expected to get the types of information they valued. In fact, audience expectations alone accounted for much of this variance, perhaps because respondents' perceptions of television news varied much more than did their perceived information needs or interests. Newspaper reading, however, appears to have persisted despite audience expectations or values.

CHAPTER VIII

CONCLUSIONS AND DISCUSSION

Summary of Key Findings

This dissertation sought to (1) identify the perceived information needs and interests of the audience/electorate during a presidential election campaign, (2) determine the extent to which news media coverage of the campaign was perceived to satisfy these needs and interests, and (3) explore the possible impact of these audience perceptions or evaluations on news media use and political information seeking during the campaign. A fourth, but important, goal was to determine the suitability of Galileo measurement techniques for addressing the above concerns.

A random sample of 83 Knoxville area adults was interviewed by telephone during the last few weeks of the 1984 presidential election campaign. These respondents proved willing and able to use Galileo separation estimates to express their perceptions of the value, interest and decision-making utility of five types of campaign information and their availability from news media.

Despite small sample size and marginal reliability, these estimates produced a non-random multidimensional cognitive space characterized by mean interpoint (between concept) distances of significantly different lengths and relatively small standard errors. These maps were readily interpretable and consistent with most of the

apriori predictions of how the audience would perceive and evaluate news media coverage and the campaign information it provided.

More important, a simple transformation of the data yielded significant correlations with independent, conventional measures of audience satisfaction with news coverage and attention to news about the campaign. These results not only provided additional evidence to validate the Galileo measures and their interpretation, but also indicated the importance of satisfying the information needs and interests of the audience. People who expected to receive the types of information they valued most, paid more attention to news about the campaign and were more satisfied with news coverage. Satisfaction depended primarily on the perceived availability of "substantive" news about the leadership abilities and voting records of the candidates.

Models derived from the general expectancy-value theory were used to demonstrate the potential impact of news media performance and audience perceptions on news media use and campaign information seeking. These expectancy-value models were tested with multiple regression techniques. An additive model of audience expectations and values accounted for nearly one-third of the variance in television news exposure, and less than one-fifth of the variance in newspaper use. This confirmed hypotheses that audience evaluations of the ability of television news to satisfy their information needs and interests would play a critical role in their decision to use that medium. The impact of audience perceptions on newspaper use remains unclear.

The Galileo maps indicated that the news media failed to satisfy the audience's perceived need for the substantive types of information necessary to make an informed vote decision. An analysis of these multidimensional maps revealed that respondents perceived substantive information about candidate voting records and leadership abilities was significantly more useful in deciding how to vote than consummatory news that focused on mudslinging and horse race poll results. Contrary to conventional wisdom, respondents indicted that consummatory news was no more interesting than substantive news about the campaign. In other words, the audience perceived all of the information types to be equally interesting, but substantive news was significantly more useful. This suggests that improving the quality of news media coverage would not have decreased audience interest or attention to news.

However, these data indicated the audience perceived that news media coverage of the campaign provided as much emphasis on consummatory news as it did on substantive information perceived to be useful in deciding how to vote. Further analysis of these audience perceptions indicated that substantive news was perceived to be more useful than available, and that the perceived availability of consummatory news greatly exceeded its perceived utility and demand. No such differences were found between audience interests and the perceived availability of specific types of campaign information. By providing substantive and consummatory news in apparently equal proportions, the news media may have satisfied audience interests, but

failed to satisfy the significantly greater need and desire that respondents expressed for substantive news.

Implications for News Media and Democracy

From these data, it would be difficult to argue that audience interest in the hoopla of the political "horse race" preclude the news media from informing democratic society more effectively and responsibly. The news media appear to have significantly underestimated the audience's need and desire for substantive campaign information, while overestimating its demand for consummatory news.

Although respondents may not have generally found politics to be intrinsically interesting, it does not mean the audience preferred superficial coverage, horse race journalism or sensationalism to substantive information perceived to be useful in deciding how to vote. In fact, nearly half of all respondents said they were dissatisfied with news media coverage of the campaign. And the perceived lack of substantive information was the most important factor behind this dissatisfaction.

These results tend to replicate the findings of numerous studies of media uses and gratifications (McLeod and Becker, 1981), and support the conclusions of Robinson et al. (1982) who found that news reporters and producers routinely underestimate audience interest in substantive news about public affairs. In short, the conventional wisdom about audience limitations and constraints may result in campaign coverage that is neither useful nor interesting to the audience/electorate.

This research also indicates that respondents performed their democratic responsibilities and sought campaign information in numbers that would exceed general expectations. The vast majority regularly read stories about politics on the inside pages of the newspaper, others watched the network news each evening, and many used both news media on a regular basis. These respondents also paid more attention to campaign news than their intrinsic interest alone might warrant. While 37 percent said they were very interested in the campaign, 52 percent reported paying close attention. Respondents typically felt that voting was a civic duty with important consequences and that it was necessary to rely on the news media for decision-making information.

In short, the news media reached the vast majority of respondents because they made a conscious effort to inform themselves. This effort and activity were greater than suggested by Graber (1984) or the early voting studies (Berelson et al., 1954) that still seem to pervade the conventional wisdom (Broh, 1980). However, the news media were perceived to have rewarded these efforts with campaign coverage that devoted as much attention to consummatory news as it did substantive information useful in making a vote decision.

Given the information needs and interests expressed by the audience, it came as no surprise that only half of the respondents said they were satisfied with news media coverage of the campaign. Further analysis indicated that the audience perceived that substantive campaign news was significantly more useful than available, and that

the perceived availability of consummatory news greatly exceeded its perceived value or demand.

These results were strikingly similar to those reported by Wenner (1982). Respondents in his study sought higher levels of surveillance gratifications from network news than they perceived they obtained. These same respondents perceived they obtained significantly more consummatory and non-instrumental types of gratifications than they sought.

These discrepancies have particularly grave implications for democratic society because the news media today are the primary source of information about the social and political realities to which voters must respond. Although citizens are typically held responsible for informing themselves in democratic society, their ability to do so depends partly on the quality of information made available by the news media. If, as several commentators suggest, journalists actually underestimate audience interest in substantive news necessary to make an informed vote decision, the public may be discouraged from continued information seeking from the media and may even turn away from the political process itself.

If the reward value of campaign information from mass media is insufficient, and the personal "cost" of obtaining it from other sources is too high, citizens are not likely to acquire the information they need and desire (Atkin, 1973; Downs, 1957). Such citizens are likely to remain uninformed and unable to recognize their self-interests, cast "rational" ballots or engage in meaningful political

activity. Nor can they be expected to develop or maintain much interest in politics or political participation. And they have little reason to continue seeking information from media that fail to provide it. In short, the problem threatens to make the dismal findings of the early voting studies an enduring reality or a self-fulfilling prophecy.

Further analysis of these data provided evidence that audience evaluations of news media performance and content do, in fact, have some measurable impact on news media use and campaign information seeking. By using an expectancy-value model of media use, it was possible to correlate these audience perceptions with exposure to television news and attention to news about the campaign. While these results were not entirely conclusive, they raised the possibility that news media performance does little to cultivate the ability and inclination of democratic citizens to inform themselves and participate more fully in the political process.

Respondents exposed themselves to television news and paid attention to campaign news to the extent they expected that news media coverage would provide the types of campaign information they needed and valued. Those who were dissatisfied with television coverage of the campaign watched it less often.

But the same results that draw attention to this problem and its possible consequences, also raise hope for a possible and pragmatic solution. This research indicates a middle ground may exist in which the news media can provide more substantive coverage within the constraints imposed by the audience and the economic structure of the

American media system. While there may be no clear mandate for a more substantive emphasis, the data suggest there is considerable room for improvement and no apparent penalty for doing so. In fact, it appears the news media may have an economic incentive to improve the quality of their campaign coverage.

By clarifying the information needs and interests of the audience and demonstrating the importance of satisfying these needs and interests, this research suggests that improving the quality of news content may provide the key to maintaining or increasing audience size, attention and satisfaction. This may be especially true in a highly competitive and rapidly changing market in which new communication technologies or outlets could lure away dissatisfied news consumers by offering attractive alternatives that better satisfy their needs and interests. In short, the mass media may have an economic stake in informing the public more effectively. And this research suggests it may be possible to find ways to do so, if communication research is focused more appropriately.

Implications for Theory and Methods

These results also have important implications for expectancy-value theory and the application of Galileo measurement methods in uses and gratifications research. The Galileo method was chosen because it offered several distinct advantages over conventional survey techniques. Expectancy-value theory provided a general model with which these measurements could be validated and the influence of audience perceptions on actual behavior could be explored. The results

provided support for both expectancy value theory and Galileo measurement, but also raised several important issues that should be addressed.

The expected advantages of Galileo measurement were numerous, and included assurance that the concepts used in the measuring instrument would be meaningful to respondents, and the procedures would require a smaller than average size sample and produce ratio-level data with finer gradations among observations. The Galileo method also required no prior assumptions about the dimensions along which comparisons would be made, or the interrelationships among dimensions. It would produce a multidimensional map in which all measurements were represented spatially and could be visualized simultaneously. And perhaps most important, the method allowed for direct comparisons between "apples" and "oranges," or in this case, between audience perceptions of their own needs or interests and their perceptions of media content.

This last advantage appeared to be both a blessing and a curse. In one sense, it allowed for direct comparisons that had previously not seemed possible and may provide the key for further theoretical development in uses and gratifications research. On the other hand, several problems were encountered in using the method, the most challenging of which were the proper interpretation of these complex cognitive domains and how to move the analysis of these interpoint distances beyond the mere visualization and rotation of multidimensional maps.

Respondents seemed able and willing to use the Galileo procedures to express their perceptions of the extent to which five types of campaign information were interesting, useful and available from news media coverage. Still, interviewers raised concerns that the respondents might have made separation estimates that were proportional to one another, but not relative to the yardstick that was provided. As a result, it was necessary to transform the data using a within-person standardization procedure prior to correlations with external, conventional measurements.

The data were not as reliable as might be desired. While the responses were fairly systematic and interpretable, they may have been more clear and definitive with a larger sample. Small sample size made the data more vulnerable to the effects of outliers and extreme responses, increasing the standard errors and decreasing reliability. A second potential advantage of the method also appeared responsible for the marginal reliability of the data. The results may have been more reliable with the specification of a less complex cognitive domain and less abstract concepts. However, the questions addressed by this research were, in fact, abstract.

As it turned out, small sample size appeared to pose a problem in two other ways. First, it precluded the examination of subgroups or the impact of demographics, media variables and other factors known to be related to political perceptions and media use. Second, it made it more difficult to detect significant differences, especially in multivariate analysis that required a large number of degrees of

freedom. This undercut one advantage of the Galileo method--the possibility of using smaller sample sizes.

Respondents failed to detect significant differences in the perceived interest value among five types of campaign information. Nor were they able to detect significant differences in the availability of the five types of information. This raised some concern about the quality of measurement. But why would the instrument detect the subtle but systematic differences in respondent's perceptions of the decision-making utility of these information types, and then fail to detect differences in the likelihood they would be provided by news media? It is possible that respondents were better at assessing their own needs and desires than they were at assessing the ability of news media to satisfy such demands. But this would not explain why significant differences were not detected in the audience's interest in the five types of information. Larger samples would be necessary to detect significant differences in some of these trends and render the results more interpretable.

In many cases, however, significant results were obtained as predicted, despite small sample size and marginal reliability. This attests to the strength and validity of the methodology. But perhaps more important was the rich detail provided by the multidimensional maps of audience perceptions. Components from these maps correlated with independent, conventional survey items, providing additional evidence of valid measurement and interpretation. Most convincing was the fact that people who were satisfied or critical of news media on a

conventional survey scale provided Galileo responses that rated the availability of substantive and consummatory information from news media in precisely the opposite manner. Certainly more conventional measurement techniques could have been used to obtain the same results. But while they may be more widely accepted and thus more persuasive, no conventional data gathering technique appears to offer the combined detail and relative efficiency of the Galileo method.

The fact that only weak zero-order correlations were obtained between audience perceptions and news media use can be better explained by several factors other than poor measurement. First, it would seem to attest to a pervasive challenge in social sciences--linking mental states with actual behavior--and not a problem unique to this particular method. Second, some of these low and non-significant correlations are no doubt related to the problems of small sample size and marginal reliability that have already been discussed. And perhaps most important is the fact that the nature of the expected relationship between audience perceptions and news media use is not well understood and has not been fully explicated by established theory.

The multiple regression results clearly indicate that such a relationship exists. The additive model of audience expectations and values accounted for nearly one-third of the variance in exposure to television news. This suggests that the arbitrary aggregation procedures used during the construction of expectancy-value indexes resulted in the loss of information necessary to establish significant correlations with media use variables. The regression model, on the

other hand, allowed for the individual weighting and combining of audience expectations and values. The result was R-squares that were larger than most of the previous uses and gratifications studies cited in the literature review, even though the model included none of the traditional demographic predictors of media use and relied instead entirely on measurements of audience perceptions alone.

The general expectancy-value theory clearly provided the necessary key to linking audience perceptions to news media use. These results were taken as further evidence of valid measurement and interpretation. A construct validation approach was selected because it would validate the theory and method simultaneously when systematic and predictable interrelationships among variables emerged. But for that reason it was also difficult to determine whether inconsistencies between the actual and predicted results were due to measurement problems or insufficiently developed theory.

Audience values alone failed to predict news media use, regardless of how value was operationalized. This finding was consistent with the basic assumptions of the expectancy-value approach. A significant relationship did emerge, however, when audience values were combined with their expectations of the likelihood that these needs or interests would be satisfied by using that medium. Both additive and multiplicative combinations were significant predictors of television news exposure, but the additive model accounted for considerably more variance. Moreover, the multiplicative model failed to add a significant increment to the variance explained by the additive model.

It also accounted for only marginally more variance than a model based on audience expectations alone. In fact, audience values failed to significantly improve the predictive ability of the additive model, over and above the variance explained by audience expectations alone. This was not consistent with the basic assumptions of the expectancy-value approach, but may have been due to the fact that audience expectations varied more than audience values. But it also raises the problem again of small sample sizes and models that require many degrees of freedom. A larger sample would have provided results that were more definitive and interpretable.

More perplexing was the inability to link these same audience perceptions to newspaper reading, although they successfully predicted exposure to television news. It seems unlikely that the measurement technique would be effective for one medium and not another, or that expectancy-value theory is valid for television use and not newspaper reading. This may point to an inconsistency or difference in the conceptualization and measurement of the two dependent variables. The television news index was based on measures of the frequency with which respondents viewed several different types of news programming offered at varying times of the day and week. The newspaper use index, on the other hand, asked respondents how often they read stories specifically about politics in various sections of the daily newspaper. However, one would expect the latter measure, which is more specifically related to political news, to correlate better with audience evaluations of the

quality of campaign coverage. Instead, these audience evaluations were much more closely related to general exposure to all television news.

There may also be important differences in the nature of these two audience activities that might account for this discrepancy--reading the newspaper and watching television news might be motivated by different factors. More specifically, there are a wide variety of possible motivations for newspaper reading that have little to do with seeking political information, and yet newspaper readings may very well come into contact with political content as they clip coupons, read the comics or scan the sports page. This would have the result of suppressing the correlation between evaluations of the quality of newspaper campaign coverage and reading about politics in the paper. Television news viewing may be motivated by a somewhat more narrow set of gratifications, while its conceptualization and measurement in this research did not focus specifically on viewing of political content only.

A third and plausible explanation raises once again the issue of viable alternatives for campaign information. It may be that expectancy-value products representing evaluations of television news content are systematically related to television news exposure because convenient, effective and low "cost" alternatives exist for television viewers who are dissatisfied with the quality of its coverage, whereas alternatives to newspapers are not so readily apparent. Perhaps respondents who are dissatisfied with television coverage can always turn to the newspaper to provide the information they need and desire.

But respondents who are not satisfied with newspapers do not view television or other media as acceptable or superior alternatives. The lack of available and viable alternatives would tend to reduce the observed relationships between expectancy-value scores and news media use, in this case newspaper reading. However, the cognitive maps suggested that respondents perceived little difference between the two media, and rated television news as only slightly less substantive than newspaper coverage.

These issues do not reflect poorly on expectancy-value theory. Although the theory requires further development and testing, it was successful in providing a framework with which to link audience evaluations and news media use. A better and more direct test of expectancy-value theory could certainly have been devised, using the Galileo measurement techniques, if that had been the primary goal of this research. But despite these constraints, the expectancy-value models accounted for more variance than typically found in media use research. These results could not have been obtained without valid theory and measurements.

The validation procedures used in this research were more extensive than most studies, but still they overlooked many important facets that would be examined in a more complete and comprehensive construct validation. This study, for example, focused on a single presidential election campaign. It might also examine a wider variety of media and information sources available to respondents. A more complete study would also consider the effects of varying situational

factors, changes over time and differences among types of people. And finally, this study indicates that results may be influenced by the choice of interviewing methods.

Further research should also address several other limitations of this dissertation. Most important is the inability with these data to establish causal order, or at least temporal precedence of key variables. Because the data were gathered at one point in time, it was virtually impossible to determine for example whether negative evaluations of news media coverage lead to decreased exposure, or whether people who don't use the media often tend to evaluate it more negatively. Measures of habitual media and news media use might also be differentiated from specific campaign information seeking from the media. Another drawback of the small sample size was the inability to differentiate respondents by their media habits or the gratifications they seek from news media use. As a result, this study could not fully recognize the diversity of the audience or explore the differences in the perceptions of campaign coverage among subgroups. Future research would benefit from using larger samples and addressing some of the issues and limitations noted here.

Conclusions

This research has brought together a wide variety of theoretical developments and identified their possible implications in the context of a very real social and political problem. More specifically, this has demonstrated that as the fields of political science and communications change their view of the audience/electorate and its

decision-making process, they must also re-examine the implications of these changes on questions of news media responsibility and performance in democratic society.

This research articulated these concerns and gathered appropriate data to begin the search for solutions. While the results were not entirely definitive and certainly not conclusive, they indicate that the questions are worth asking and warrant further research. A gap clearly exists between the perceived information needs of the audience/electorate and the quality of campaign coverage available from the news media. But these findings also offer hope that the news media can do better, that there is more latitude and incentive to improve the news than previously thought--less interest in consummatory news and more demand for substantive campaign information. By providing more emphasis on the latter, the news media may be able to increase both the satisfaction and size of their audience. There is clearly room for improvement, and the fate of democracy may rest in the balance.

Communications researchers and journalists must work together to find ways the news media can be used more effectively to facilitate political information seeking, promote political literacy and encourage participation in the democratic process. Clearly, further research is needed. But perhaps it is time we also began serious policy discussions and devoted more attention to how the problem might be solved, instead of debating whether or not the problem exists or who is most to blame.

LIST OF REFERENCES

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Atkin, C. (1973) "Instrumental utilities and information seeking," pp. 81-118 in P. Clarke (ed.) *New Models for Mass Communication Research*. Beverly Hills, CA: Sage Publications.

Atkinson, J. W. (1964) *An Introduction to Motivation*. New York: Wiley and Sons.

Barnett, G. A. (1980) "A multidimensional analysis of the 1976 presidential campaign." *Communication Quarterly* 28(3): 156-164.

--- (1972) "Reliability and metric multidimensional scaling." Unpublished research report. East Lansing, MI: Department of Communication, Michigan State University.

--- K. B. Serota and J. A. Taylor (1976) "Campaign communication and attitude change: A multidimensional analysis." *Human Communication Research* 2(3): 227-244.

Becker, L. B. (1979) "Measurement of gratifications." *Communication Research* 6(1): 54-73.

--- (1976) "Two tests of media gratifications: Watergate and 1974 elections." *Journalism Quarterly* 53: 26-31.

Bennett, W. L. (1981) "Perception and cognition: An information-processing framework for politics," pp. 69-193 in S. L. Long (ed.) *The Handbook of Political Behavior*. New York: Plenum Press.

Berelson, B. (1952) "Democratic theory and public opinion." *Public Opinion Quarterly* 16: 324-326.

--- P. Lazarsfeld and W. McPhee (1954) *Voting*. Chicago: University of Chicago Press.

Blumler, J. G. (1983) "Communication and democracy: The crisis beyond and ferment within," pp. 166-173 in *Ferment in the Field*. Philadelphia, PA: The Annenberg School Press.

--- (1982) "Political communication: Democratic theory and broadcast practice," pp. 621-636 in *Mass Communication Review Yearbook* 3. Beverly Hills, CA: Sage Publishing.

--- (1978) "Voter attitudes to election communication." *European Journal of Political Research* 6(2): 127-156.

--- (1969) "Producers' attitudes towards television coverage of an election campaign: A case study." *Sociological Review Monographs* 13: 85-115.

--- and E. Katz (1974) *The Uses of Mass Communications: Current Perspectives on Gratifications Research*. Beverly Hills, CA: Sage Publications.

--- and D. McQuail (1969) *Television in Politics: Its Uses and Influences*. Chicago: University of Chicago Press.

Broh, C. A. (1980) "Horserace journalism: Reporting the polls in the 1976 election." *Public Opinion Quarterly* 44: 514-529.

Campbell, A., P. E. Converse, W. E. Miller and D. E. Stokes (1960) *The American Voter*. New York: Wiley.

Chaffee, S. H. and J. L. Hochheimer (1983) "Mass communication and American politics: A new look at the early studies." Paper presented to the International Communication Association annual conference, Dallas, TX, May, 1983.

Craig, R. T. (1977) "Limiting the scope of the spacial model of communication effects." *Human Communication Research* 3: 310-325.

Cronbach, L. J., G. C. Gleser, H. Nanda and N. Rajaratnam (1972) *The Dependability of Behavioral Measurements*. New York: Wiley.

Cronbach, L. J., N. Rajaratnam and G. C. Gleser (1963) "Theory of generalizability: A liberation of reliability theory." *British Journal of Statistical Psychology* 16(2): 137-163.

Dahl, R. A. (1958) *A Preface to Democratic Theory*. Chicago: University of Chicago Press.

Downs, A. (1957) *An Economic Theory of Democracy*. New York: Harper and Row.

Elliott, W. A. and C. P. Quattlebaum (1979) "Similarities in patterns of media use: a cluster analysis of media gratifications." *Western Journal of Speech Communication* 43(1): 61-72.

Escalona, S. K. (1940) "The effect of success and failure upon the level of aspiration and behavior in manic-depressive psychoses." *University of Iowa Studies in Child Welfare* 16: 199-302.

Festinger, L. (1942) "A theoretical interpretation of shifts in level of aspiration." *Psychology Review* 49: 235-250.

Galloway, J. J. and F. L. Meek (1981) "Audience uses and gratifications: An expectancy model." *Communications Research* 8(4): 435-449.

Gans, H. J. (1983) "News media, news policy, and democracy: Research for the future," pp. 174-184 in *Ferment in the Field*. Philadelphia: The Annenberg School Press.

--- (1979) *Deciding What's News*. New York: Pantheon Books.

Gillham, J. and J. Woelfel (1977) "The Galileo system of measurement: Preliminary evidence for precision, stability, and equivalence to traditional measures." *Human Communication Research* 3: 222-234.

Gordon, T. (1976) "Subject abilities to use metric multidimensional scaling: Effects of varying the criterion pair." Paper presented to the International Communication Association annual conference, Portland, OR, April, 1976.

Graber, D. A. (1984) *Processing the News: How People Tame the Information Tide*. New York: Longman.

--- (1976) "Effect of incumbency on coverage patterns in the 1972 presidential campaign." *Journalism Quarterly* 53: 499-506.

Grunig, J. E. (1979) "Time budgets, level of involvement and use of the mass media." *Journalism Quarterly* 56(2): 248-261.

Hofstetter, R. (1976) "Bias in the news: Network television coverage of the 1972 election campaign." Columbus, OH: Ohio State University Press.

James, A. A. (1985) "A method for identifying effective messages for university recruitment communication strategies." Unpublished Master's thesis. Knoxville, TN: College of Communications, University of Tennessee.

Katz, E. (1960) "The functional approach to the study of attitude." *Public Opinion Quarterly* 24: 163-204.

--- (1959) "Mass communications research and the study of popular culture: An editorial note on a possible future for this journal." *Studies in Public Communication* 2: 1-6.

--- J. G. Blumler and M. Gurevitch (1974) "Utilization of mass communication by the individual: An overview," pp. 19-32 in J. G. Blumler and E. Katz (eds.) *The Uses of Mass Communication: Current Perspectives on Gratifications Research*. Beverly Hills, CA: Sage.

--- M. Gurevitch and H. Haas (1973) "On the uses of mass media for important things." *American Sociological Review* 38: 164-181.

Kelso, W. A. (1978) *American Democratic Theory: Pluralism and Its Critics*. Westport, CT: Greenwood Press.

- Key, V. O. (1966) *The Responsible Electorate*. Cambridge, MA: Harvard University Press.
- Kippax, S. and J. P. Murray (1980) "Using the mass media: Need gratification and perceived utility." *Communication Research* 7(3): 335-360.
- Korzenny, F., N. J. Stoyanoff, M. Ruiz and A. B. David (1980) "Metric multidimensional scaling and automatic message generation applied to the tourism industry: The case of Israel." *International Journal of Intercultural Relations* 4: 77-95.
- Krais, S. and D. Davis (1976) *The Effects of Mass Communication on Political Behavior*. University Park, PA: Pennsylvania State University Press.
- Kruskal, J. B. and M. Wish (1978) *Multidimensional Scaling*. Beverly Hills, CA: Sage Publications.
- Lazarsfeld, P. F., B. Berelson and H. Gaudet (1944) *The People's Choice*. New York: Duell, Sloan and Pierce.
- Lemert, J. B. (1981) *Does Mass Communication Change Public Opinion After All?* Chicago: Nelson-Hall.
- Levy, M. R., H. Kilburn and R. Greene (1979) "A multidimensional message strategy for energy and conservation." Paper presented to the International Communication Association, Philadelphia, PA, May, 1979.
- Lewin, K. (1935) *A Dynamic Theory of Personality*. New York: McGraw-Hill.
- Lichtenstein, A. and L. Rosenfeld (1983) "Uses and misuses of gratifications research: An explication of media functions." *Communication Research* 11(3): 393-413.
- Lichtenstein, A. and L. Rosenfeld (1984) "Normative expectations and individual decisions concerning media gratifications choices." *Communication Research* 11(3): 393-413.
- Lippmann, W. (1922) *Public Opinion*. New York: Harcourt, Brace and World.
- Lodge, M. (1981) *Magnitude Scaling: Quantitative Measurement of Opinions*. Beverly Hills, CA: Sage Publications.
- Lometti, G. E., B. Reeves and C. R. Bybee (1977) "Investigating the assumptions of uses and gratifications research." *Communication Research* 4(3): 321-338.

Maase, S., E. L. Fink and S. A. Kaplowitz (1984) "The cognitive dynamics of incongruity in humor: Multidimensional models," in R. Bostrom (ed.) *Communication Yearbook 8*. Beverly Hills, CA: Sage Publications.

Manheim, J. A. (1976) "Can democracy survive television?" *Journal of Communication* 26(2): 84-90.

McGuire, W. J. (1974) "Psychological motives and communication gratification," pp. 167-196 in J. G. Blumler and E. Katz (eds.) *The Uses of Mass Communication: Current Perspectives on Gratifications Research*. Beverly Hills, CA: Sage Publications.

McLeod, J. M. and L. B. Becker (1981) "The uses and gratifications approach," pp. 67-100 in D. D. Nimmo and K. R. Sanders (eds.) *Handbook of Political Communication*. Beverly Hills, CA: Sage Publications.

McLeod, J. M. and L. B. Becker (1974) "Testing the validity of gratification measures through political effects analysis," pp. 137-164 in J. G. Blumler and E. Katz (eds.) *The Uses of Mass Communication: Current Perspectives on Gratifications Research*. Beverly Hills, CA: Sage.

McLeod, J. M., L. B. Becker and J. E. Byrnes (1974) "Another look at the agenda setting function of the press." *Communication Research* 1: 131-166.

McLeod, J. M., C. R. Bybee and J. A. Durall (1982) "Evaluating media performance by gratifications sought and received." *Journalism Quarterly* 59(1): 3-12.

McLeod, J. M., J. A. Durall, D. A. Ziemke and C. R. Bybee (1979) "Expanding the context of debate effects," in S. Kraus (ed.) *The Great Debates 1976: Ford vs. Carter*. Bloomington: Indiana University Press.

McQuail, D. (1984) *Mass Communication Theory: An Introduction*. Beverly Hills, CA: Sage Publishing.

--- J. G. Blumler and J. R. Brown (1972) "The television audience: A revised perspective," in D. McQuail (ed.) *Sociology of Mass Communications*. Harmondsworth: Penguin.

Miller, M. M. (1986) "Using generalizability theory to assess the dependability of direct magnitude separation estimates (Galileo data)." Paper presented to the International Communication Association, Chicago, May, 1986.

--- and R. E. Hurd (1984) *The University of Tennessee, Knoxville Image Study Technical Report*. Knoxville, TN: University of Tennessee.

--- and S. D. Reese (1981) "Political malaise and interactions of media exposure and reliance." Unpublished manuscript. Madison, WI: University of Wisconsin.

Nie, N. H. and S. Verba (1972) *Participation in America*. New York: Harper and Row.

Nie, N. H., S. Verba and J. R. Petrocik (1976) *The Changing American Voter*. Cambridge, MA: Harvard University Press.

Niemi, R. G. and H. F. Weisberg (1976) *Controversies in American Voting Behavior*. San Francisco: W. H. Freeman and Co.

Nimmo, D. D. and K. R. Sanders (1981) *Handbook of Political Communication*. Beverly Hills, CA: Sage Publications.

O'Brien, R. M. (1984) "Using generalizability theory to estimate the dependability of aggregate-level variables." *Quality and Quantity* 18: 193-205.

Paletz, D. L. and R. M. Entman (1981) *Media Power Politics*. New York: The Free Press.

Palmgreen, P. (1984) "Uses and gratifications: A theoretical perspective," pp. 20-55 in *Communication Yearbook* 8. New Brunswick, NJ: Transaction Books.

--- and J. D. Rayburn (1982) "Gratifications sought and media exposure: An expectancy value model." *Communication Research* 9(4): 561-580.

--- and J. D. Rayburn (1979) "Uses and gratifications and exposure to public television: A discrepancy approach." *Communication Research* 6(2): 155-180.

--- L. A. Wenner and J. D. Rayburn (1981) "Gratification discrepancies and news program choice." *Communication Research* 8(4): 451-478.

Pateman, C. (1970) *Participation and Democratic Theory*. Cambridge, MA: University Press.

Patterson, T. E. (1980) *The Mass Media Election*. New York: Praeger.

--- and R. P. McClure (1976) *The Unseeing Eye*. New York: Putnam.

Plissner, M. and W. Mitofsky (1981) "What if they held an election and nobody came?" *Public Opinion* 4(1): 50-51.

Rayburn, J. D. and P. Palmgreen (1984) "Merging uses and gratifications and expectancy-value theory." *Communication Research* 11(4): 537-562.

Reeves, B. and G. E. Lometti (1980) "The dimensional structure of children's perceptions of television characters: A replication." *Human Communication Research* 5(3): 247-256.

Reeves, B. and M. M. Miller (1978) "A multidimensional measure of children's identification with television characters." *Journal of Broadcasting* 22(1): 71-86.

RePass, D. E. (1971) "Issue salience and party choice." *American Political Science Review* 65:389-400.

Robinson, J. P., H. Sahin and D. K. Davis (1982) "Television journalists and their audiences," pp. 163-177 in J. S. Ettema and D. C. Whitney (eds.) *Individuals in Mass Media Organizations: Creativity and Constraint*.

Robinson, M. J. (1977) "Television and American politics: 1956-1976." *Public Interest* 48: 3-39.

--- (1975) "American political legitimacy in an era of electronic journalism: Reflections on the evening news," pp. 97-139 in D. Cater and R. Adler (eds.) *Television as a Social Force: New Approaches to TV Criticism*. New York: Praeger.

--- and M. A. Sheehan (1983) *Over the Wire and On TV*. New York: Russell Sage Foundation.

Schramm, W. (1949) "The nature of news." *Journalism Quarterly* 26: 259-269.

Schumpeter, J. A. (1943) *Capitalism, Socialism and Democracy*. London: Geo. Allen and Unwin.

Sears, D. O. and J. L. Freedman (1971) "Selective exposure to information: A critical review." *Public Opinion Quarterly* 31: 545-553.

Serota, K. B., M. J. Cody, G. A. Barnett and J. A. Taylor (1977) "Precise procedures for optimizing campaign communication," pp. 475-491 in B. Ruben (ed.) *Communication Yearbook 1*. New Brunswick, NJ: Transaction Books.

Siebert, F. S. (1974) "The libertarian theory of the press," pp. 39-71 in F. S. Siebert, T. Peterson and W. Schramm (eds.) *Four Theories of the Press*. Chicago: University of Illinois Press.

Sinclair, K. (1982) "Horserace vs. 'substance' in coverage of election by British prestige press." *Journalism Quarterly* 59(4): 598-602.

Swanson, D. L. (1979) "Political communication research and the uses and gratifications model: A critique." *Communication Research* 6: 37-53.

Thorndike, R. L. (1982) *Applied Psychometrics*. Boston: Houghton Mifflin Company.

Tichenor, P. J., G. A. Donohue and C. N. Olien (1970) "Mass media flow and differential growth of knowledge." *Public Opinion Quarterly* 34: 159-170.

Tolman, E. C. (1932) *Purposive Behavior in Animals and Men*. New York: Century.

Tuchman, G. (1972) "Objectivity as strategic ritual: An examination of newsmen's notions of objectivity." *American Journal of Sociology* 77(4): 660-679.

Urban, C. D. (1984) "Factors influencing media consumption: A survey of the literature," pp. 213-282 in B. Compaine (ed.) *Understanding the New Media*. Cambridge, MA: Ballinger Publishing Company.

Vroom, V. H. (1964) *Work and Motivation*. New York: Wiley and Sons.

Walker, J. L. (1966) "A critique of the elitist theory of democracy." *American Political Science Review* 60: 285-295.

Wenner, L. A. (1982) "Gratifications sought and obtained in program dependency: A study of network evening news programs and 60 Minutes." *Communication Research* 9(4): 539-560.

Woelfel, J. (1975) "A theory of occupational choice," in J. S. Picou and R. Campbell (eds.) *Career Patterns of Minority Youth*. New York: Charles E. Merrill Press.

--- and E. L. Fink (1980) *The Measurement of Communication Processes: Galileo Theory and Method*. New York: Academic Press.

Wolfinger, R. E. and S. J. Rosenstone (1980) *Who Votes?* New Haven, CT: Yale University Press.

Woodall, W. G., D. K. Davis and H. Sahin (1983) "From the boob tube to the black box: Television news comprehension from an information processing perspective," pp. 174-194 in E. Wartella and D. C. Whitney (eds.) *Mass Communication Review Yearbook* 4. Beverly Hills, CA: Sage.

APPENDIXES

APPENDIX A

OPEN-ENDED INTERVIEW QUESTIONS

Introduction:

Hello, my name is (your name). I'm conducting a telephone survey for the University of Tennessee Communication Research Center. We selected your number at random and need to talk to the adult in your home who has the most recent birthday.

Do you know who that might be?

Could I speak with him/her?

My name is (your name). I'm conducting a survey for the University of Tennessee Communication Research Center.

Would you be willing to help us by answering a few short questions about the presidential election campaign? Thank you very much!

Questionnaire:

- 1) Can you think of any reasons why people might pay attention to the presidential election campaign?
- 2) Can you think of any reasons why people might NOT pay much attention to a presidential election campaign?
- 3) How about you personally? Do you follow the campaign? Why or why not?
- 4) What reasons can you think of for voting in a presidential election?
- 5) What reasons can you think of for NOT voting in a presidential election?

- 6) If you were deciding to vote for one presidential candidate or another, what kinds of things would you look for?
- 7) Regardless of what the media or the politicians say, what problems do you think the next president should tackle? And what do you think the next president should do about them?
- 8) If you wanted more information about the candidates and what they would do if elected, where would you get that kind of information?
- 9) What reasons can you think of for choosing those particular sources of information instead of others?
- 10) Finally, I'd like to ask a couple questions about how much time you spend getting information about the campaign.
About how many minutes did you spend today.....
 - a) watching TV news about the presidential election?

- 10) Finally, I'd like to ask a couple questions about how much time you spend getting information about the campaign.

About how many minutes did you spend today...

TODAY

YESTERDAY

USUALLY

- a) watching TV news about
the presidential election?
 - b) reading newspaper stories
about the election?
 - c) reading news magazine stories
about the election?
 - d) reading campaign literature
about the election?
 - e) talking about the election
with family or friends?
 - f) listening to a campaign
worker or candidate?
 - g) Did you read or hear about the election anywhere else?
 - h) And about how many minutes did that take?
- 11) What is your age?
- 12) Record sex of respondent here
- 13) What is the highest level of education you received?
- 14) Do you expect to vote in the presidential election?
- 15) Who do you think you will vote for?

APPENDIX B

GALILEO INSTRUCTIONS

GALILEO INSTRUCTION PAGE

SAY:

The questions we're going to ask are a little unusual, so I'd like to take a minute and explain them. You will be given two things and I'm going to ask you to tell me how different you think they are using numbers.

If you think they are very different, they would be very far apart and you would use a large number. If you thought they were very similar, they would be close together and you would use a small number. If they were exactly the same, you would say "zero" because there is no difference between them.

Just for an example, let's talk about the differences between kinds of fruit. We'll say that an apple and an orange differ by 100 units. If that's true, how different are a lemon and a lime?

(APPROPRIATE RESPONSE IS 30 OR 40)

Okay. Most people would say that a lemon and a lime are less different than an apple and an orange. Since we said that an apple and an orange differ by 100 units, the difference between a lemon and a lime would be less than that -- maybe 30 or 40 units.

Let's try another one. Remember, an apple and an orange differ by 100 units. If that's true, how different are a grape and a watermelon?

(APPROPRIATE ANSWER IS GREATER THAN 100, MAYBE 200).

Okay. Most would agree that a grape and a watermelon are more different than an apple and an orange. Since we said an apple and an orange differ by 100 units, the difference between a grape and a watermelon would be more than that -- maybe 200.

(IF NECESSARY, try an apple and a pear = less than 100)
(AND a banana and a peach = more than 100)

In general, that's how our questions work. I'll give you a ruler of 100 difference units and you compare other differences to that ruler.

You can use any number that you want. If you think the two things are more different than the ruler, then you would use a number larger than 100. If they were twice as different, you would say 200. If the two things were not as different as the ruler, you would use a number smaller than 100. And if you think the two things are exactly the same, you would say "zero."

I know these questions are a little unusual, but most people find them pretty easy after a little practice. Okay?

BEGIN QUESTIONNAIRE

APPENDIX C

THE GALILEO QUESTIONNAIRE

MEDIA USE AND EVALUATION QUESTIONNAIRE

SAY:

For this survey, we'll say that campaign promises and voting records differ by 100 units. Using that ruler, please estimate how different or far apart the following things are.

If they are more different than the ruler, you would use a number larger than 100. If they seem less different than the ruler, you would use a number smaller than 100. If they were exactly the same, you would say "zero" for no difference.

If you have no idea, just tell me to leave that one blank. Remember, there are no right or wrong answers. We are just interested in your opinion.

Campaign promises and voting records differ by 100 units. If that's true, how different are...

0102 candidate leadership abilities and voting records _____

0103 candidate leadership abilities _____
and campaign promises _____

0104 candidate leadership abilities and mudslinging _____

0105 candidate leadership abilities _____
and who's ahead in the polls _____

0106 candidate leadership abilities and interesting _____

0107 candidate leadership abilities and believable _____

0108 candidate leadership abilities _____
and decide how to vote _____

0109 candidate leadership abilities and television news _____

0110 candidate leadership abilities _____
and newspaper stories _____

0111 candidate leadership abilities and yourself _____

0203 voting records and campaign promises _____

0204 voting records and mudslinging _____

0205 voting records and who's ahead in the polls _____

Remember, campaign promises and voting records differ by 100 units...

0206 voting records and interesting _____

0207 voting records and believable _____

0208 voting records and decide how to vote _____

0209	voting records	and	television news	_____
0210	voting records	and	newspaper stories	_____
0211	voting records	and	yourself	_____
0304	campaign promises	and	mudslinging	_____
0305	campaign promises	and	who's ahead in the polls	_____
0306	campaign promises	and	interesting	_____
0307	campaign promises	and	believable	_____
0308	campaign promises	and	decide how to vote	_____
0309	campaign promises	and	television news	_____
0310	campaign promises	and	newspaper stories	_____
0311	campaign promises	and	yourself	_____

Remember, campaign promises and voting records differ by 100 units...

0405	mudslinging	and	who's ahead in the polls	_____
0406	mudslinging	and	interesting	_____
0407	mudslinging	and	believable	_____
0408	mudslinging	and	decide how to vote	_____
0409	mudslinging	and	television news	_____
0410	mudslinging	and	newspaper stories	_____
0411	mudslinging	and	yourself	_____

0506	who's ahead in the polls	and	interesting	_____
0507	who's ahead in the polls	and	believable	_____
0508	who's ahead in the polls	and	decide how to vote	_____
0509	who's ahead in the polls	and	television news	_____
0510	who's ahead in the polls	and	newspaper stories	_____
0511	who's ahead in the polls	and	yourself	_____

Remember, campaign promises and voting records differ by 100 units...

0607	interesting	and	believable	_____
0608	interesting	and	decide how to vote	_____
0609	interesting	and	television news	_____
0610	interesting	and	newspaper stories	_____
0611	interesting	and	yourself	_____

0708	believable	and	decide how to vote	_____
0709	believable	and	television news	_____
0710	believable	and	newspaper stories	_____
0711	believable	and	yourself	_____

0809	decide how to vote	and	television news	_____
0810	decide how to vote	and	newspaper stories	_____
0811	decide how to vote	and	yourself	_____
0910	television news	and	newspaper stories	_____
0911	television news	and	yourself	_____
1011	newspaper stories	and	yourself	_____

NOW we'd like to ask you just a few regular questions about the kinds of news you usually get.

- 1) Do you read a daily newspaper? (circle one)

(1) YES

(0) NO

IF "NO," go to 4

IF "YES," continue with 2

- 2) How many days per week do you usually read a daily newspaper?

0 1 2 3 4 5 6 7

- 3) How many days each week would you say you read stories about politics on...

a) the front page 0 1 2 3 4 5 6 7

b) the editorial and opinion pages 0 1 2 3 4 5 6 7

c) the inside pages 0 1 2 3 4 5 6 7

- 4) How many times a week would you say you watch...

a) the local TV news at 6 o'clock? 0 1 2 3 4 5 6 7

b) the national network news at 6:30 0 1 2 3 4 5 6 7

c) the local TV news at 11 o'clock 0 1 2 3 4 5 6 7

d) other TV news shows like Nightline, Face the Nation and 60 minutes? 0 1 2 3 4 5 6 7

- 5) How many days each week do you watch news on cable TV?

0 1 2 3 4 5 6 7

6) How interested are you in politics? Would you say you are...(read responses)

(4) very interested (2) somewhat interested (0) not at all

7) How much attention do you pay to news about the presidential election?
Would you say you pay...(read responses)

(4) close attention (2) some attention (0) no attention

NOW, I'm going to read you a few statements. Please tell me whether you strongly agree, agree, feel neutral, disagree, or strongly disagree

	<u>SA</u>	<u>A</u>	<u>N</u>	<u>D</u>	<u>SD</u>
8) Voting in elections is a good way to make your voice known.	5	4	3	2	1
9) There is usually not much choice between the candidates for president.	5	4	3	2	1
10) Sometimes politics and government seem so complicated, a person like me can't really understand what's going on.	5	4	3	2	1
11) Voting in elections gives people like me the chance to have a say about what government does.	5	4	3	2	1
12) People like me need to follow the news media if they really want to know what's going on.	5	4	3	2	1
13) Politicians are only interested in people's votes, not their opinions.	5	4	3	2	1
14) People have a responsibility to vote even if they don't like either of the candidates.	5	4	3	2	1
15) The news media don't really report about the things that are important to people like me when we decide how to vote.	5	4	3	2	1

16) Do you intend to vote in the November election?

(1) YES

(0) NO

IF YES, continue

IF NO, skip to 19

17) Have you decided who to vote for president?

(1) YES

(0) NO

16a) Who would that be?

16b) Would you say you are leaning
more toward Reagan or Mondale?

(5) REAGAN (1) MONDALE

(4) REAGAN (2) MONDALE (3) DK

18) Have you decided who to vote for senator?

(1) YES

(0) NO

17a) Who would that be?

17b) Would you say you are leaning
more toward Gore, Ashe or
McAteer?

(7) GORE (3) ASHE (1) McATEER (6) GORE (4) ASHE (2) McATEER (5) DK

19) What is your age? _____

20) What is the highest level of education you received? _____

21) What is your first name? _____

(SO WE CAN CALL YOU BACK IF THEIR ARE ANY PROBLEMS)

SAY: THANK YOU VERY MUCH! That's all the questions we have. We really appreciate
your help. Good night.

Circle sex of respondent (1) Male (0) Female

Phone number _____

Date/ Time _____

Interviewer Signature _____

VITA

Robert E. Hurd was born January 11, 1957, and was raised in Lake Geneva and Waukesha, Wisconsin. He graduated from Waukesha South High School in 1975. He received the Bachelor of Arts degree in Journalism and Mass Communication from the University of Wisconsin-Madison in 1981. He worked for two years as a reporter for a small daily newspaper in central Wisconsin, before entering the doctoral program in Communications at The University of Tennessee, Knoxville.

Mr. Hurd received research fellowships from the Karl and Madira Bickel Foundation and was named the College of Communications Outstanding Graduate Teaching Assistant in 1985. That same year, the first phase of his dissertation research was recognized as the Best Graduate Student Paper by the Communication Theory and Methodology Division of the Association for Education in Journalism and Mass Communication (AEJMC). He has published other research in Journalism Quarterly and Public Opinion Quarterly.

Upon completing his doctoral coursework in 1985, Mr. Hurd joined the Journalism and Mass Communication faculty at Iowa State University where he taught courses in communication theory, research methods and reporting until Spring, 1987. At that time, Mr. Hurd accepted his current position in Washington, D.C. as Project Manager with the Media and Opinion Research Division of Gordon S. Black Corporation, a full-service market research firm.

During the 1988 presidential election campaign, Mr. Hurd was involved in the design, administration and analysis of more than 100

public opinion and election polls for news media clients, including USA TODAY, Cable News Network, the Detroit News and the Indianapolis Star. His additional responsibilities include marketing and audience research for mass media, including newspapers, television and advertisers.

He received the Ph.D. in Communications from The University of Tennessee in June, 1989. The author is a member of AEJMC, the International Communication Association, the American Association for Public Opinion Research, the Midwest Association for Public Opinion Research, and participates in American Marketing Association and Newspaper Research Council activities. He is also a member of Kappa Tau Alpha, the honorary journalism society.