INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps. Each original is also photographed in one exposure and is included in reduced form at the back of the book.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

UMI

A Bell & Howell Information Company
300 North Zeeb Road, Ann Arbor MI 48106-1346 USA
313/761-4700 800/521-0600

Mass Media Signal, Political Awareness and Attitude Change

A Dissertation Presented

by

Clark Ray Hubbard

to

The Graduate School in Partial Fulfillment of the Requirements for the Degree of

Doctor of Philosophy

in

Political Science

State University of New York
at Stony Brook

May 1997

State University of New York at Stony Brook
The Graduate School

Clark Ray Hubbard

We, the dissertation committee for the above candidate for the Doctor of Philosophy in Political Science, hereby recommend acceptance of this dissertation.

Kathleen M. McGraw
Associate Professor of Political Science

Milton Lodge
Professor of Political Science

Charles Taber
Associate Professor of Political Science

Marco R. Steenbergen
Assistant Professor of Political Science
University of North Carolina, Chapel Hill

This dissertation is accepted by the Graduate School.

Abstract of the Dissertation
Mass Media Signal, Political Awareness and Attitude Change

by

Clark Ray Hubbard
Doctor of Philosophy

in

Political Science

State University of New York
at Stony Brook

1997

The study of mass media's political effects has long been a conundrum for social scientists. On the one hand, journalists, pundits and political practitioners place great faith in the power of mass media to change political attitudes toward policies and candidates. On the other, political scientists, psychologists and communications scholars have consistently found inconsistent, weak or nonexistent support for such power across the past 50 years (e.g. Klapper 1960; McGuire 1985; Katz 1987). In this dissertation I argue that much of the basis for these 'minimal effects' conclusions lies in the failure of social scientists to account for the many contingent conditions necessary for the detection of substantial media-induced attitude-change effects. Specifically, an adequate

media effects model requires recognition of variation within the audience's level of political awareness and knowledge of the message content or 'signal' being issued by mass media. I develop a statistical model of the mass- mediated political attitude change process addressing these deficiencies, and test it using survey panel data collected across the course of the 1976 presidential campaign, coupled with a quantitative content analysis of the newspaper stories to which the survey respondents were being exposed during the time span of the panel. I test the model using instrumental variables regression techniques, and examine the results of the model estimation in light of the content analysis results. Doing so reveals the following conclusions: First, prior research has underestimated media-induced political attitude change effects, because variation in individual response to media signal tends to be masked in the aggregate. Second, readily identifiable, repetitive patterns of effects occur across the audience's political awareness distribution. Third, these responsiveness patterns can be explained (and, in the future, predicted) as a function of mass media signal. Finally, political campaigns represent an overt attempt to influence attitudes toward political candidates through the mechanism of influencing mass media content concerning those candidates. Combining theoretical and methodological tools from the traditionally segregated disciplines of political science, social psychology and

communication studies leads to a social-scientific conclusion 180 degrees away from the 'minimal effects' doctrine and more in line with conventional wisdom and common sense.

Table of Contents

List of Tables and Figures

Tables

Figures

Acknowledgments

A note of warning to the reader is in order: Although this dissertation is a piece of political science research, and is therefore firmly rooted in the discipline, it involves large amounts of social psychology and communication studies theory and methodology. The cross-disciplinary focus of this work results in an eclectic mix of terminology, methodology and traditionally discipline-specific jargon, which may cause some confusion. This result is the unfortunate by-product of the even-more-unfortunate rifts among these three traditionally disparate academic disciplines. I hope this work does something to bridge these gaps. Until all the social sciences come together in peace and unity, however, *caveat emptor.*

Personally thanking every individual and institution who contributed, knowingly or otherwise, to the completion of this project is impossible, both because of the size of the list and the author's less-than-elephantine mnemonic abilities. I'm willing to give it a try, however, so here goes:

First, my dissertation committee at Stony Brook: My chair and advisor, Kathleen McGraw, is important both because of her substantive contributions to the content and her intangible impact as an academic role model. The same goes for Milton Lodge. Chuck Taber did a wonderful last-minute job of pinch-hitting

for the globetrotting Stanley Feldman, who had an enormous influence over the early stages of the project but was unable to see it through to the bitter end because he had more interesting things to do (give anyone a choice between sitting in a dissertation defense and going on sabbatical on the other side of the world and the same decision would be made every time). Marco Steenbergen, currently at University of North Carolina, also did exemplary last-minute duty as a fourth member and a replacement for Stanley's methodologist persona, not to mention enduring four years of constant whining and harassment about methodology problems from myself and many other Stony Brook graduate students. Heartfelt thanks to all of my committee members.

Next on the list are my content analysis coders, without whom this project may have possibly been completed by 2025 if not later. At Stony Brook, Eileen Ausset did a great deal of preliminary work and uncovered a number of my mistakes in creating the coding scheme. At the University of Michigan, Wendy Seronko did typically excellent work, and Dan Braga spent untold hours on campus, at home and in the hospital (!) coding newspaper stories with an uncommonly keen eye for detail and an almost frightening (to this author, anyway) work ethic. My eternal gratitude to all three.

The rest of the Stony Brook mafia, erstwhile and current: Sam Best, Bob

Boucher, Shawn Brau (Where Are They Now?), Al Cover, Jill Glathar, Wendy Hansen, Paul Hewitt, Val Hoekstra, Leonie Huddy, Linda Isbell, Jeff Levine (on loan from Indiana), Tse-Min Lin, Bob Noe, Helmut Norpoth, Ken Rona, Paul Teske, Rich Timpone (Master of the Martial Arts and Other Stuff), Isaac Unah, everyone in the Political Psychology Brown Bag group or Wine and Cheese Club or whatever it's being called these days, and anyone else I've forgotten. These people all contributed to what's here, usually unwittingly, probably unwillingly and certainly sharing no culpability.

Special mention goes to a few Stony Brookers not yet listed: Vic Ottati, who piqued my interest in political psychology and attitude change and gave all of us a solid grounding in the field; Brad Jones, whose methodological abilities are awe-inspiring and whose musical taste is impeccable because it mostly agrees with my own (not to mention his willingness to venture to CBGB and elsewhere at a moment's notice); Brandon Haller, all-around excellent office mate, drinking buddy (reference point: Black 47 at Paddy Reilly's, NYC), fly-fisherman and card player (money is still owed for gin rummy, by me, of course); and anyone who engaged in any of those long, all-night poker game sessions.

At the University of Michigan: Vince Price and Mike Traugott, for giving me a chance and making me feel welcome, not to mention even more (and

frankly, superior) fly-fishing expertise from Mike; Doreen Fussman and Warren Noone, for also making me feel welcome and helping out a great deal; Chris Achen, for providing an enormous well of expertise and (possibly unwitting and certainly offhanded) inspiration; and especially Margaret Young, who did an amazing job as a teaching assistant, an even more amazing job as a friend, and a sort-of-semi-successful job of keeping me out of trouble in Ann Arbor.

At the University of New Hampshire: Tom Trout, for being patient and understanding while I was finishing this damn thing; Marilyn Hoskin, for doing the same; Dee-Ann Dickson and Deb Briand, for helping things run smoothly; and John Camobreco, Janine Clark, Larry O'Connell, Chris Reardon and everybody else for putting up with me.

This dissertation owes an enormous intellectual debt to John Zaller, who doesn't know me and probably wouldn't want to, and beside whom I am a humble insect, academically speaking.

A miscellaneous list of people, some of whom I know, most of whom I don't, but all of whom had some influence, one way or another, consciously or not, upon me and this work: Larry Bartels, Larry Bell, Tami Buhr, William Orten Carlton (=Ort), Sandy Case, Jeff Chase, the College of Journalism and Mass Communication at the University of Georgia, Philip Converse, Tom Cooper,

Chuck D, Slim Dunlop, Sean Fagan, Darcy Fagan (née MacMillan), Fat Mike, Conrad Fink, L. Freeze, John Gierach, Amy Glennon (née Bellew), Mike Glennon, Doris Graber, Ben Grimm, Matt Groening, Arthur Guinness (& Sons), Polly Jean Harvey, Teri Hatcher, Linda Hopper, Greg Hubbard, Michael Jackson (no, the other one), Bill Jacoby, Mike Judge, Susan Koffman, Jim Koch, Gary Larson, Stan Lee, Courtney Love, Robert Nesta Marley, Chris Mars, Fritz Maytag, William McGuire, Ruthie Morris, L. Muggerud, Diana Mutz, Garrett Oliver, John Paty, Liz Phair, S. Reyes, Reed and Susan Richards, David Roback, Zack de la Rocha, Henry Rollins, Carlin Ross, Sahak and Nikki at the Corner Bar in Setauket, Hope Sandoval, Homer Simpson and family, Tommy Stinson, Bob Stinson (r.i.p.), Johnny Storm, Madeline Stowe, Mary Sullivan, Quentin Tarantino, Dr. Hunter S. Thompson, Bill Watterson, Paul Westerberg, Professor Charles Xavier and his protegeés, and many many others who are equally deserving but have slipped through my inexcusably large synaptic gaps.

At the homestead in Marietta, GA: My mom and dad, Charlene and Ray Hubbard, did everything they could and left the rest up to fate. Please don't blame them for the outcome.

Finally, Rebecca Plante, PhD, has had more to do with me and my work than most of the rest of the world put together. Thank you.

Chapter 1:Mass Media, Political Campaigns and the Search for Effects

The role of mass media in the political process has fascinated, encouraged and worried several generations of observers. Studying media impact on political attitudes has long been of great interest to social scientists and laypersons alike. From the earliest days of the republic, political pundits and social observers generally decried the state of affairs in which an irresponsible and rabble-rousing press was considered "the most powerful, if not the all-important factor in influencing public opinion, and consequently the votes of a community" (Lundberg 1926, p. 709). At the same time, the role of newspapers as a check against governmental excesses was recognized and praised. This ambivalence is perfectly summed up by Alexis de Tocqueville, who after his epic 1831-32 journey through America, called the press "a singular power, so strangely composed of mingled good and evil that liberty could not live without it, and public order can hardly be maintained against it" (Tocqueville [1835]1945, p.191).

Today, with mass media coming under much critical scrutiny from all

directions, improving our understanding of the media's effects on politics is imperative. Media effects research has a long, varied history, a considerable portion of which focuses on the impact of mass media during political campaigns (Graber 1993). This dissertation contends that mass media exposure has substantial effects on political attitudes during presidential campaigns, but only for particular segments of the population, under particular circumstances. Specifically, individuals at differing levels of political awareness -- a store of organizational capabilities, knowledge and skills by which people relate to the political world -- are susceptible to opinion change precipitated by exposure to mass mediated political messages under differing circumstances.

Political communication theory delivers conflicting expectations about attitude change, depending upon an individual's level of political awareness, the nature of the messages the individual is receiving, strength of prior attitude and other factors. Predictions concerning media-induced attitude change based upon the intersection of these factors run the gamut from wild swings among the hoi polloi, to bedrock stability among the elite, to modest shifts among the middlemen. The goal of this dissertation is, first, to show that individual-level media-induced political attitude change effects do occur, and second, to examine the conditions under which various patterns of attitudinal responsiveness to media

messages hold true.

I combine analysis of voters' attitudes during a presidential election campaign, as measured by a panel survey, with contemporaneous measures of the mass media messages to which the panel respondents are being exposed. Collectively, most attitudes show little, if any, change (beyond the expected information-gain effects), but when I take into account the crucial role played by political awareness in the political persuasion process, significant media effects become apparent across the political awareness spectrum. Lack of support in previous research for direct, individual-level attitudinal effects is partially a result of failure by researchers to account for contingent conditions, including cognitive mediators such as political awareness. Failure to include an explicit measure of the political messages being produced by mass media is another weakness of prior research that has led to an underestimation of media exposure effects.

Common sense and social science: A parting of ways

Numerous different types of political media effects have been identified, including agenda-setting, priming, framing, "cultivation," and other effects on political learning and socialization. Many of the studies done in these areas have been quite successful. In the case of direct media impact on political attitudes,

however, Kinder and Sears (1985) are forced to conclude that "evidence for substantial media impact is not very compelling" (p. 711). This conclusion is bolstered, if not wholly justified, by some of the research into the effects of media messages on attitudes during presidential campaigns (Patterson and McClure 1976; Patterson 1980). These and other studies have partially supported the notion that mass media have "minimal effects" on political attitudes.

A pioneering work in this area, Lazarsfeld, Berelson and Gaudet's (1948) *The People's Choice*, found scant evidence of media impact during the 1940 Roosevelt-Willkie campaign. Work on the psychology of attitude change done by Hovland and his colleagues at Yale (e.g. Hovland, Lumsdaine and Sheffield 1949) indirectly supported this conclusion. These two bodies of work, combined with a series of studies concerning the apparent lack of influence of newspaper editorial endorsements on candidates' electoral success (e.g. Lundberg 1926; Gosnell 1937), helped to usher in the era of pervasive belief in the "minimal effects" of the media on politics. This research is discussed in greater detail in subsequent sections of this chapter.

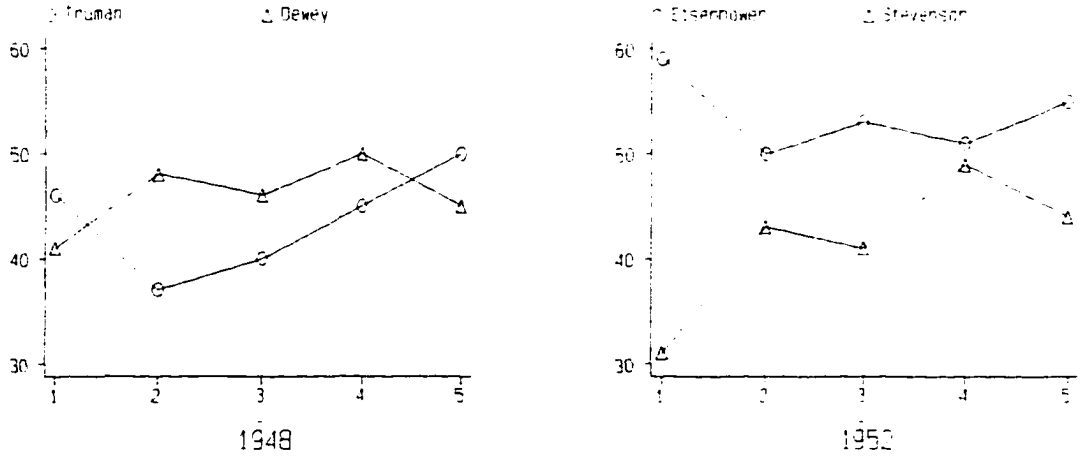
In the ensuing years since the widespread proliferation of the minimal effects doctrine, numerous studies have attempted to detect significant impact on political attitudes resulting from media exposure during campaigns. Opinions

about candidates, however, and more importantly political behaviors such as participation and vote choice, do not appear to be immediately responsive to mass-mediated campaign messages. Instead, more long-term forces such as socioeconomic or religious status (Berelson, Lazarsfeld and McPhee 1954) or party identification (Campbell, Converse, Miller and Stokes 1960) apparently cause people to maintain fairly stable patterns of political commitment, at least across the course of any given campaign. One influential study concludes that the presence of substantial media impact during presidential campaigns is a "myth" (Patterson and McClure 1976).

A problem facing such assertions of lack of media impact is that public opinion, in the form of candidate preference (as measured by various polling agencies) can swing back and forth between candidates during presidential nomination and general election campaigns. For instance, consider the 1976 nomination campaign. In 1975, Jimmy Carter was known as governor in Georgia and "Jimmy Who?" just about everywhere else. His presence in early polls was slight at best. However, after some rather surprising primary victories, Carter led Ford in the polls by about 30 points at the end of the Democratic National Convention in July, and went on to win the presidency. The up-and-down-and-up-again fortunes of John F. Kennedy in 1960, and of Bill Clinton during the

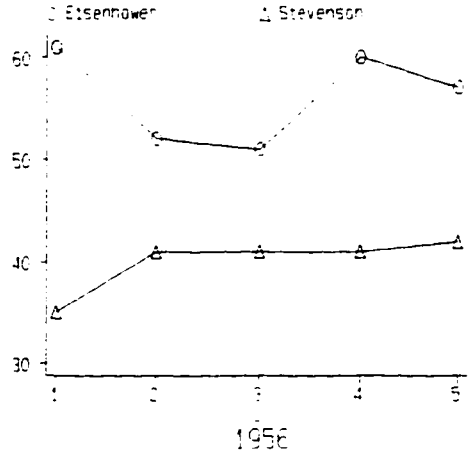
1992 presidential campaign are other examples of the potential volatility of voters' preferences. Figure 1.1 provides graphic examples of this kind of volatility, culled from presidential campaign "trial heats" conducted by the Gallup Poll and other polling agencies across the past 12 presidential election years. Each panel of Figure 1.1 presents five data points per candidate: the first poll of the year, a post-convention poll, an early October poll, the final pre-election poll and the election results.

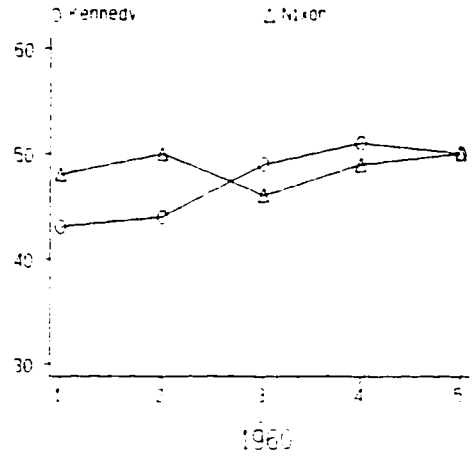
Figure 1.1: Election year presidential preferences, 1948-1992[1]

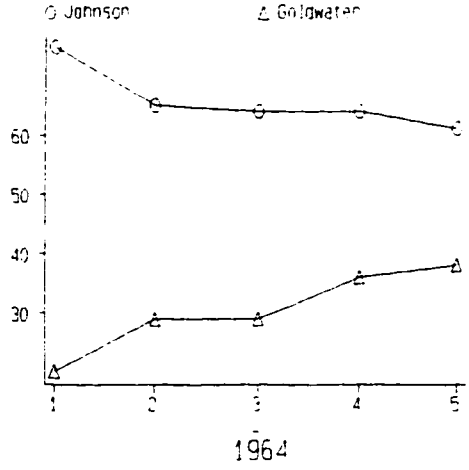


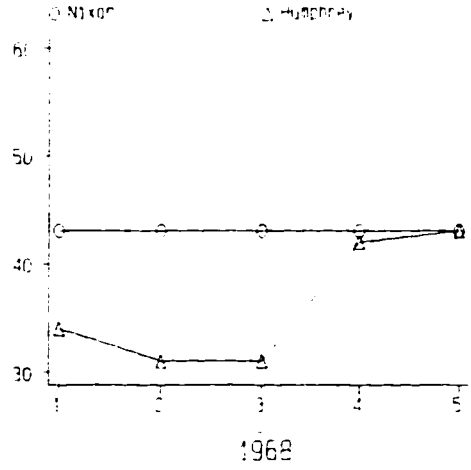
[1] Data collected in Stanley and Niemi (1994), p.104)

(Figure 1.1: Election year presidential preferences, 1948-1992, cont'd)

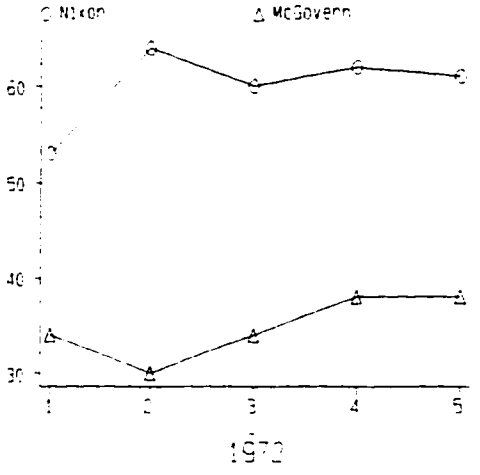


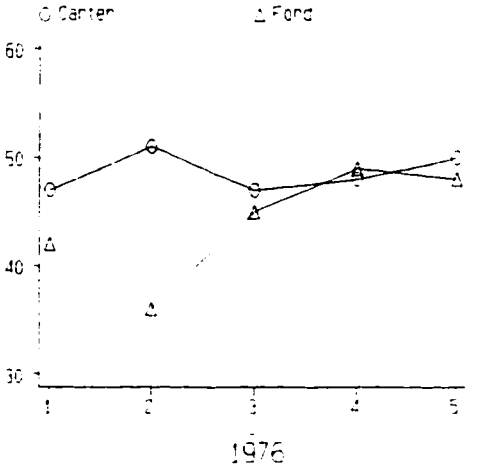


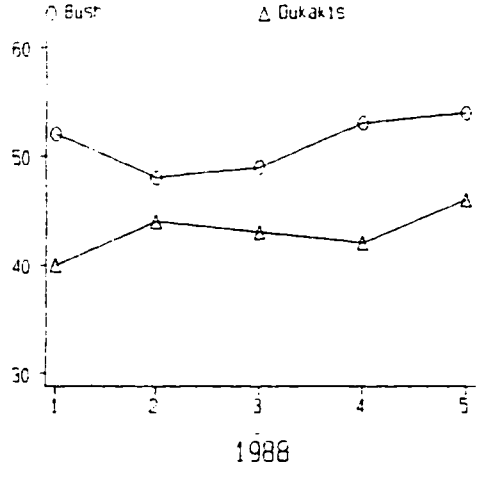


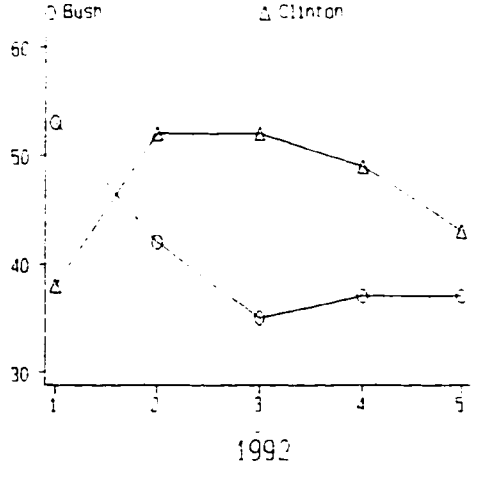


(Figure 1.1: Election year presidential preferences, 1948-1992, cont'd)









Changes in electoral support for candidates like those depicted in Fig. 1.1 must be driven by *something*. A "nonattitudes" explanation -- the idea that attitudes among the mass public change randomly and capriciously because rank-and-file members of the mass public lack the (politically) cognitive ability to develop true attitudes (Converse 1964) -- is both normatively unappealing and substantively problematic.[2] Since voters either intentionally or accidentally obtain most of their information about political candidates from the media (see Fiorina 1990 for an urbane discussion of this phenomenon), the most obvious culprit for short-term[3] political opinion changes is media-disseminated information. In other words, "[i]n the absence of other information, [mass-mediated] material can have an overwhelming effect upon judgments about the personal character and attractiveness of candidates" (Page and Shapiro 1992, p. 41). The still-widely-accepted conclusion that the media have "minimal effects"

---

[2] Briefly, for Converse's hypothesis to hold, opinion survey response instability would have to vary inversely with political awareness or political sophistication; those lowest in awareness should have very high levels of instability while those highest in awareness should evince very stable "true" attitudes. However, evidence from elite subsamples suggests that levels of response instability are relatively constant in both mass and elite samples; instability does not covary with sophistication (Achen 1975; Feldman 1989).

[3] I refer to attitude change across the course of a presidential campaign as "short-term" to distinguish it from the more glacial type of change (sometimes called "resocialization") usually associated with long-term panel studies (e.g. Jennings and Niemi 1981; Alwin, Cohen and Newcomb 1991).

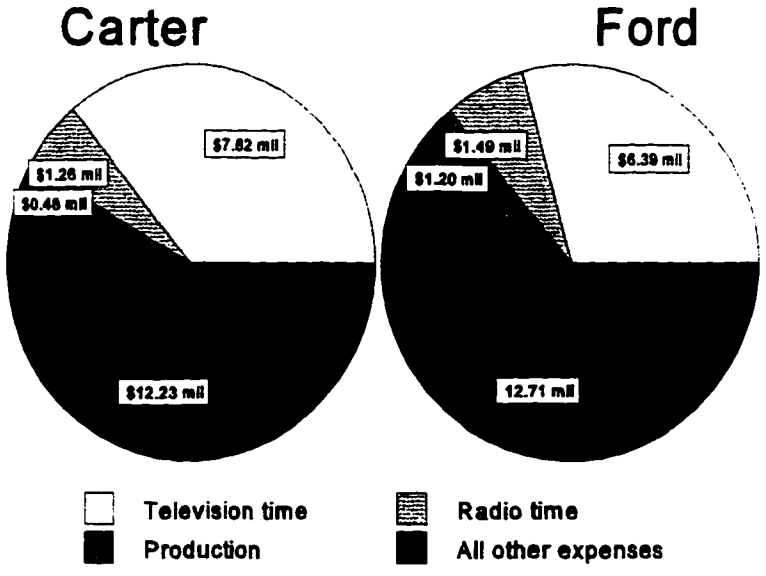
on political attitudes, or that the influence of television on presidential politics is a "myth," seems odd in light of the vicissitudes that afflict candidates' fortunes during campaigns.

As a reaction against the minimal-effects doctrine, some researchers contend that "the persuasive effects of the mass media may be more fugitive than minimal" (Bartels 1993; see also Page, Shapiro and Dempsey 1987). As Arterton (1978) has pointed out, if the media have little effect on public opinion, why are campaign managers, candidates, journalists and the public at large so utterly convinced that media "image-making" is crucial to electoral success? Campaigners, for example, are true believers in the ability of media messages to change voter attitudes. In fact, media advertising and marketing costs are the single largest items in most modern campaign budgets (Bennett 1992). Figure 1.2 presents the general election campaign finance breakdowns, highlighting electronic media broadcasting, for the 1976 Carter and Ford efforts.[4]

---

[4] I use the 1976 presidential campaign as an example here because later analysis focuses on this particular campaign. Campaign funding in more recent contests is even more dedicated to mass media (Bennett 1992).

Figure 1.2: Advertising expenses of 1976 general election campaigns[5]



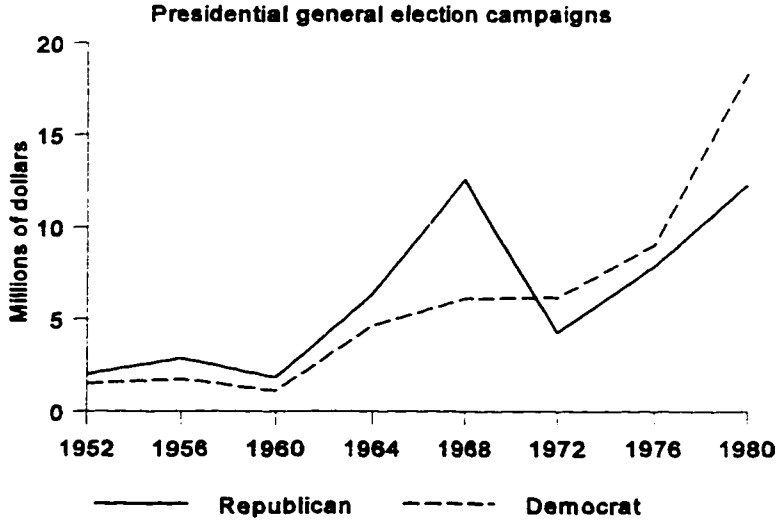
The numbers represented in Fig. 1.2 are conservative. Large amounts of campaign money itemized as travel expenses, equipment rental and so forth are actually paying for electronic media production costs (Joslyn 1984). In addition, as much as 25 percent of newspaper advertising money is used to announce candidates' broadcast media appearances. Modern campaigns are so media-

[5] Data from Joslyn (1984), p.85.

oriented that separating media advertising expenses from other campaign expenses can be quite difficult (Joslyn 1984).

Increasing mass-media orientation in political campaigns is not a partisan phenomenon, nor does it appear to be a temporal aberration in U.S. politics. Figure 1.3 presents the cross-time trend in presidential campaign expenditures on broadcast media for eight elections. Although not depicted in the graph, this trend has continued throughout the 1980s and into the 1990s (Jamieson 1992).

Figure 1.3: Expenditures for television and radio time[6]



[6] Data from Alexander (1984), p.13. The upward trend is equally steady, although less visually dramatic, when depicted using inflation-adjusted dollars.

The trend is clearly upward. While social scientists have been busy exclaiming about the mass media's lack of ability to influence political attitudes and behavior, campaigners and politicians have been steadily spending more and more money actualizing their beliefs in that ability. Sitting presidents, too, spend much time and energy attempting to influence public attitudes through mass media channels, both through conventional press conferences and mediated communication aimed directly at the public, rather than journalists (Kernell 1986).

Bartels (1993) blames social scientists for this disjunction between political "horse-sense" and empirical findings. He attributes researchers' failure to find convincing evidence of media-driven attitude change during political campaigns to poor research design and nonchalance regarding the limitations of social measurement. This dissertation is an attempt to address these problems within the context of the 1976 presidential nomination and general election campaigns.

Media effects during campaigns: A brief history

The early stage of alarm

The idea of persuasion of the public by elites is an old one in political science. Early observers, like Walter Lippmann, were alarmed by the potential of the mass media to damage American democracy, if not through outright

manipulation of the public's attitudes, then at least through media-based distortion of reality (Lippmann 1922). Lippmann, in fact, presciently discussed the "pictures in our heads" that we, as citizens, use as the basis for our knowledge of politics. His discussion is a remarkably accurate prediction of the "schema theory"[7] that would later come to loom large in the field of social cognition. Lippmann was especially concerned with the role the mass media, with their tendency toward distortion and inaccuracy, played in the formation of these pictures in the head.

Other examples of popular concern about the potential attitude-influencing power of mass media messages abound. The near-panic[8] which followed Orson Welles' October 1938 radio dramatization of H.G. Wells' *The War of the Worlds* was often cited as a cautionary tale regarding the potential negative power of mass media (Cantril *et al* 1940). On a more explicitly political level, many observers were particularly concerned about the European fascist states' (arguably successful) attempts to use radio, film and print propaganda to

---

[7] I use the term loosely. See Kuklinski (1993), but c.f. McGraw and Lodge (1993) and Feldman (1993).

[8] Although popular accounts at the time presented public reaction to the broadcast as a form of mass hysteria, Cantril, Gaudet and Herzog's *The Invasion from Mars: The Psychology of Panic* (1940) reveals that only about 17 percent of contemporaneoud survey respondents admitted actually feeling fear as a result of the broadcast. Although such a reaction from one-sixth of the population hardly constitutes mass hysteria, it was substantial enough to warrant the concern of the mass media scholars and pundits of the time.

consolidate and advance political power. The government-funded study of such propaganda, to investigate its potential usefulness to the United States Army, the War Production Board and other agencies, sowed the seeds for the Yale school of persuasion studies, which is briefly outlined below.

The rise of empiricism: The Columbia election studies

In contrast to early observers' fears, later empirical studies like those of the Columbia school downplayed the importance of the media in politics. Their conclusions were based on findings that the public's minds were apparently already made up well before an election (Lazarsfeld, Berelson and Gaudet 1948; Berelson, Lazarsfeld and McPhee 1954). Both of these studies are panel studies of individual attitudes and vote preferences during presidential campaigns. Each concluded that the little media impact that did occur happened near the beginning of the campaign. Most people seemed to have made up their minds before the candidates really took to the stump in earnest, and newspaper readers seemed to seek out information sources that reinforced their existing attitudes.

The first of the Columbia studies, the Erie study (after its sampling area of Erie County, Ohio), represents the first major survey-based study of electoral behavior. As documented in *The People's Choice*, the seven-wave panel study was designed to monitor information flow throughout the 1940 presidential campaign, from May to November. The authors expected to document

substantial media effects such as party-switching and candidate choice based on mass media information. However, only eight percent of the sample turned out to be "vote switchers," changing from one major party to the other during the seven-month time period. Instead, most media exposure was selective and tended to reinforce existing partisan predispositions (Lazarsfeld, Berelson and Gaudet 1948).

The second Columbia panel study, conducted in Elmira, New York during the 1948 presidential campaign, elaborated on some of the ideas introduced in the Erie study. In particular, the concept of *opinion leadership* was examined as part of a larger hypothesis called the "two-step flow of communication" (Berelson, Lazarsfeld and McPhee 1954). The members of the community who paid closest attention to the campaign, and to mass mediated political information in general, turned out to be the same individuals who communicated their ideas about politics to other members of their social groups. Apparently many individuals, rather than receiving political information directly from the mass media, received information in a diluted form, through the "filter" of an opinion leader. In other words, according to the two-step flow hypothesis, political information is received in two steps rather than in a direct, mass mediated communication process. By this reasoning, information-based political attitude change moves from the realm of mass communication and becomes an interpersonal interaction process. Hence, the Columbia studies were used as a major piece of evidence in

the establishment of the minimal-effects doctrine.

The Yale persuasion studies

The early social-psychological studies by the Yale group (summarized in Hovland, Janis and Kelley 1953) were conducted during World War II and funded by the U.S. government. Investigation of the persuasion process continued after the war, and many of the studies were performed contemporaneously with the Columbia studies. Although the Yale authors were concerned with attitude change and "propaganda" in general, rather than within an election context, their conclusions had a great deal of influence in the adoption of the minimal-effects doctrine. The "message-learning approach" advocated by the Yale group posits that attitude change occurs only when a persuasive message is learned and remembered, a condition contrary to the rather exiguous attention most people usually give to politics and to the mass media generally.

The Yale group formulated the classic "who says what to whom" or "source --> message --> recipient" persuasion paradigm. The skeletal framework is still in wide use today, in modern persuasion models such as the Elaboration Likelihood Model (Petty and Cacioppo 1986) and the Heuristic-Systematic Model (Chaiken 1980). The conclusion of the message-learning approach -- that a message must be remembered for it to have any persuasive effect -- has been largely discounted, however (see, e.g., Petty and Cacioppo 1981; McGuire 1985;

Pratkanis and Aronson 1991). At the time, however, communication scholars such as Klapper (1960) interpreted these results as further evidence that mass-mediated messages had very weak persuasive effects. Media messages are rarely retained in long-term memory and hence are never learned, thereby failing to satisfy the necessary "learning" condition of the message-learning approach. When applied to a political context, the conclusions of the Yale group provided more grist for the minimal-effects mill.

The influence of editorial endorsements

Another, lesser-known area of research dealing with changes in political attitudes based on media messages concerns the impact of newspaper endorsements on candidates' electoral fortunes. Traditionally, this has been a "ghetto-ized" research topic, one of interest primarily to political communication scholars rather than the political science or mass communications communities in general. It is of considerable historical interest, however, as it dates back to the earliest attempts at American quantitative political science (e.g. Lundberg 1926; Gosnell and Schmidt 1936; Gosnell 1937). The general conclusions of this research area, which has all but disappeared since the mid-seventies, gave some added support to the minimal effects doctrine. In fact, the history of the search for editorial endorsement effects reads like a synopsis of the history of the search for media effects on politics in general.

Lundberg (1926) provides the first piece of empirical evidence regarding the impact of newspapers' editorial endorsements on candidates' electoral fortunes. Prior to Lundberg's work, conventional wisdom and political pundits alike considered the press in general, and its editorial voices in particular, to be the single most important factor in determining electoral outcomes (Lundberg 1926). Lundberg's evidence, however, belies this conventional wisdom. Lundberg correlates the editorial endorsements (concerning both issues and candidates) of four Seattle newspapers with the responses of 940 Seattle residents who identify themselves as readers of one or more of the newspapers. Readers' agreement with a given newspaper's stated position ranged from 45 percent to 55 percent, which is taken as evidence of weak persuasive power on the part of the newspapers.[9]

Gosnell and Schmidt (1936), and later Gosnell (1937) in his seminal work *Machine Politics: Chicago Model*, to some extent echo Lundberg's conclusions. Gosnell uses aggregated Chicago election ward data, coupled with a newspaper readership survey conducted by the *Chicago Daily News* in 1933-34, to correlate the five Chicago dailies' editorial stances with candidates' electoral fortunes in several elections (controlling for several other variables such as Catholic origin,

---

[9] The three percent of the sample which regularly read the *Seattle Union Record* evinced 72 percent agreement, but Lundberg rightly dismisses this (using different terminology) as an artifact of the influence of a third variable, namely union membership.

unemployment and so on). While areas in which a certain newspaper could claim a particularly high circulation do show some relationship between that newspaper's endorsement and candidate success, in general the results are mixed and rather inconclusive. Gosnell takes the extra step of providing richly detailed qualitative explanation for his results, explaining "why" some editorial endorsements succeed and others fail from a journalistic or historical perspective.

Interest in this research area dissipated for a time, or rather was expanded to include study of the political influence of mass media generally rather than editorial endorsements alone. The resulting line of research, as conducted by the Columbia school, is documented above. A brief revival of editorial endorsement studies, centered among journalism scholars, occurred in the 1960s, led by Gregg (1965) and McDowell (1965).

These studies, and others that followed (e.g. McCombs 1967; Mueller 1970; Robinson 1972, 1974), use a combination of survey and aggregate data to examine the effects of newspaper endorsements on candidates' fortunes in elections. The electoral situations involved range from the significance of the 1968 presidential election (Robinson 1972) to the (seeming) triviality of choosing among 133 candidates for the Los Angeles Junior College Board of Trustees (Mueller 1970). Collectively, these studies tend to find a moderate level of practical electoral impact resulting from newspaper candidate endorsement. The size of the endorsement effects, however, generally take a back seat to other

determinants of vote choice such as party or interest group endorsement, or party identification.

For example, Mueller (1970) regresses the votes received by each of the 133 candidates for the Los Angeles Junior College Board of Trustees on endorsement by the Los Angeles Times and/or Los Angeles Herald-Examiner, ideological group endorsement, and ballot position. He concludes that an endorsement from the Los Angeles Times (the larger-circulation and better-respected of the two papers) is "worth" about 24,000 votes. An impressive figure, until compared to the 56,200 votes gained with an endorsement by one of several conservative interest groups. Even the power of conservative groups in Orange County, however, pales in comparison to the whopping 81,000 vote advantage given to the candidate alphabetically at the top of the 13-page ballot over the person at the bottom of the last page. These results are typical of this crop of editorial endorsement impact studies: An endorsement from a newspaper usually gives a candidate a measurable advantage, but one that seems minor in comparison to other impacts on electoral choice.

A more "modern" approach to the problem of editorial endorsement is presented by Erikson (1976). Erikson, like many of his predecessors, is interested in aggregate responses to newspaper editorial endorsements. He examines newspaper endorsements and county-level vote patterns in 233 non-Southern counties for the 1964 election. Erikson's approach is novel in that he both

recognizes and explicitly accounts for the potential nonrecursive nature of influence in this situation: Editorial endorsements are as likely to be influenced by the partisan nature of the newspaper's readership as vice versa. Erikson sets up a nonrecursive causal model of the process and tests it using two-stage least squares. He estimates that newspaper endorsements have a measurable effect on presidential elections. Specifically, a 1964 Democratic endorsement by a local paper adds about five percent to the 1960 Democratic vote in that paper's county of primary circulation.

Erikson points out that although researchers commonly assume that voters engage in selective perception regarding partisan messages, most newspapers in this country enjoy monopoly circulation.[10] Newspaper readers are, for the most part, captive audiences, and as such are commonly exposed to cross-partisan persuasive messages. Thus, Erikson contends that "although *most* voters probably remain unpersuaded by what newspapers tell them to do, some combination of processes appears to be at work to allow newspaper endorsements to influence a small but significant portion of the presidential votes cast by the American electorate" (Erikson 1976, p.223). As I attempt to show in subsequent chapters, one of these processes is cognitive mediation of the persuasion process by the audience members' political awareness.

---

[10] The trend toward lack of competition in media sources, both print and broadcast, has continued at an accelerating rate since the publication of Erikson's article in 1976 (Bagdikian 1992).

The last word in the study of electoral impact of newspaper editorial endorsements belongs at this point to Coombs (1981). Coombs takes an individual-level approach to the topic, using the 1972-1974-1976 panel study conducted by the Center for Political Studies as a data source. The CPS investigators asked panel respondents which daily newspapers they read on a regular basis; Coombs determines the editorial endorsements given to candidates by each of these newspapers in senatorial and gubernatorial elections during the period of the panel. He then proceeds to show that partisan defection rate is strongly related to editorial endorsement, contingent upon the respondent's strength of party identification (independent leaners, for example, are about 23 percent more likely than strong identifiers to defect when exposed to a cross-party endorsement). Coombs' study represents one of very few attempts to link individual-level survey data with the media messages to which survey respondents are exposed; this dissertation is another such attempt. Not coincidentally, Coombs' study and this one are among the very few that directly gainsay the minimal effects doctrine.

Minimal effects, and beyond

The results of the Columbia studies, the Yale group's persuasion work, and to a lesser extent the early editorial endorsement studies, led to Joseph Klapper's (1960) conclusion (or at least the widespread interpretation of Klapper's

conclusion)[11] that the mass media have "minimal effects" on the public's political attitudes. This dictum held sway over the social sciences for nearly two decades, and discouraged further research into the realm of mass media effects on political attitudes (Ansolabehere, Behr and Iyengar 1991).

The minimal effects paradigm began to break down, however, after empirical, survey-based investigation into the press' agenda-setting function (McCombs and Shaw 1972) and later experimental demonstration of the causal role of the mass media in setting the public agenda (Iyengar and Kinder 1987). Media impact has been demonstrated in several other areas not involving direct, individual-level attitude change. An extension of agenda-setting, the "priming effect," which refers to the media's ability to affect the criteria by which politicians are judged, has been convincingly displayed (Krosnick and Kinder 1990). Recent research has also focused on the media's effects, via the presentation or "frame" the media use to present issues, on the public's attribution (or lack thereof) of responsibility for crime, terrorism and economic problems to

---

[11] Klapper's 1960 book *The Effects of Mass Communication* is essentially a review of the media effects literature up to that time, excluding specific "wartime propaganda" studies and advertising studies. A careful reading of his conclusions reveals that, rather than broadly pronouncing that mass media have "minimal effects," Klapper instead points out gaps in knowledge, and calls for study of the contingent conditions under which mass media may have substantial effects (see the epigraph at the start of Chapter 7 in this dissertation). By this point, however, disillusionment at the lack of broad-based, obvious persuasion effects had already set in among the social science community, and Klapper's review served as the capstone in ushering in widespread acceptance of the minimal-effects doctrine (Katz 1987).

the president or government generally (Iyengar 1991; Mutz 1992). Popkin (1991) offers a definition of campaigning that emphasizes the campaigner's efforts to control the way the mass media frame the candidates and issues in the election, in an indirect effort to influence voting behavior.

In a different vein, there is evidence that political leaders' nonverbal behavior in a televised event can affect individuals' attitudes (Sullivan and Masters 1988; Ottati, Terkildsen and Hubbard 1996.). In addition, Bartels (1988) has shown how a politician's "momentum," as reported in the media, can benefit his electoral success in primary elections, a point that is particularly germane in the current context, given Carter's success in 1976. Patterson's (1980) analysis of "horse-race coverage," and the benefits and liabilities assigned to candidates based on media images of candidates as "winners and losers," suggests that the media's effects in campaigns are far from minimal. Experimental or quasi-experimental studies of the impact of televised docudramas (Feldman and Sigelman 1985; Lenart and McGraw 1989) have demonstrated measurable impact of media messages on political attitudes. In addition to the Erikson (1976) and Coombs (1981) studies mentioned above, well-designed studies by Robinson (1976) and Veblen (1975), as well as aggregate time-series survey analysis by Shapiro and his colleagues (Page, Shapiro and Dempsey 1987; Shapiro et al. 1992) are some of the relatively rare non-experimental studies of media impact in politics.

Another recent line of research which speaks to the media exposure effects controversy has to do with elite transmission of political messages to the mass public, and whether public opinion is responsive to these messages in a coherent fashion. The work of Zaller (1991; 1992; 1993) and Page and Shapiro (1992) typify this line of inquiry. Zaller's thesis (or one of his many theses) is that people use available information in the political environment to form and change their opinions. The manner in which they use this information is the result of a set of complex interactions among political awareness, predispositions (including partisanship) and the state of competition and signalling behavior among political elites. Zaller's work is discussed more fully in Chapter 2 and througout the rest of this dissertation.

Page and Shapiro (1992) examine the relationship between public opinion and policy output (legislation) in a large number of issue domains across the span of 30 years. Their concern is with aggregate-level public opinion, rather than individual-level attitude change, and one of their major findings is that aggregate-level public opinion exhibits great stability across time. However, when public opinion does change, it tends to change in a coherent and even "rational" fashion, in that the changes are predictable and understandable given the available information. Page and Shapiro find that media reports of world events are one of the most powerful sources of such change, a result that hardly jibes with a minimal effects interpretation of media exposure.

Despite the recent progress, however, the long reign of the minimal-effects doctrine has had something of a chilling effect on further investigation of the direct, persuasive impact of media messages on individual-level political attitudes. Partially for this reason, attempts at demonstrating media impact on political attitudes are not so widespread as one might think, especially outside the laboratory. Evidence of the media's direct impact on attitudes has not been pervasive, most likely because of failure to account for contingent conditions, the limitations of the cross-sectional survey (Ansolabehere et al. 1991), and the previously mentioned concerns about measurement error discussed by Bartels (1993), which are further addressed in Chapter 2. The chapter focuses on the role of political awareness as a cognitive mediator of the political attitude change process.

Chapter 2: The Importance of Political Awareness

Most current political media effects research is concerned with identifying areas of media impact on politics outside the realm of direct persuasion and attitude change. A few researchers, however, have continued the quest for such persuasive effects. One prominent recent piece of research in this area is Bartels' (1993) "Messages Received: The Political Impact of Media Exposure," published in the American Political Science Review.

Bartels (1993) attempts to address several of the problems with previous media effects research noted in Chapter 1, including lack of attention to measurement error and inattention to the longitudinal nature of opinion change during political campaigns. In particular, he focuses on measurement error as one of the prime movers behind the minimal effects paradigm in media research: "The present work attributes this pervasive pattern of negative findings and nonfindings in part to limitations of research design and in part to carelessness regarding measurement" (p.267).

Bartels' analysis, using the 1980 National Election Study Major Panel, accounts for measurement error by estimating a covariance structure model to

predict a number of different trait and issue judgments about candidates Carter and Reagan. His data consist of 758 survivors of a three-wave opinion survey administered in January-February, June and September 1980. The longitudinal nature of these data allows Bartels to examine the impact of the media on opinion *change* during the campaign. Bartels finds some support for at least a partial revision of the 'minimal effects' paradigm:

> Attention to the effects of measurement error significantly increases the apparent impact of media exposure on opinion change in a presidential campaign setting. Nevertheless ... the apparent effects of media exposure will often be modest in magnitude even when adjusted for the effects of measurement error (Bartels 1993, p.275)

So media messages apparently can cause at least some opinion changes during campaigns, belying the minimal effects doctrine. Problems remain, however. Bartels' use of the covariance structure model, which corrects parameter estimates for measurement error, forces him to make a dubious assumption in another area: He assumes media impact is constant across the population.

A simplified version of Bartels' estimation equation, for a given political attitude Y held by an individual I at time t, is

$$Y_{i\,t} = (Y_{i\,t-1} - \delta_{i\,t-1})\lambda_t + (X_{i\,t} - \zeta_{i\,t})\beta_t + u_{i\,t} \qquad (2.1)$$

where X is a vector of independent variables, δ and ζ represent measurement error in observed Y and X respectively, λ and β are parameters to be estimated and $u_{i\,t}$ is a disturbance term. When Bartels applies the model to the 1980 NES panel data, Y represents one of a set of attitudes toward Reagan or Carter, and the vector X includes television exposure, newspaper exposure and party identification. His model does not account for possible differences in individual responsiveness to television or newspaper exposure.

In effect, Bartels is caught between a rock and a hard place regarding his assumptions. He wishes to account for the possibility that measurement error could attenuate the media exposure coefficients. Doing so calls for the type of latent construct-observed variable covariance structure model that he develops and applies. Unfortunately, the computational difficulty of estimating multiplicative interaction effects in the covariance structure model causes Bartels to ignore the possibility of contingencies in the impact of media exposure on attitude change (see Bollen 1989, pp. 403-409, for a detailed discussion of interaction terms in the covariance structure modeling context). Such contingencies, however, are well-documented in attitude change research in

general and media effects research in particular (see, e.g., Hovland, Janis and Kelley 1953; Klapper 1960; Petty and Cacioppo 1981, 1986; McGuire 1985; Graber 1993). In the context of research on political media effects, the short shrift given this simple possibility -- that different types of people respond differently to media messages -- is surprising given the nature of psychological attitude-change research and public opinion theory (e.g. Converse 1962, 1964; Zaller 1991, 1992).

Indeed, the possibility of contingent media impact is an element of psychologist William McGuire's (1985) list of (rather snide) "salvaging conjectures," which are research areas that attempt to "rescue" the idea of substantial media impact from the harsh light of inconsistent and weak evidence:[1] "...[E]ven if the mass media have little impact on the general public, they may have sizable effects on some particularly susceptible subpopulation" (McGuire 1985, p. 282). Which subpopulation? In the current context, perhaps the most likely place to look for "sizable effects" of mass media messages on political attitudes is among those individuals with low levels of awareness, knowledge, or sophistication concerning the political realm. In some instances, however, the

[1] Possible attenuation of the estimated impact of media exposure resulting from measurement error is another element of this list.

greatest media effects may occur amongst those highest in awareness, while at other times the greatest amounts of attitude change may take place in the midrange of political awareness, for reasons that will be made clear below.

Political awareness and media impact

Political awareness has great potential to moderate the impact of media messages upon political attitudes and behavior.[2] According to Zaller (1990), "Political awareness affects virtually every aspect of citizens' political attitudes and voting behavior...Political awareness deserves to rank alongside party identification and ideology as one of the central constructs in the public opinion field" (p.125).

The importance of political awareness has been shown in a number of different contexts[3]. Most importantly for the present project, recent work has shown that a

---

[2]The same broad concept that I call political awareness also goes by the alias of political expertise, and is often operationalized as political knowledge, as discussed later. I rather cavalierly treat these terms as interchangeable throughout this paper, since the most important aspects of the concept -- availability (or lack) of a fund of political knowledge and expertise, and a relatively high degree of attitude crystallization and resistance to change at higher levels -- are shared across all of the concept's various incarnations.

[3]A partial list of research which stresses the role of political awareness as an independent variable includes Converse (1962); Dreyer (1971); Macaluso (1977); Zaller (1989, 1991, 1992, 1993); McGraw, Lodge and Stroh (1990); Rahn,

high level of political awareness leads to a relatively higher resistance to media-induced political attitude change (Zaller 1991, 1992). This resistance results from the larger pool of political knowledge and expertise available to the relatively politically aware, and the fact that this pool is more accessible for these individuals when compared to those lower in awareness (Zaller and Feldman 1992; Zaller 1992). In other words, political awareness can be conceptualized as a magazine of ammunition for the political arena; those individuals with high levels of awareness have a larger amount of ammunition with which to defend their attitudes. Hence, politically aware individuals are more likely to have stable political attitudes (Feldman 1989).[4] This notion of an awareness effect is conceptually very similar to social-psychological research on the effects of intelligence on the attitude change process (see McGuire 1985 for a review).

Aldrich and Borgida (1994), among others . A partial list of research seeking to explain political awareness, using it as a dependent variable, includes Kingdon (1970); Tichenor, Donohoe and Olien (1970); Price and Zaller (1993); Price and Czilli (1993); Delli Carpini and Keeter (1991); Crone (1993), among others. In addition, as noted later in this chapter, a vigorous debate concerning the measurement of political awareness, typified by Luskin (1987) and Delli Carpini and Keeter (1993), continues to simmer.

[4] An alternative metaphor for the resistance of well-developed attitudes to change is to conceptualize an individual's set of political attitudes as a physical mass. Individuals high in political awareness have a larger mass of attitudes in storage than do those low in political awareness. As would be the case in the physical universe, the larger mass exhibits greater inertia, or resistance to movement or change, than the smaller mass.

The obverse of the notion of crystallized attitudes at high levels of awareness is that those individuals with a relatively poor fund of political resources will have more malleable attitudes, under the proper circumstances. Converse (1962) sums up this idea succinctly: "...such voters show a high susceptibility to short-term change in partisan attitudes *providing that any new information reaches them at all*" (p.144; original emphasis). The implication, of course, is that low-awareness voters pay little attention to political media messages, or have trouble understanding such messages if they are heeded. Media exposure is a necessary condition for media-induced attitude change. A message must be received, and at least minimally understood, before it can be yielded to, according to Converse (1962), McGuire (1969; 1985) and Zaller (1992). I should point out that Converse is principally concerned with strength of partisanship, rather than awareness, as the key variable. McGuire's focus is intelligence. Zaller correctly points out that the key underlying variable is domain expertise, which in the political world amounts to political awareness or sophistication.

The nature of political awareness, then, leads to potentially conflicting hypotheses regarding attitude change. First, those at the highest levels of awareness are most likely to receive new, potentially attitude-changing

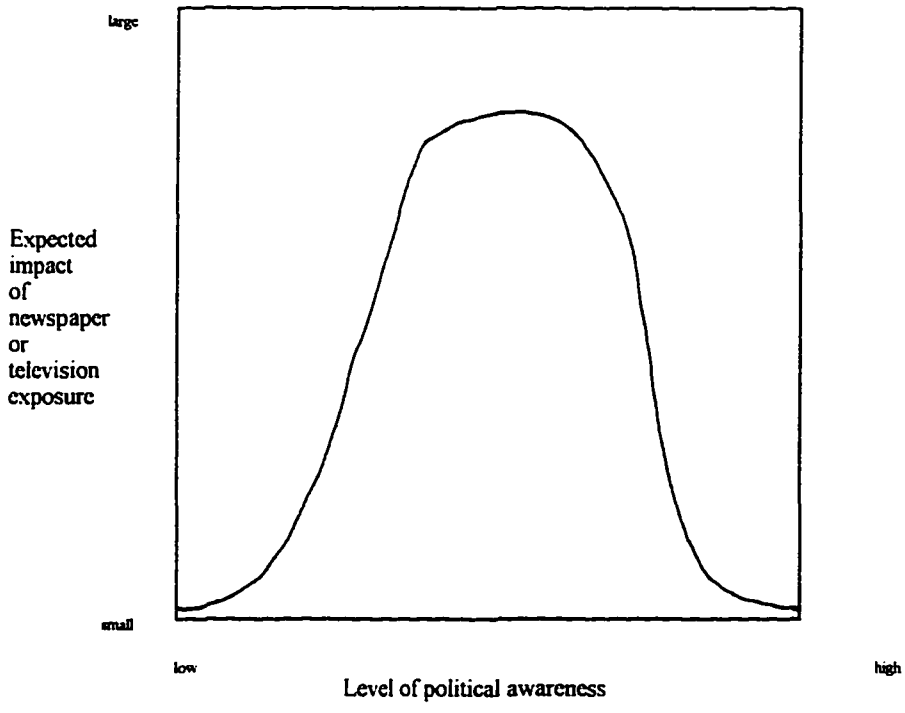
information, yet their crystallized attitudes are least likely to "yield" to the new information by changing. Still, under some circumstances -- for example, in an information-poor environment, where information costs are high -- these "expert" individuals may exhibit the largest amounts of attitude change as a result of media messages. I call this situation the "rotisserie league model." Only true baseball fanatics, those fans with the greatest levels of domain expertise in baseball, exhibit changes in attitudes toward various players as a result of the rarefied information available in the box score section of the sports pages. Normal people, oblivious to this specialized information, maintain fairly steady attitudes toward various players and teams, unless an extraordinary play or record-breaking performance occurs.

On the other hand, those at the lowest levels of awareness are least likely to receive any new information, yet their relatively malleable attitudes are most likely to change in response to such information. Given a message of great enough intensity or volume, however, the largest amounts of attitude change should occur among this group. I dub this perspective the "Wellesian model," after the pseudo-panic caused by the redoubtable Mr. Welles' 1938 radio broadcast of H.G. Wells' *The War of the Worlds.*

These two conflicting consequences of awareness or expertise --

independently pointed out by Converse (1962) and McGuire (1969) -- are summed up neatly by Zaller (1992). He calls the intersection of these two conflicting impulses the "Converse-McGuire" or the "inverted-U" model: Those in the *midrange* of political awareness are most likely to change their attitudes as a result of mass mediated political messages, because they are *somewhat* likely to receive such messages and *somewhat* likely to yield to them. The Converse-McGuire hypothesis is graphically depicted in Figure 2.1.

Figure 2.1: The Converse-McGuire model



A crucial point concerning these three hypotheses -- the rotisserie league model, the Wellesian model, the Converse-McGuire model -- must be emphasized here: *They are not mutually exclusive*. In certain situations, for example in times of greater or lesser message intensity, any of the three models may be the "correct" one. The intensity or volume of the media signal will determine which model predominates at any given time.

Zaller and curvilinear response patterns

Although Zaller (1992), in his *The Nature and Origins of Mass Opinion*, takes the Converse-McGuire inverted-U as the theoretical point of departure in his discussion of response patterns, he emphasizes that the inverted-U is not the only possible response pattern, nor even the most common one. Differential response patterns are the result of a confluence of different forces, such as the nature of the message itself (level of intensity; one- vs. two-sided information flow) and the nature of extant public opinion on an issue (strong prior attitudes vs. little information). In fact, "attitude change in response to a two-sided message can take different forms at different points in time" (p.207), and the same can be said for one-sided messages as well. Zaller develops a typology of

(simulated) mass opinion change, based on the application of his attitude-change model at different levels of message intensity and different distributions of prior opinion.

Zaller's model, which he christens the "Receive-Accept-Sample" (RAS) model of opinion change, posits that different individuals' opinions are affected in different ways by "elite" discourse concerning political issues. This elite discourse -- largely disseminated through mass media channels -- brings different issue-oriented considerations to the fore among differentially politically aware segments of the public. The "volume" or intensity of elite discourse varies, as does the ideological balance of elite discourse content. Changes in individual-level political attitudes, and hence aggregate changes in public opinion, occur as a result of the convergence of these factors.

For attitude change to occur, individuals must first *receive* some portion of elite discourse concerning an issue, which entails both exposure to and understanding of the message. Political awareness is the primary factor in determining and individual's reception likelihood -- highly aware individuals are more likely to receive messages than unaware individuals. Second, individuals must *accept*, or incorporate into their belief system, the new information. Again, political awareness is the key factor in determining acceptance -- highly aware

individuals are less likely to accept new counter-attitudinal information than are unaware individuals, who are less discriminating. Finally, when asked a (survey) question about the attitude-object, respondents *sample* the salient considerations that come to mind at the moment of answering. If elite discourse on an issue is consistently unidirectional and intense enough to penetrate across large enough segments of the population, aggregate shifts in public opinion on that issue will occur.

In the context of the current work, the most important thing to note about Zaller's RAS model is that different response patterns are likely, depending upon both the nature of the elite messages and the position on the political awareness spectrum of the subpopulation under consideration. The Converse-McGuire inverted-U pattern should appear among those individuals located in the midrange of the awareness spectrum, for relatively strong unidirectional messages, for example. Other response patterns -- including analogues to the rotisserie league model and the Wellesian model -- are also possible, depending upon the nature of elite discourse and the subpopulation under examination.

One major difference between this dissertation and Zaller's work is that the latter is heavily focused on policy issue opinion change, whereas the focus of the current inquiry is on political person judgment. The social psychological

distinction between issue persuasion and person perception is sharply defined, and the two domains are widely regarded as separate and distinct processes (see, e.g. Fiske and Talyor 1991; McGuire 1985; Nisbett and Ross 1980 for discussion)[5]. This distinction is both disciplinary and substantive; individuals bring different considerations to bear when evaluating issue-oriented messages versus person-oriented information.

For this reason alone, we may expect to observe differences between the issue-based response patterns documented by Zaller and the person-oriented (more specifically, candidate-oriented) response patterns that emerge from the current exploratory analysis. There is no logical reason, however, to expect political awareness to move from its place as a key variable in the political opinion change process when we are dealing with political persons rather than political issues. The general theoretical effects of political awareness upon reception of and yielding to political messages should remain the same.

The "reception" portion of the situation is partially avoided in the current

---

[5] Issue-oriented attitude change is usually the research area for scholars whose interests are labelled "persuasion and attitude change" (e.g. Petty and Cacioppo 1986; Chaiken, Liberman and Eagly 1989). Person-oriented attitude change, on the other hand, is usually grouped under the "social judgment" or "person perception" rubric (e.g. Nisbett and Ross 1980). Although there is a great deal of theoretical and conceptual overlap between the two areas, very little specific empirical work addresses both realms in a mutual fashion.

research by specifically measuring and modeling media exposure. Those who report high levels of media exposure are likely to have received the new information required by Zaller's (and Converse's) theory. Understanding mass mediated communications is not difficult for most people, given that the language, usage and cultural allusions in most newspapers and television news reports are pitched to an approximately eighth-grade intellect (Fink 1988; Postman 1985). The reception end of the reception-yielding principle should not be completely dismissed in the current context, however. It may be the case that high-media-exposure individuals may *not* "receive" the message (in the Converse-McGuire sense), simply because of a lack of attention. This possibility is especially acute for politically unsophisticated or unaware individuals, because such people are least likely to show enough interest in politics to bother paying attention.[6]

---

[6] In fact, some evidence for the Converse-McGuire "inverted-U" function is presented by Coombs (1981), who finds that individuals with middling levels of education are most responsive to newspaper editorials, while the uneducated and most highly-educated are considerably less affected in terms of amount of attitude change.

Cognitive approaches to media impact

The conclusions regarding political awareness outlined above -- particularly the notion that opinion change is a complex process, and therefore mass media messages will have different effects at different times -- are tangentially echoed and substantiated by research in cognitive psychology, specifically in the area of persuasion and attitude change. The Elaboration Likelihood Model of persuasion developed by Petty and Cacioppo (1979; 1981; 1986) and the Heuristic-Systematic Model developed by Chaiken (1980; Chaiken, Liberman and Eagly 1989), while distinct in certain areas of process, both posit that cognitive sophistication is positively associated with resistance to persuasive messages. A high level of cognitive sophistication, or intelligence, leads to a chronic tendency to systematically scrutinize, or cognitively elaborate upon, persuasive messages to a greater extent than would otherwise occur, other factors being equal. Conversely, a low level of cognitive sophistication begets a tendency to treat persuasive messages more casually, a condition called "peripheral" or "heuristic" processing in the ELM and HSM, respectively.

Run-of-the-mill persuasive messages, those aimed at changing attitudes that are not overwhelmingly important to an individual's personal life, tend to have greater success when processed in the latter fashion. That is, a message

concerning, say, a soft drink or automobile is more likely to change an individual's attitude toward the product if the message is processed peripherally or heuristically, as opposed to being subjected to careful cognitive scrutiny. Since individuals with low levels of cognitive sophistication have a chronic tendency to process messages in a casual fashion, these individuals are likely to be more generally susceptible to attitude-changing messages than are cognitive sophisticates. No great leap of faith is required to extend this analogy to the political arena, where political sophisticates are more resistant and political novices are more susceptible to political attitude change, as outlined above. Thus, the conclusions of the public opinion theorists are at least circumspectly supported by the conclusions of the cognitive psychologists. This reasoning has been followed in several recent pieces of research in the political science realm, ranging from studies of candidate evaluation (Rahn, Aldrich and Borgida 1994) to responsiveness to a changing public agenda (MacKuen 1984) to the interaction between political awareness and affect in constructing responses to political news stories (Hsu and Price 1993).

The existence of a certain type of person whose political attitudes are more susceptible to outside influence than those of her peers is, of course, not a new idea in political science. In fact, the search for this type of person precedes

even Converse's (1962) analysis of political attitude change. She is, of course, the (in)famous "floating voter" of the earliest days of political survey research (Daudt 1961; Campbell *et al* 1960; Lazarsfeld, Berelson and Gaudet 1948). In fact, it would be safe to categorize this dissertation as a continuation of the search for the floating voter, focusing upon political awareness as the key identifier of this type of political animal.

Note, however, that the definition of "floating voter" used in this dissertation differs somewhat from the classic definition. Daudt (1961), summarizing approximately two decades of survey research in this area, defines floating voters as voters who "change their minds at successive elections" (p.4). In other words, the emphasis on the early floating voter studies, especially after the influence of the Michigan school became predominant, was on the notion of deviation from "correct" party-line voting from election to election. Deviation from party-identification-based voting dominates the concerns of Converse (1962), and this emphasis on successive elections continues throughout the thread of floating voter research, from Converse (1962) up through Zaller's recent work (1991;1992).[7]

---

[7] Tick marks on the laundry list of floating voter research since Converse include Benewick *et al* (1969), Dreyer (1971), Dobson and St. Angelo (1975), Zukin (1977), Pederson (1978), Norpoth and Baker (1980), Bybee *et al* (1981) and

The preceding discussion of the effects of political awareness or sophistication is adequate in terms of theoretical generalizations. To pursue an empirical enquiry concerning political awareness, however, we must pay special attention to our operationalization of the concept. Defining political awareness in concrete operational terms is the subject of the next section.

Operationalizing political awareness

A rather large amount of debate exists concerning the proper operationalization of political awareness, political sophistication, political knowledge and other closely related concepts. One camp, including in its ranks Zaller (1990), Delli Carpini and Keeter (1993), and Crone (1993), contends that a basic test of chronic level of political knowledge is the best, or at least an acceptable, measure of the awareness/sophistication concept.[8] The other camp, originated by Campbell, Converse, Miller and Stokes (1960) and their 'levels of

---

Kazee (1981). Converse's other primary research thread, the attitudes vs. nonattitudes debate, is peripherally related to the floating voter motif. Presumably floating voters' policy attitudes will have little constraint or temporal stability, and their open-ended responses to questions about political figures would likely be placed in the 'no issue content' category of a 'levels of conceptualization' measure.

[8] Hamill and Lodge (1986) use amount of knowledge about ideology as a measure of political sophistication, which is defined as the richness of political schemata.

conceptualization' measure, and now represented primarily by Luskin (1987), claims that level of abstractness in political discussion is a key component of political sophistication.[9] Still another view, championed by Popkin (1991) and Sniderman, Brody and Tetlock (1991), contends that amount of political knowledge is meaningless in terms of political decision-making. Instead, voters rely upon heuristics, or cognitive shortcuts, to infer everything they need to know in order to make rational political choices.

For our current purposes, the "amount of knowledge" aspect of political awareness is the crucial component of the concept. The notion of cumulative attitudinal intertia, or crystallization of attitudes, hypothesized by Converse (1962) hinges upon this aspect of political awareness. The "abstractness-level" concerns of Luskin take a back seat to knowledge base in this instance, because the ancillary aspects of the political awareness concept are not brought into play in the model that is outlined later. In fact, Luskin (1987) himself includes information- holding as a critical, and coincidentally more reliably measurable, component of political sophistication.

So, despite some debate to the contrary, the general concept of political

---

[9] The ideological 'depth-interview' techniques initially championed by Robert Lane (1962) probably would fit into this category as well, to the extent that they can be wedged into any category.

awareness as outlined in the previous section is best measured by some type of test of political knowledge. A simple knowledge test best addresses the fundamental aspect of the awareness concept, which is the existence of a fund of political knowledge and expertise from which the sophisticated can draw ammunition for counterargument.[10] As noted above, such ammunition theoretically allows political sophisticates to have less malleable, more stable attitudes than their politically unaware fellows. Individuals high in political knowledge therefore should be less susceptible to media-induced attitude change during political campaigns. We now turn to a explicit, although not necessarily mathematically or formally rigorous, statement of these notions.

A model of political awareness and attitude change

Before we can begin discussion of the data and empirical analysis, some explicit statement of the theoretical notions discussed above is necessary. Borrowing rather heavily from Bartels (1993), MacKuen (1981) and, especially, Zaller (1992), I will attempt such a statement below. The development of this model depends largely upon the "reception and yielding" process delineated

---

[10] The specific nature of this knowledge test, as applied to the empirical analysis in this dissertation, will be discussed in Chapter 3 along with other data specifics.

earlier in the discussion of the Converse and Zaller models of opinion change, with an added degree of specification uncertainty (and necessarily exploratory empirical approach) resulting from the current focus on candidate-oriented rather than issue-oriented political attitudes.

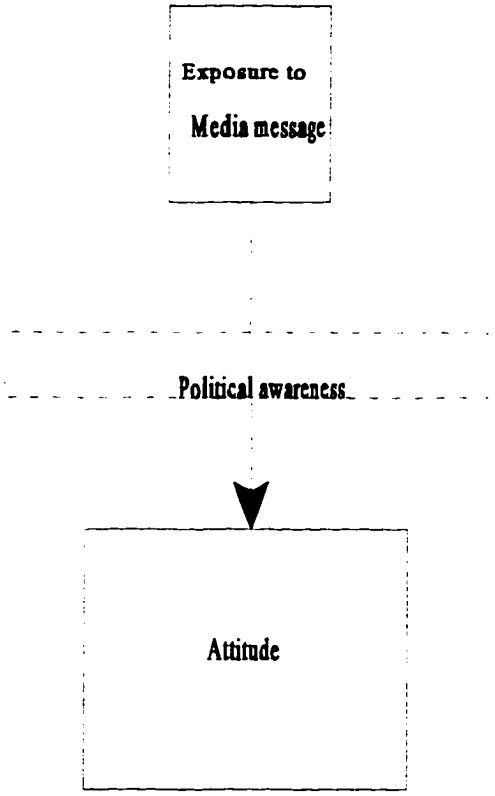
We are concerned with changes in political attitudes across time, or more specifically in the context of this dissertation, changes in attitudes toward presidential candidates across the course of a campaign. Media messages are the primary source of changes in these attitudes, or at least the source of most interest to us. The effects of these media messages upon attitudes toward the candidates are, for reasons previously discussed, mediated[11] by each individual's level of political awareness (hence the line seen below, passing through the 'political awareness' box, running from 'media message' to 'attitude'). A model of this attitude change process therefore consists of three main parts: Attitude toward a candidate, exposure to media message(s) concerning the candidate, and level of

---

[11] To be more precise (and to show Professor McGraw that I was paying attention), the substantive and statistical impact of media signal upon attitude is *moderated* by a given individual's level of political awareness. This moderating influence, considered in terms of the theoretical discussion outlined previously, in turn suggests that media messages are cognitively *mediated* by the "attitude crystallization" effect of the individual's storehouse of political knowledge or awareness (see Baron and Kenny 1986 for a discussion of the moderator-mediator distinction).

political awareness. This simple model is graphically depicted in Figure 2.2.

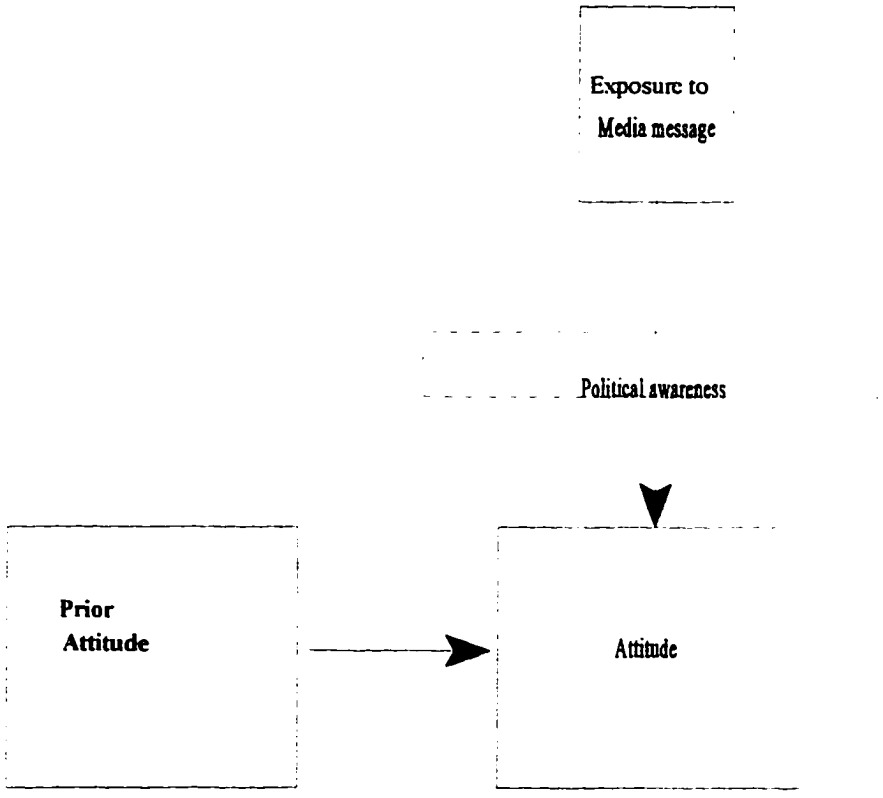
Figure 2.2: A simple media effects model



The model shown above is complicated by the cross-time nature of attitude change. Attitude toward an object at any given time depends not only upon new information concerning the attitude object; it also depends on prior

attitude toward the object. This complicating factor is included in the rebuilt model shown in Figure 2.3.

Figure 2.3: Intermediate media effects model



The model in Figure 2.3 may remain incomplete, however. Based on decades of prior research, some of it reviewed in Chapter 1, we can expect a number of

other influences on people's attitudes toward political candidates. These influences most notably include partisanship or party identification (Campbell *et al* 1960; Converse 1962; Dobson and St. Angelo 1975); socioeconomic background and status, including rural versus urban residence (Lazarsfeld, Berelson and Gaudet 1948; Berelson, Lazarsfeld and McPhee 1954); an individual's general level of involvement in the campaign (Bybee *et al* 1981; Kazee 1981; Zaller 1992); amount of involvement in social networks and interpersonal political discussion (Kingdon 1970; Lenart 1994); perceived closeness of the presidential race (Fiorina 1990) and a host of other factors.

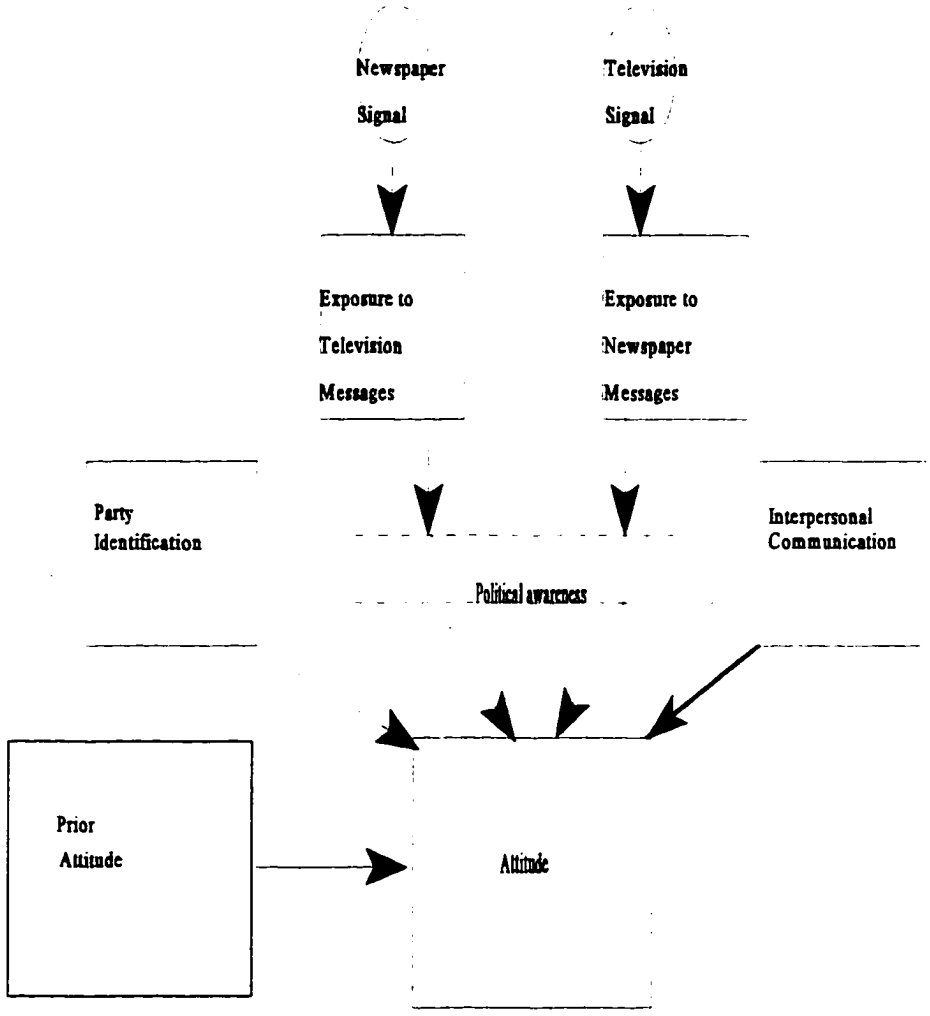
Explicitly allowing for each and every potential influence upon current attitude is neither practical nor desirable, however. One of the advantages of examining an attitude change process, or any other process for that matter, across time is that variation not explicitly accounted for in a model of the process is "picked up" by the inclusion of prior attitude in the model and its estimation (Markus 1979; Hsiao 1986). This phenomenon allows for an explicit examination of one or a few sources of change without having to explicitly model or "control" for all other potential sources. In other words, inclusion of a previous measure of one's dependent variable as a predictor of the current level of the same variable lessens (but by no means removes) the danger of model misspecification.

Specifically, so-called "control" variables, which could reasonably be expected to affect only the *formation* of an attitude, can be considered redundant in a cross-time model of *change* in that attitude. Any contribution made by a given variable to the formation of an attitude is implicitly included in the model through the inclusion of a prior measure of the dependent variable as a predictor.

Of the usual control variables noted above, only party identification and interpersonal communication concerning politics are included in our conceptual model. Party identification may make an independent contribution to change in political attitudes across time by virtue of its commonly hypothesized function as a screen or filter through which political messages are selectively passed (Campbell, Converse, Miller and Stokes 1960; Zaller 1992). Interpersonal communication, although not of central interest to this dissertation, is another important contributor to political attitude change. This idea was first promulgated in the "two-step flow" hypothesis delineated by the Columbia studies (Lazarsfeld, Berelson and Gaudet 1948; Berelson, Lazarsfeld and McPhee 1954), and has received heightened interest in recent years. Lenart (1994) and Hacker (1995), for example, are forceful advocates of the importance of interpersonal communication in the area of candidate image formation and change.

Figure 2.3 has another problem as well. It assumes homogeneity of media messages -- that television and newspapers, as sources of information, have equal content. A further assumption of the conceptual model presented in Figure 2.3 is that individuals have equal exposure to the different types of media. Neither of these assumptions is viable. Numerous studies, as well as common sense, suggest that the political content of television and newspapers differ (Graber 1988; Neuman,Just and Crigler 1992; Postman 1985; Westlye 1991). Level of exposure

Figure 2.4: A conceptual model of political media effects



and cognitive responses to the different media also differ (Andreoli and Worchel 1978; Petty and Cacioppo 1986; Brians and Wattenberg 1996; Chaffee, Zhao and Leshner 1994; Price and Czilli 1993; Patterson and McClure 1976; Clarke and Fredkin 1978; DeFleur, Davenport, Cronin and DeFleur 1992; Delli Carpini, Keeter and Kennamer 1994; Neuman, Just and Crigler 1992; Wagner 1983; Wicks and Drew 1991). Therefore, we must consider television and newspapers as separate potential influences on political attitudes.[12] All of these necessary additions to the conceptual model are noted in Figure 2.4, above.

I will allow the model shown in Figure 2.4 to function as a guide, and turn to a symbolic representation of this graphical model, which I outline below. The model, presented here in general form, will be applied to specific instances of attitude change during the 1976 campaign in Chapter 3. The symbolic representation of Figure 2.4 is as follows:

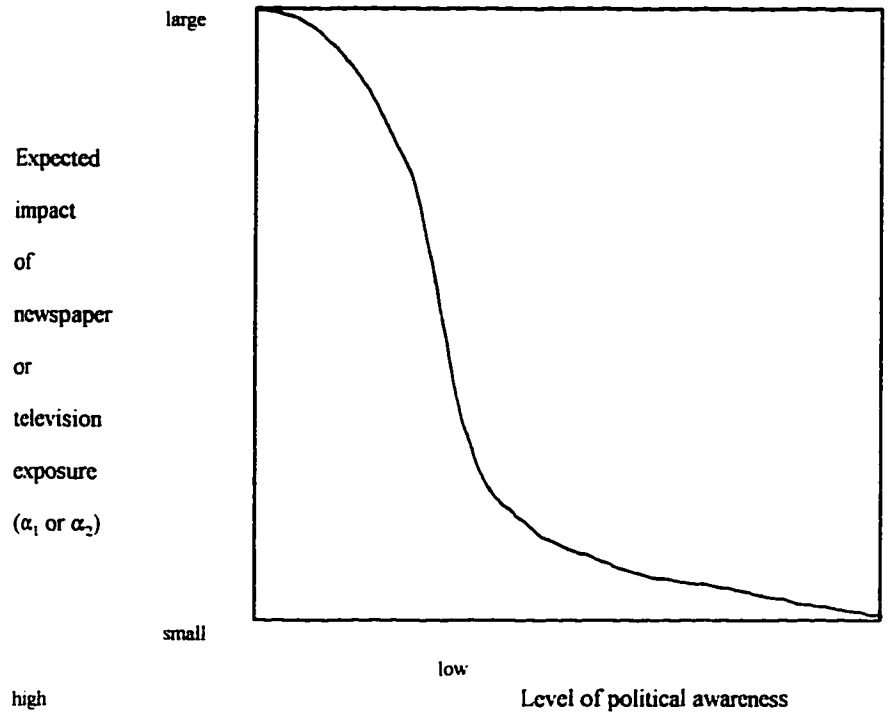
$$Y_t = \beta_1(Y)_{t-1} + \beta_{2\ldots k}(\text{controls}) + \alpha_1(\text{newspaper exposure})_t + \alpha_2(\text{television exposure})_t + \epsilon_t \quad (2.1)$$

[12] Newsmagazines are another potential mass mediated source of information about political campaigns and candidates. Empirically, however, newsmagazines have been a minor source of information at best (Graber 1988). This assumption holds in the 1976 campaign data which will be introduced in Chapter 3.

Following common practice, I let Y_t represent the dependent variable of interest, in this case attitude toward a candidate at time *t*. The first predictor term, $Y_{(t-1)}$, represents attitude toward the candidate at an as-yet-unspecified prior time point. The coefficient β_1 modifying this term can be considered a measure of attitude stability. Coefficients for the other terms represent the effects of their respective variables on *change* in attitude from time t-1 to time t, taking prior attitude into consideration.

The second term, $\beta_{2...k}$(controls), allow for the independent impact of party identification, interpersonal communication, and any other control variables on political attitude change. The third and fourth terms, α_1(newspaper exposure)$_t$ and α_2(television exposure)$_t$, represent amount of newspaper and television exposure at time t. Note that the actual signals, or messages, disseminated by newspapers and television are not included in this model because they remain, for the time being, unmeasured. The coefficients α_1 and α_2 represent, respectively, the impact of newspaper and television exposure on changes in attitude Y from time t-1 to time t. Coefficients α_1 and α_2 are allowed to vary as a function of political awareness, for reasons discussed earlier.

Figure 2.5: The Wellesian model



Specifically, I expect the impact of exposure to the two types of media upon attitude change to follow one of the three models discussed earlier in this chapter. If the Wellesian model holds sway, I expect media impact to be greatest among those individuals who evince the *lowest* levels of political awareness. I expect the impact of exposure to decline rapidly among the population as level of political awareness increases. This concept is presented graphically in Figure 2.5. If, on the other hand, the rotisserie league model is correct, then media impact on

attitudes toward the candidates will be greatest among those at the *highest* levels of political awareness, as shown in Figure 2.6. The third possibility, the Converse-McGuire model, posits that media impact will be greatest at the *midrange* of political awareness, a possibility depicted earlier in Figure 2.1.[13]

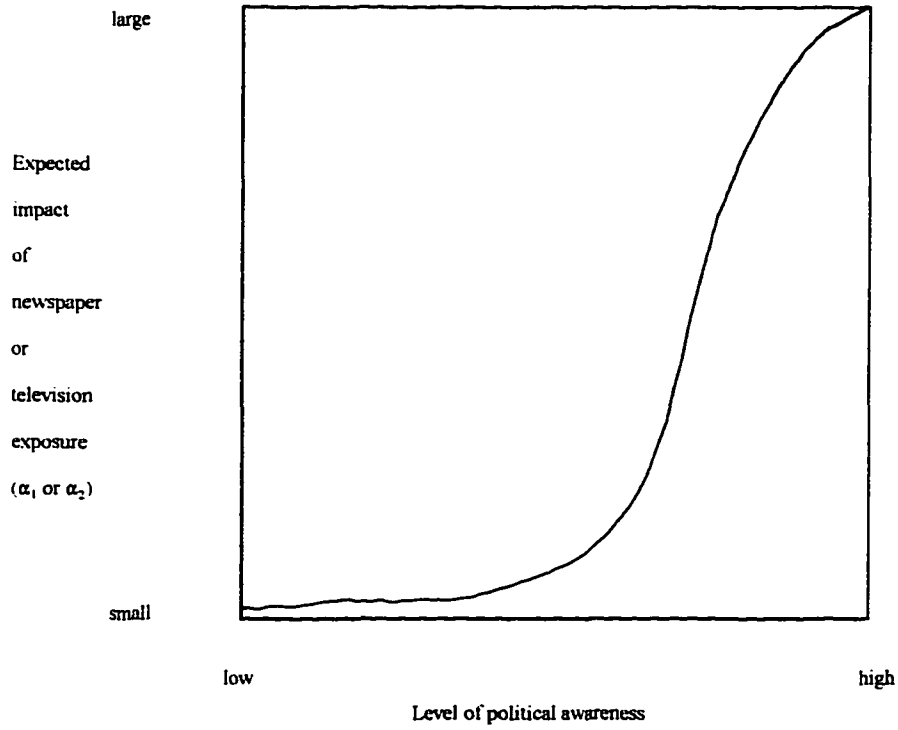
This uncertainty about which of the attitude-change models is the "correct" one is moot under some interpretations of epistemology. The "contextualist" position strongly espoused, ironically enough, by McGuire (1983) contends that no one theory is "correct" or "incorrect;" instead, *all* theories, even apparently mutually exclusive ones, are correct under the appropriate conditions. Theory-building changes from a Kuhnian "normal science" exercise of accumulating evidence for the dominant paradigm, and becomes an effort to uncover the conditions under which a particular theory holds sway, or, in a more specific empirical setting, to "make clear the meaning of the hypothesis, disclosing its hidden assumptions and thus clarifying circumstances under which the hypothesis is true and those under which it is false" (McGuire 1983, p.7). As

---

[13] Broadening the scope of inquiry in our exploration of attitude change to include the possibility of these three functions is, of course, still inadequate from the perspective of objective reality. In all likelihood, a near-infinite number of response patterns exist, all of them responding in small ways to changes in systemic message factors and individual tendencies. Of course, the value of theory is to provide a parsimonious view of reality, which entails simplification and, perhaps, oversimplification, which stands as my justification for limiting the search (at least in this initial stage) to the three response patterns outlined in the text.

outlined below, I undertake an exploratory approach to the different possible response patterns in this contextualist spirit, keeping in mind that none, some or all of the response patterns may emerge depending on the context. The spirit is one of "empirical confrontation as discovery rather than test" (McGuire 1983, p.13).

Figure 2.6: The rotisserie league model



Theoretical considerations aside, the more immediate question facing this analysis is how to model the different response patterns in a manner amenable to

empirical verification. One way to model the curvilinear effects shown in Figures 2.1, 2.5 and 2.6 is by allowing the α coefficients to vary in the following fashion:

$$\alpha_1 = \gamma_{1\,1} + \gamma_{1\,2}(\text{political awareness}) + \gamma_{1\,3}((\text{political awareness})/1+\exp(\text{political awareness})) \quad (2.2)$$

$$\alpha_2 = \gamma_{2\,1} + \gamma_{2\,2}(\text{political awareness}) + \gamma_{2\,3}((\text{political awareness})/1+\exp(\text{political awareness})) \quad (2.3)$$

This specification for the α coefficients allows them to vary in an exponential fashion as a function of level of political awareness. When algebraically recombined with Equation 2.1, Equations 2.2 and 2.3 will yield a model which allows for differential impact of newspaper and television exposure at different levels of political awareness, along the lines of the hypothetical effect in the Converse-McGuire model shown in Figure 2.1. Here is where the conceptual model runs headlong into Bartels' dilemma concerning measurement error versus conditional effects, which is discussed at the beginning of this chapter. Rather than attempting to model the effects shown in Figures 2.1, 2.5 and 2.6 using a covariance structure framework, in Chapter 3 I take a different approach to dealing with the problem of measurement error.

The approach outlined in Equations 2.2 and 2.3 presents another, more

fundamental problem, however: As hinted in my earlier espousal of a contextualist theory of knowledge, *we don't know which of the three models most accurately reflects the real world*, and in fact, *they may all do so to some extent, under different circumstances*. Therefore, we don't know what exact shape the functional form of the α coefficients should take. Since the models are not mutually exclusive, any of the functional forms could occur at any given time point during a political campaign. A more exploratory way of (empirically) dealing with the impact of political awareness as a moderator is, instead of defining a functional form and estimating the model, to simply stratify a sample into quartiles, or deciles, or some other n-tiles and estimate an equation along the lines of Equation 2.1, but with linear-in-the-parameters media coefficients, for every sub-group. This is a simple variation on the approach that Hamilton (1992) calls *exploratory band regression*.

Aside from being less elegant than the nonlinear-in-the-parameters procedure outlined above, the exploratory band regression approach has two shortcomings. First, whenever a stratification approach is taken, information is lost. Second and perhaps more importantly, if the moderation effect of political awareness on media impact is truly nonlinear as shown in Figures 2.1, 2.5 and 2.6, a stratification approach can only approximate the nonlinearity in a very

crude fashion. This tradeoff may be necessary, however, as we are in the dark concerning the precise nonlinear form of the α coefficients.

The final term in Equation (2.1), ϵ_t, is an error term representing the influence of any unmeasured or unspecified factors on change in Y from time t to time t-1. The ϵ_t term symbolizes the move from the conceptual to the statistical. I will utilize Equation (2.1) to create a series of estimable statistical models and use them as the basis for the empirical investigation presented in the later sections of Chapter 3. The first sections of the next chapter introduce the survey data used to estimate the model.

To sum up, in order to empirically investigate the impact of mass media upon attitudes toward political candidates, at least four issues need to be addressed. First, examining political attitude change should, whenever possible, be done in a temporally dynamic setting, because political attitudes develop and change across time, especially during a campaign. In addition, the nature and intensity of the media signal concerning the campaign will change across time (Westlye 1991; West 1993). Second, we should account for the possibility of measurement error in the data. Third, as stressed in this chapter, we must account for the importance of political awareness as a potential moderator of media impact, in an exploratory fashion. Fourth, to complete the picture we should have

a direct measure of the media signal, or information flow, concerning the candidates.

The dynamic nature of political attitude change is explicitly reckoned with in the current study by the nature of the data and modeling procedures used for analysis. In Chapter 3 I will empirically address the second two concerns, measurement error and mediation by political awareness. Addressing the final concern, the construction and implementation of a direct measure of media signal, and its implications for our understanding of media exposure effects, will fill out the remainder of this dissertation.

Chapter 3: Media Exposure and Political Attitudes

Lack of attention to the longitudinal nature of a political campaign, and to the time-bound process of attitude change implied by this fact, is one of the main problems with many prior studies of political media effects, as mentioned in the previous chapter. Another problem, heavily emphasized in Chapter 2, is lack of attention to the possible conditional nature of these media effects -- specifically, in terms of the condidtional impact of mass media messages upon audience members at different levels of political awareness or sophistication. A third problem, discussed extensively by Bartels (1993), involves errors in the survey measurement of media effects and correction for those errors. Solving the measurement error issue, as mentioned earlier, seems to preclude solving the problem of conditional effects, or at least makes a tandem solution difficult. The fourth major problem with prior studies is that nearly all prior models of media effects lack a direct measure of the messages, or signal, being sent out by the mass media. In this chapter I attempt to deal with the first three of these problems, saving the media signal issue for the remainder of the dissertation.

Fortunately, the first two problems can be easily solved: We need a

longitudinal data set that measures change in individual attitudes toward political candidates across the span of a political campaign -- in other words, a panel survey with repeated measures of these key variables for a single set of individuals. These data must also include serviceable measures of media exposure, which can be related to changes in the aforementioned attitudes. If such a data set can be found, problem number one is solved. The same data can also solve problem number two; all we need are usable measures of political awareness or sophistication for the individuals in the data set. Several such data sets exist, most of them collected by the National Election Studies; one could also go back to the original Columbia surveys conducted in Erie and Elmira, NY for the same purpose. The data set I use in this study has the required elements, and also has a few unique advantages which will be discussed below. Reconciling the solution to problem number two (a conditional effects model) with a solution to problem number three (model estimates corrected for measurement error) will be discussed after the data are introduced.

The survey data: Patterson's 1976 campaign panel[1]

The main attitudinal data to be used in this study are the result of a 5-wave panel survey conducted by Thomas E. Patterson (see Patterson 1980 for the original investigator's interpretation of the results of this survey). Respondents participated in face-to-face interviews at two-month intervals between February and November during the 1976 primary and general election campaigns. The interview schedule was timed to correspond with major campaign events: the pre-New Hampshire primary period in February, the early primaries in April, the end of the primary season in June, the Democratic and Republican National Conventions in August, and the height of the general election campaign in October and the first two days of November. Respondents were also each interviewed by telephone after one of the Ford-Carter debates and after election day (to ascertain vote choice). A total of 1,002 respondents were interviewed in the first wave; 234 respondents were added during the second and third interviews to bring the total to 1,236. However, only those 1,002 individuals

---

[1] The data used in this dissertation were made available in part by the Inter-University Consortium for Political and Social Research. The data for *Presidential Campaign Impact on Voters: 1976 Panel, Erie, Pennsylvania and Los Angeles* were originally collected by Thomas E. Patterson. Neither the collector of the original data nor the Consortium bear any responsibility for the analyses or interpretations presented here.

present in the first wave of interviews have the potential to be included in the analysis presented here, because the necessary political awareness measures are only present in wave one. Five hundred twenty-six respondents survived the entire five-wave process without dropping out, for a panel survival rate of 42.5 percent.[2] The resulting data set contains numerous measures of media use (both for general and political-information purposes), political attitudes and orientations, and attitudes toward the candidates (see Appendix 3-B). The general interview format is similar to that of the CPS National Election Studies, using questionnaires designed by Patterson. The surveys were conducted by

---

[2] The potential problem of panel mortality in this survey -- that the survivors are a nonrepresentative subsample of the original sample, and therefore conclusions based on these data are suspect -- in this survey is discussed by Feldman (1989). To wit:

> ...it is clear that the respondents left after five waves of interviewing are *not* very different from the original group. The panel respondents are not significantly more educated, higher in income, or different racially, although they are slightly more likely to be female than the original sample. On political variables, the panel respondents are somewhat more involved and interested in politics than the original group, although the differences are not very large (p.56, original emphasis).

Given the nature of the argument concerning the conditional effects of media exposure laid out in Chapter 2, a sample that is "somewhat more involved and interested in politics" will serve to create a stronger test for our hypothesis that those lowest in political awareness will be most responsive to media messages (see Appendix 3-A for further discussion of this topic).

professional interviewers working for the Response Analysis Corporation of Princeton, New Jersey. In sum, the Patterson data provide an opportunity to directly observe the individual-level effects of the campaign as reported in the media.

A unique feature of Patterson's panel, at least by modern standards, is its geographical specificity. Rather than attempting to interview some form of national sample á la National Election Studies, Patterson instead limited the sampling to two specific areas: the Standard Metropolitan Statistical Areas of Erie, Pennsylvania and Los Angeles, California. The two communities are quite different: Erie is (and was) a predominantly white, working-class, rural community with very limited media availability, while Los Angeles is, well, Los Angeles. Patterson's intent was to expand the classic idea of the single-community campaign study (the Columbia studies) to a comparative community study, to test whether significant differences emerged in the communities' collective or individual responsiveness to the same political campaign. This geographical stratification provides another advantage for our current purposes, however: The areas each have a manageable media market, with one primary newspaper. In other words, measuring media signal can be done in a much simpler fashion in two distinct communities than would be the case for a national

sample. This reasoning is implemented in the content analysis presented in Chapter 4.

In each community, the Survey Response Analysis Corporation uses standard block-household-individual random selection to select potential respondents.[3] Adult (18 or over), English-speaking individuals selected in this fashion are included in the sample. The sampling technique in this instance results in a slight overrepresentation of women in the Erie sample and of higher-educated persons in the Los Angeles sample, compared to contemporary U.S. census data. In Patterson's original analysis of these data (Patterson 1980), the sample was weighted to "correct" for these disparities. The weighting coefficients are not utilized in any of the analyses reported in this dissertation. Dates and Ns of interviews conducted in each locale are presented in Table 3.1.

---

[3] Briefly, each SMSA (Erie and Los Angeles) is divided into blocks, from which a random sample without replacement is taken. Each block is further subdivided into households, which are defined as residences with separate mailing addresses. Another random sample without replacement is taken from each block of households. These residences, or more accurately one of the residents within each of them, have now been chosen to be part of the sample. An interviewer visits the residence, and asks to speak to an individual in the household who meets certain predetermined criteria -- for example, the oldest male in the household, or the youngest female over 18, or the person whose birthday falls closest to the current date. The key point is that the interviewer is simply following instructions provided by the survey company, and has no discretion concerning which residences to visit or which individual to interview once there.

Table 3.1: Interviews in the two locales

Erie, Pennsylvania		Los Angeles,California	
Interview dates	**# of respondents**	**Interview dates**	**# of respondents**
February 6 - 24	527	February 6 - 24	475
April 28 - May 20	495	April 28 - May 20	402
June 9 - 30	513	June 1 - 30	394
August 20 - Sept. 13	483	August 20 - Sept. 7	340
October 15 - Nov. 2	462	October 16 - Nov. 1	337

Source: ICPSR Codebook #7990 and Patterson (1980)

One other issue concerning the Patterson data that should be addressed is their overall representativeness, compared to similar studies of political attitudes in the American national electorate. Can we generalize from Patterson's Erie and Los Angeles samples to the rest of the nation's voters? The obvious benchmark with which to answer this question is the 1976 National Election Study. Feldman (1989) has examined the Patterson data in relation to the 1976 NES, and found few significant differences. Some relevant comparisons concerning demographics and political attitudes are presented in Appendix 3-A.

Measures used in this study

As noted earlier, the Patterson data contain all of the necessary measures to carry out our objective of measuring the conditional nature of media effects during a political campaign. The models we will be estimating in the remainder of this dissertation will be geared toward explaining variations in respondents' attitudes toward the candidates across the course of the campaign. Our dependent variables, then, will consist of various ratings of candidates Ford, Carter and Reagan at the different panel waves.[4] Specifically, respondents rate the candidates on seven-point scales along the dimensions of trustworthiness, strength of leadership qualities, perceived ability to carry out the duties of the office of president, likability of personality and a general favorability-unfavorability dimension. These trait ratings can be analyzed separately or scaled together to produce an omnibus "attitude toward the candidate" dependent variable. Question wording and format for these variables, their scaling

---

[4] Including all 14 Democratic hopefuls and six Republican candidates in all of the analyses would prove to be massively unwieldy. Ford and Carter are included, naturally, because they go the distance into the general election campaign; I include Reagan in the early-wave models because he is a very salient figure in the Republican primary race, all the way up to the convention. Most of the other candidates are such nonentities that few respondents are willing to venture an opinion about them, making for major missing data problems (which is a problem with Carter in the first two waves, by the way).

properties, and the explanatory variables mentioned below are presented in Appendix 3-B.

A number of explanatory variables will be used to predict the variance in the dependent variables. They include standard demographics like sex, age, family income, and race, plus commonly used political variables such as party identification and ideology. Our measure of political awareness, or knowledge, is constructed by scaling responses to a series of 19 recognition questions involving political figures of the day, and seven questions involving correct placement of the two major parties on six issues of the day and on an ideological dimension. The newspaper readership scale is constructed from a series of four questions, ranging from "Do you usually read a daily paper?" to "Within the last 24 hours, did you read anything about politics in the newspaper?" A similar series of questions regarding television news makes up our television exposure scale. In addition, Patterson's interviewers asked a similar series of four questions concerning interpersonal political communication. Although not of central interest in this dissertation, these political discussion measures can be scaled together and included in our equations as "control" variables. The importance of interpersonal communication to the formation and change of political attitudes is a position forcefully advocated by Lenart (1994) and Hacker (1995), among

others.

Note that all of the explanatory and dependent variables are measured at every panel wave, with the exception of the demographic measures, which are administered to respondents during their first interview. Again, full question wordings, plus Cronbach's α reliability coefficients for all Likert scales used in the analysis, are presented in Appendix 3-B. Before using these measures to proceed with the development of an estimable model based on the conceptual model presented in Chapter 2, we must grapple with the potential problem of attenuation (or inflation) of coefficients resulting from measurement error.

Measurement error and its implications

As noted in Chapter 2, Bartels (1993) is concerned with measurement error in estimates of media exposure, citing such error as the cause of consistent underestimation of media effects in prior research. Bartels follows the most straightforward path toward correcting this problem, by taking a multiple-indicator, latent-variable model approach (a.k.a. covariance structure modelling) and estimating the model using Bentler's (1989) EQS statistical software

package.[5] However, this procedure is ultimately limiting because of the difficulty in estimating interaction effects in the context of a covariance structure model. The difficulty exists because interaction effects create almost-certain violation of the assumption of normality in the variables (Bollen 1989). Interaction effects between political awareness and exposure to media signal are an integral part of this dissertation, making straightforward application of the covariance structure model unmanageable.

One way to approach this problem is to estimate a covariance structure model across several groups, that is, to stratify the sample according to sophistication (high, medium, low) and obtain coefficients for each group. Unfortunately, this approach is problematic in our current situation because of the relatively low number of cases available for analysis; stratification would entail running models on rather small samples.[6] Therefore, another approach to the

---

[5] Jöreskog and Sörbom's LISREL program serves the same purpose.

[6] The number of cases for a simple model like the one estimated in this section, using a five-wave simultaneous covariance structure estimation procedure, is 508 once we account for missing data. Division of the sample into, for example, four strata based upon level of political awareness would result in subsamples of 127 cases, and in some instances (early impressions of Carter, for example), only a handful of cases remain for analysis. Sample sizes this small may result in inflated standard errors, preventing all but the most powerful explanatory variable effects from reaching statistical significance in a structural equation modelling situation. OLS and instrumental variables estimation procedures appear to be less

(continued...)

problem of measurement error in media exposure variables is necessary.

Fortunately, the data used in this study contain a number of excellent measures of media exposure, both in general and specifically pertaining to politics (see Appendix 3-B for question wording). I argue that simply scaling these measures summatively (Likert-type scaling) adequately accounts for errors of measurement in assessing media exposure. Reliability coefficients (alphas) for these scales exceed .75 for television news exposure and .72 for newspaper exposure across the five panel waves (see Appendix 3-B). These numbers are acceptable, even excellent, for social science data (Carmines & Zeller 1979).[7]

Modelling change across time

If measurement error were the only potential problem in modelling the media persuasion process, we could simply run OLS on a model including the newly-scaled exposure variables and report the results. However, the cross-time

---

(...continued)
sensitive to small numbers of cases, and therefore more robust in the face of estimation with few degrees of freedom.

[7] Which begs the question, why didn't Bartels (1993) simply scale his exposure measures together, rather than using the more complicated latent variable model/ measurement model approach? I argue that the exposure measures in Bartels' data (the 1980 NES panel study) are inferior to those in the Patterson data, and result in unacceptably low reliabilities when scaled.

nature of the process under investigation requires one of two specific statistical modelling procedures.[8] The first, and oldest, technique, currently advocated by Allison (1990), is to use change scores as dependent variables in standard OLS regression models.

A change score is simply the difference between two measurements of the same variable Y at two different points in time, as $Y_{t2} - Y_{t1}$. Regressing the resulting score on a set of independent variables is known as the *change score method* of statistically modelling change. This method has the advantages of being parsimonious and intuitively appealing, and its use has persisted despite heavy methodological criticism, discussed below. Despite this criticism, Allison (1990) makes a strong defense of the change score method in certain cases, specifically those in which Y_{t1} has no true causal effect on Y_{t2}. In the context of this analysis, however, prior attitude (Y_{t1}) is quite likely to have just such a causal impact upon current attitude (Y_{t2}). In fact, many students of attitude change would agree that the single most important component of an attitude as measured today is that same attitude, measured or unmeasured, the day before (see Petty

---

[8] The *mathematical* (as opposed to statistical) modelling of change is a distinct proposition, involving a completely different class of models. See Coleman (1964; 1968) or Huckfeldt, Kohfeld and Likens (1982) for discussions of dynamic mathematical modelling, and Mackuen (1981) for a substantive application involving mass media agenda-setting.

and Cacioppo 1981 or Fiske and Taylor 1991 for overviews of the exhaustive literature on attitudes and attitude change). This facet of the model underlying the change score approach suggests that an alternative method of modelling change is needed.

A second technique for statistically modelling cross-time change, championed by Markus (1979) among many others, requires that all such models include a lagged endogenous variable as a predictor. Doing so ensures that any independent variable's contribution toward explaining the variance in a given dependent variable is explaining between-wave *change* in that dependent variable.[9] This procedure, generally known as the "regressor variable method," developed in response to charges that the change-score approach introduced several problems into analysis of panel data. First, change scores are notoriously

---

[8] In other words, the analyses presented in this dissertation assume that changes in candidate impressions follow a model more complex than simple Markov processes, in which "the probability of an individual being in a particular state of the variable of interest at time $t - 1$ is solely a function of his location [on that variable] at time t" (Markus 1979, p.8). If we assume such a first-order (or higher-order) Markov process to be true in the current context, we would be assuming that an individual's attitudes toward a candidate during a campaign are completely impervious to outside influences of any sort. Needless to say, this dissertation is attempting to show (emphatically) that such a situation is *not* the case. We assume that outside influences -- namely, mass media messages -- do affect time t to time $t - 1$ changes in political attitudes. Hence, prior attitude is only one of several explanatory variables in each of our models.

unreliable, mathematically far less reliable than either of their component variables.[10]

The second problem with change scores is that they are susceptible to "regression-to-the-mean" effects. Briefly, Y at time 1 will almost always be negatively correlated with $Y_{t2} - Y_{t1}$, because individuals tend to "regress to the mean" or return to a more "average" level of performance from one measurement to the next. In other words, individuals with high scores at time 1 tend to move down on the time 2 measurement, while low-scoring individuals tend to move up. This leads to a case in which an independent variable X, if correlated with Y_{t1}, will be (spuriously) negatively correlated with $Y_{t2} - Y_{t1}$, which could artificially suppress a true positive relationship or inflate a small negative one (Markus 1979; Allison 1990). In response to these problems, the regressor variable method,

---

[10] Briefly, assuming that Y_{t1} and Y_{t2} are equally reliable and have equal variance, the reliability of $Y_{t2} - Y_{t1}$ is given by

$$\frac{\rho^2_Y - \rho_{Yt1\ Yt2}}{1 - \rho_{Yt1\ Yt2}}$$

where ρ^2_Y is the common reliability of Y_{t1} and Y_{t2}, and $\rho_{Yt1\ Yt2}$ is their correlation. If $\rho_{Yt1\ Yt2}$ is positive, which is usually the case, then the reliability of the change score $Y_{t2} - Y_{t1}$ is mathematically bound to be lower than the common reliability of the component parts, ρ^2_Y (Allison 1990). For example, assume both Y_{t1} and Y_{t2} have a high reliability coefficient (α) of 0.9, so that $\rho^2_Y = 0.9$, and the correlation $\rho_{Yt1\ Yt2} = 0.8$, which yields a reliability coefficient for $Y_{t2} - Y_{t1} = 0.1/0.2 = .5$, which is unacceptably low by most social-science standards.

which uses the lagged endogenous variable Y_{t1} as a predictor when Y_{t2} is the dependent variable, was developed as an alternative to the change score method.

In the current context, the lagged endogenous variable in question is candidate impression measured at the previous panel wave. Running an unmodified OLS procedure using such a model can introduce bias into the coefficients, because a lagged dependent variable used as a predictor in an equation is likely to be correlated with the error term in that equation (Markus 1979). Therefore, to eliminate such potential bias, an instrumental variables technique is needed.

Instrumental variables are variables that function as a surrogate for an endogenous variable, in this case the lagged dependent variable, in each equation. They must be correlated with the lagged endogenous variable but uncorrelated with the error term in their particular equation. In practice, exogenous demographic characteristics, as well as attitudinal measures hypothesized to be uncorrelated with the error term, can be used as instruments. Note also that variables measured at future time points in the panel can function as instruments for variables in earlier panel waves, because future measurements are necessarily uncorrelated with the present error term by virtue of their temporal status (Markus 1979; Conover and Feldman 1989).

A two-stage least squares (2SLS) estimation procedure can be used to obtain coefficient estimates for instrumental variable models; in fact, all systems estimation procedures (2SLS, three-stage LS, two-stage auxilary instrumental variables estimation, Seemingly Unrelated Regressions, and so on) are essentially instrumental variables techniques. Specifically, the instruments are used to obtain predicted values for the lagged dependent variable Y_{t-1} in the first stage. These predicted values are then substituted for Y_{t-1} in the second stage, allowing the estimation of a coefficient unbiased by the lagged dependent variable's probable correlation with the error term in the second-stage equation.

In the spirit of methodological diversity, I have obtained coefficients for the simple media exposure model presented below using all three of the different methods (covariance structure modelling, OLS and instrumental variables) just discussed. The model, estimated for the Ford and Carter dependent variables in the Patterson panel at waves two through five[11], is:

$$Y_t = \beta_0 + \beta_1(Y_{t-1}) + \beta_2(TV_t) + \beta_3(Paper_t) + \beta_{4...7}(controls) + \epsilon_t \qquad (3.1)$$

Controls include party identification, age, education and race. The latter three

---

[9] Panel wave one must be used to construct instruments for Y_{t-1} in panel wave two. Demographic characteristics are also measured at wave one.

variables are also used as instruments for the lagged dependent variable in the instrumental variables estimation procedure. Other instruments are sex, ideology, and general evaluations (favorable-unfavorable ratings) of the candidates measured at future time points.[12] For the wave five equations, future vote choice (measured in a telephone interview after the November 3 election) is used as an instrument.[13]

In the above equation, β_2 and β_3 are interpreted as the effect of current levels of television news exposure and newspaper exposure, respectively, on the change in the dependent variable Y, holding the initial values of Y constant. β_1 is interpreted as the direct influence of prior attitude (Y_{t-1}) upon current attitude Y_t. β_1, then, serves as a measure of the relative cross-time stability of candidate impression, an element absent from a change score approach to the problem (see the discussion of the change score method versus the regressor variable method

---

[10] Except, of course, in the equations where the general evaluations appear as dependent variables.

[11] While the use of subsequently measured variables as predictors of prior attitude may seem unusual, keep in mind that the sole purpose of an instrumental variable is to bear some relation to the endogenous variable without being correlated to the error term in the estimation equation (Markus 1979; Plewis 1985; Finkel 1992). A variable measured at a future time point can be reasonably assumed to be uncorrelated with the error term in the current equation, even if the variables appear to be conceptually similar at first glance. The high degree of consistency among the coefficients estimated using three different methods (presented in Tables 3-C.1- 3-C.4) lends credence to this assumption.

on p. 72).

Equation 3.1 is estimated for the following attitudinal ratings, for both Ford and Carter: leadership capacity, ability to succeed as president, trustworthiness, appropriateness of the candidate's personality for the office, and a general favorable-unfavorable rating. As noted in Appendix 3-B, all are measured as seven-point scales in the Patterson data.[14] Multiple-indicator model results are obtained using EQS; OLS and instrumental variable results are obtained using SAS (the instrumental variables models are estimated using SAS's 2SLS procedure). The coefficients for our variables of interest, television and newspaper exposure (β_2 and β_3) in the Ford and Carter equations, for all five dependent variables, are presented in Tables 3-C.1 to 3-C.4 in Appendix 3-C (coefficient estimates for the lagged dependent variable and the control variables are available upon request from the author). As noted above, in each case the coefficients can be interpreted as the effect of television and newspaper exposure upon the change in the appropriate dependent variable. Number of cases equals

---

[12] Seven categories is approaching the minimum number on which OLS and/or 2SLS can safely be run (Aldrich and Nelson 1984). Ordered probit would perhaps be a more appropriate estimation procedure (see the Appendix in Fiorina 1981 for an excellent discussion of categorical dependent variable estimation techniques); however, I judge the difficulties inherent in using such a technique in the EQS and 2SLS format to outweigh whatever small gains may result.

508 for most of the Ford equations, but goes as low as 120 for the four Carter trait equations at panel wave 2 (Carter was still a relative unknown at the time, so fewer people responded to questions about him).

As can be seen from the coefficients in Appendix 3-C, the models are relatively comparable. Some attenuation is seen for the OLS and instrumental variables equations. However, the most highly significant instances of media exposure affecting attitudes (for example, all of the Ford television exposure variables at Time 5; Carter trustworthy at Time 4 for newspaper exposure, among others) remain fairly constant across all three methods.

Given these results, I elect to use an instrumental variables technique to estimate coefficients for the more complex models. The instrumental variables technique is the most flexible for the current application. First, it takes advantage of the scaling properties of the media exposure variables to account for measurement error. Second, instrumental variables estimation is more intuitive in its application, and the results of the estimation procedures are readily interpretable, because they behave like standard OLS coefficients. Third, given our uncertainty about model specification -- we don't know the functional form of the political awareness by media exposure interactions for every equation -- the instrumental variables technique is more adaptable to an exploratory data analysis

technique. Finally, instrumental variables estimation accounts for the potential bias resulting from the inclusion of a lagged dependent variable as a predictor in each equation. This flexibility makes instrumental variables estimation the best choice for the remainder of the analyses in this dissertation, which begin below.

A conditional model of media-induced attitude change

If we accept the argument that measurement error is not a significant problem for our current enterprise (after creating our dependent and independent variable scales), we can proceed with the development of an estimable model of the conditional nature of media impact in a presidential campaign. What we need to do is allow the impact of media exposure to vary at differing levels of political awareness, as illustrated earlier in Figures 2.1, 2.5 and 2.6. Since we are uncertain about which (if any) of the three theoretical effects models is correct, we must approach these data in an exploratory fashion. We can then determine whether the rotisserie league model, the Wellesian model, the Converse-McGuire model or some combination of the three is the most accurate picture of the situation. As mentioned in Chapter 2, the most sensible way to proceed is to apply a technique known as exploratory band regression to the data (Hamilton

1992).

Band regression entails stratifying a sample into several groups and running the same regression model on each group or stratum. Then, the coefficients from each regression can be compared to detect differences in magnitude or direction among the groups. Since we are interested in differential impact of media exposure at different levels of political awareness, in this case we stratify the sample into roughly equal groups based upon scores on the political knowledge test outlined in Appendix 3-B. Stratifying the Patterson data into five knowledge groups works out to be the best compromise between sensitivity to nonlinearity and statistical power.[15]

All that remains is to apply a statistical model parallel to Equation 2.1 to the five knowledge groups. The estimation model applied here is

$$(Impression)_t = \beta_0 + \beta_1 (Impression)_{t-1} + \beta_2 (Newspaper\ exposure)_t + \beta_3 (Television\ exposure)_t + \beta_4 (Interpersonal\ communication)_t + \beta_5 (Party\ identification) + \epsilon_t \quad (3.2)$$

---

[13] As mentioned earlier, an instrumental variables technique estimated using 2SLS appears to be more robust than the structural equation model estimated with EQS in the face of relatively small numbers of cases, allowing us to successfully obtain coefficient estimates for five awareness groups (with the exception of some of the early Carter impression models).

where $(Impression)_t$ is the candidate impression scale outlined in Appendix 3-B, measured at time t for a given candidate, in this case Carter, Ford or Reagan. The first explanatory term, $\beta_1 (Impression)_{t-1}$, represents the same impression scale measured at the previous panel wave. In practice, as noted earlier, estimating the equation with the actual observed value of this lagged endogenous variable would lead to correlation with the error term, and hence biased coefficients. Therefore, an instrumental variable, constructed as outlined in Appendix 3-D, is used in place of the actual observed value of the lagged endogenous variable. A value of 1.0 for the coefficient β_1 would mean that a perfect 1:1 linear relationship exists between current and prior attitude, while a small coefficient indicates panel wave-to-panel wave instability in attitude toward the candidate.[16]

The second and third terms, $\beta_2 (Newspaper\ exposure)_t$ and $\beta_3 (Television\ exposure)_t$, are our variables of interest. These terms signify the media exposure scales outlined in Appendix 3-B, measured at the current panel wave. Note that the nonlinear coefficients represented by α_1 and α_2 in Equation 2.1 have been replaced by whitebread, linear β coefficients in Equation 3.2. Splitting the sample into five political awareness strata and running linear regression on each

---

[14] Lack of a perfect linear relationship between these two variables could, of course, also represent nonlinearity in the relationship, which is unlikely, or measurement error, which is certainly possible (see Achen 1975).

group is a simpler, more intuitive method of uncovering nonlinearities in the data, especially since we are uncertain of the functional form of the relationship between the exposure scales and candidate impression. In fact, as noted earlier, it is entirely possible that different functional forms -- as illustrated by the rotisserie league, Wellesian and Converse-McGuire models -- may predominate at different stages of the campaign. Also, different models may fit better for the different types of media. That is, the rotisserie league model may better represent the interaction between the newspaper exposure effect and political awareness late in the campaign, while the Converse-McGuire model may better represent the interaction between the television exposure effect and political awareness throughout the campaign, and so on.

The fourth and fifth terms in Equation 3.2, β_4 (*Interpersonal communication*)$_t$ and β_5 (*Party identification*), are considered control variables in this analysis, although assessing the impact of interpersonal communication and party identification at different stages of the campaign is an interesting exercise in its own right. (*Interpersonal communication*)$_t$ is the scale measuring interpersonal communication concerning politics, as developed in Appendix 3-B. The fifth term is simply party identification, conceptually defined as a psychological attachment to one of the two major parties, measured by the

standard NES-style two-step question and scored on a seven-point scale, with "strong Democrat" anchored at one and "strong Republican" at seven. Recall that other potential control variables -- demographic factors, for example -- are not present in Equation 3.2 because they are considered to be "picked up" by the inclusion of $(Impression)_{t-1}$ in each estimation.[17]

Equation 3.2 is estimated separately for the Erie and the Los Angeles samples, based on our earlier discussion of the nature of media signal in campaigns. It is quite likely that both newspaper and television campaign messages differ in both volume and evaluative tone between the two geographical areas; estimating the equations for both samples together may result in cancelling out real effects. The equation is estimated at panel waves two through five (April-May, June, August-September, and October-November), since panel wave one (February) provides the instrument for prior impression at wave two. Equation 3.2 is estimated for all five of the political awareness strata[18] at each time point for candidates Carter and Ford, and at waves two and three for Reagan

---

[15] Interestingly in terms of the intersection of statistical theory and practice, these demographic variables are actually included in every estimation, because they are all used in the production of the lagged endogenous instrument.

[16] The five awareness strata are created by dividing the sample based upon the 26-point political knowledge scale, as described in Appendix 3-B. The number of cases in each group is as as uniform as possible.

(before he relinquished the Republican nomination to Ford), yielding a formidable total of 100 sets of regression coefficients. These coefficients are presented as coherently as possible below.

Results from application of the model

The prodigious number of regression coefficients generated by applying the model described by Equation 3.2 to the five political awareness strata in each geographical subsample of the Patterson data requires a relatively concise method of tabulation. The tables presented below are organized as follows: Each one of Tables 3.2 through 3.11 contain ten sets of 2SLS regression coefficients, one for each of the five political awareness strata in the Erie and Los Angeles subsamples, in that order. Equation 3.2 is estimated for candidates Carter (Tables 3.2 through 3.5) and Ford (Tables 3.6 through 3.9) at panel waves two through five, and for Reagan at panel waves two and three (Tables 3.10 and 3.11). The numerous empty cells in Table One are a result of the very few numbers of respondents in the low knowledge groups who were willing to venture an impression of Carter. The Georgia governor was still a relative unknown in April and May, despite his early primary victories, especially among political nonsophisticates. Following convention, statistically significant coefficients are

marked with an asterisk.[19]

[17] I use p≤ .10 as the level of statistical significance for these models, rather than the traditional p≤ . 05, because some of the regressions are run on as few as 12 cases, causing a great reduction in statistical power.

Table 3.2: Carter impression at Wave Two

Erie subsample

	political awareness stratum				
	1 (low)	2	3 (mid)	4	5 (high)
Wave One impression	---	---	---	.251 (.396)	.005 (.542)
newspaper exposure	---	---	---	1.72* (.885)	1.32* (.660)
television exposure	---	---	---	.425 (.564)	-.234 (.310)
political discussion	---	---	---	1.05* (.502)	.120 (.284)
party identific.	---	---	---	-.843 (.686)	-.152 (.578)
intercept	---	---	---	1.67 (8.85)	9.66 (8.68)
adjusted R^2	---	---	---	.41	.07
N =	+	+	+	12	34

Table entries are unstandardized 2SLS regression coefficients. Standard errors are in parentheses.

* $p \leq .10$

+ Group N's too small to produce coefficient estimates.

Table 3.2 cont'd: Carter impression at Wave Two

Los Angeles subsample

	political awareness stratum				
	1 (low)	2	3 (mid)	4	5 (high)
Wave One impression	---	---	---	1.46* (.583)	.711* (.428)
newspaper exposure	---	---	---	-.527* (.206)	-.374* (.194)
television exposure	---	---	---	-.188 (.467)	.016 (349)
political discussion	---	---	---	.115 (.409)	.468 (.296)
party identific.	---	---	---	-1.72* (.934)	-.536 (.622)
intercept	---	---	---	5.32 (9.74)	5.61 (6.94)
adjusted R^2	---	---	---	.36	.05
N =	+	+	+	15	29

Table entries are unstandardized 2SLS regression coefficients. Standard errors are in parentheses.

* p≤ .10

+ Group N's too small to produce coefficient estimates.

Table 3.3: Carter impression at Wave Three

Erie subsample

	political awareness stratum				
	1 (low)	2	3 (mid)	4	5 (high)
Wave Two impression	.676*	.828*	.841*	.574*	.872*
	(.336)	(.232)	(.379)	(.180)	(.417)
newspaper exposure	-.054	.183*	.289*	.131	-.105
	(.161)	(.089)	(.107)	(.140)	(.227)
television exposure	-.049	-.338*	-.282*	-.195	.005
	(.296)	(.135)	(.109)	(.183)	(.218)
political discussion	-.228	.133	-.027	.305*	-.082
	(.837)	(.356)	(.198)	(.157)	(.154)
party identific.	.293	.197	.986*	.756*	.025
	(.478)	(.410)	(.420)	(.304)	(.372)
intercept	2.34	3.04	1.62	3.93	2.87
	(4.20)	(4.77)	(6.33)	(2.84)	(4.31)
adjusted R^2	.32	.38	.08	.43	.11
N =	22	31	47	34	51

Table entries are unstandardized 2SLS regression coefficients. Standard errors are in parentheses.

* $p \leq .10$

Table 3.3 cont'd: Carter impression at Wave Three

Los Angeles subsample

	political awareness stratum				
	1 (low)	2	3 (mid)	4	5 (high)
Wave Two impression	.898 (.674)	.769* (.281)	1.26* (.401)	.497* (.194)	.892 (.347)
newspaper exposure	.831* (.413)	.249 (.320)	.129 (.294)	-.187 (.156)	-.104 (.161)
television exposure	-1.48* (.645)	-.416* (.246)	.008 (.380)	.111 (.217)	.160 (.219)
political discussion	-.489 (.968)	.479 (.355)	.146 (.327)	.179 (.195)	.429* (.198)
party identific.	1.06 (1.50)	.908 (.902)	-.469 (.685)	-.307 (.396)	.795 (.533)
intercept	30.2 (10.5)	2.18 (5.57)	4.26 (7.45)	6.66 (3.95)	5.63 (7.98)
adjusted R^2	.04	.36	.24	.20	.13
N =	14	20	31	39	42

Table entries are unstandardized 2SLS regression coefficients. Standard errors are in parentheses.

* $p \leq .10$

Table 3.4: Carter impression at Wave Four

Erie subsample

	political awareness stratum				
	1 (low)	2	3 (mid)	4	5 (high)
Wave 3 impression	.558*	1.28*	.581*	.737*	.800*
	(.220)	(.660)	(.320)	(.444)	(.299)
newspaper exposure	-.142	.167	.163	-.233*	-.227*
	(.239)	(.280)	(.212)	(.123)	(.148)
television exposure	.434*	-.080	-.103	.245	.089
	(.259)	(.465)	(.232)	(.468)	(.211)
political discussion	.790*	1.08	.121	-.345	.226
	(.470)	(.687)	(.196)	(.383)	(.203)
party identific.	1.72*	.137	1.302*	.402	1.03
	(.621)	(.822)	(.405)	(.671)	(.384)
intercept	2.29	4.45	1.23	3.15	1.33
	(3.46)	(7.92)	(4.66)	(5.02)	(4.19)
adjusted R^2	.43	.06	.34	.12	.33
N =	25	27	43	32	48

Table entries are unstandardized 2SLS regression coefficients. Standard errors are in parentheses.

* $p \leq .10$

Table 3.4 cont'd: Carter impression at Wave Four

Los Angeles subsample

	political awareness stratum				
	1 (low)	2	3 (mid)	4	5 (high)
Wave 3 impression	.491 (.398)	.284 (.219)	.825* (.272)	.276 (.318)	.525* (.212)
newspaper exposure	.632* (.530)	.673* (.212)	.115 (.265)	.115 (.222)	.103 (.170)
television exposure	-.847* (.473)	-.321* (.188)	-.236 (.312)	-.184 (.279)	-.231 (.207)
political discussion	-.342 (.644)	-.434 (.310)	-.552* (.302)	-.198 (.308)	.062 (.198)
party identific.	.293 (1.04)	1.80* (.584)	1.11* (.540)	1.17* (.487)	.905* (.474)
intercept	11.4 (8.31)	4.53 (3.21)	3.04 (4.65)	6.98 (6.47)	3.98 (4.37)
adjusted R^2	.20	.59	.59	.09	.20
N =	14	21	21	36	30

Table entries are unstandardized 2SLS regression coefficients. Standard errors are in parentheses.

* $p \leq .10$

Table 3.5: Carter impression at Wave Five

Erie subsample

	political awareness stratum				
	1 (low)	2	3 (mid)	4	5 (high)
Wave 4 impression	.242 (.229)	.811* (.283)	.921* (.204)	.974* (.155)	.653* (.151)
newspaper exposure	.114 (.185)	-.414* (.383)	-.531* (.276)	-.063 (.099)	.111 (.135)
television exposure	-1.19* (.333)	-.435 (.457)	.276 (.198)	.055 (.144)	-.331* (.145)
political discussion	.278 (.225)	.636 (.419)	.620 (.413)	.136 (.126)	-.172 (.139)
party identific.	-.103* (.547)	-1.18 (.874)	-.621 (.413)	-.529* (.300)	-.521 (.357)
intercept	10.5 (3.13)	1.21 (5.70)	3.47 (2.99)	1.05 (2.12)	6.55* (2.45)
adjusted R^2	.71	.31	.42	.77	.58
N =	22	22	45	33	49

Table entries are unstandardized 2SLS regression coefficients. Standard errors are in parentheses.

* $p \leq .10$

Table 3.5 cont'd: Carter impression at Wave Five

Los Angeles subsample

	political awareness stratum				
	1 (low)	2	3 (mid)	4	5 (high)
Wave 4 impression	1.10*	.226	.583*	.756*	1.37*
	(.323)	(.498)	(.330)	(.229)	(.541)
newspaper exposure	-.308	.141	-.078	-.220*	-.303*
	(.330)	(.355)	(.278)	(.119)	(.154)
television exposure	.022	.183	-.627*	-.672*	-.288
	(.457)	(.623)	(.335)	(.286)	(.179)
political discussion	-.585	-.228	.466	-.032	-.312
	(.435)	(.440)	(.358)	(.159)	(.304)
party identific.	-.125	-2.24*	-.094	-.391	-.612
	(.915)	(.865)	(.703)	(.534)	(1.06)
intercept	4.33	6.09	10.25*	3.94	2.71
	(5.80)	(6.17)	(4.94)	(2.69)	(7.21)
adjusted R^2	.53	.17	.30	.55	.38
N =	18	23	22	35	30

Table entries are unstandardized 2SLS regression coefficients. Standard errors are in parentheses.

* $p \leq .10$

Table 3.6: Ford impression at Wave Two

Erie subsample

	political awareness stratum				
	1 (low)	2	3 (mid)	4	5 (high)
Wave One impression	.481*	.436*	.814*	.817*	.886*
	(.133)	(.157)	(.140)	(.166)	(.099)
newspaper exposure	-.350*	-.292*	-.193	.045	-.113
	(.190)	(.176)	(.157)	(.169)	(.143)
television exposure	.124	.210	.080	.145	.190
	(.290)	(.225)	(.176)	(.234)	(.154)
political discussion	.303	-.028	-.105	-.210	-.157
	(.268)	(.214)	(.184)	(.187)	(.140)
party identific.	-.658	-.527	-.679*	-.631	.242
	(.570)	(.433)	(.070)	(.402)	(.323)
intercept	7.18*	8.37*	6.89*	4.98	1.84
	(3.38)	(2.86)	(3.07)	(3.91)	(3.12)
adjusted R^2	.38	.31	.38	.51	.64
N =	37	46	64	41	60

Table entries are unstandardized 2SLS regression coefficients. Standard errors are in parentheses.

* $p \leq .10$

Table 3.6 cont'd: Ford impression at Wave Two

Los Angeles subsample

	political awareness stratum				
	1 (low)	2	3 (mid)	4	5 (high)
Wave One impression	.767*	1.00*	.615*	.838*	.838*
	(.125)	(.262)	(.094)	(.159)	(.101)
newspaper exposure	.214	-.226	.031	.018	.339*
	(.244)	(.217)	(.105)	(.146)	(.109)
television exposure	-.299*	.215	.022	-.131	-.079
	(.131)	(.347)	(.139)	(.202)	(.152)
political discussion	-.283	.145	.077	.040	.067
	(.433)	(.426)	(.156)	(.230)	(.144)
party identific.	.584	.511	-.382	-.108	.292
	(.693)	(.664)	(.295)	(.456)	(.369)
intercept	2.60	1.16	6.11*	3.74	1.49
	(3.58)	(6.48)	(2.87)	(4.45)	(3.47)
adjusted R^2	.49	.26	.64	.40	.68
N =	35	41	46	56	55

Table entries are unstandardized 2SLS regression coefficients. Standard errors are in parentheses.

* $p \leq .10$

Table 3.7: Ford impression at Wave Three

Erie subsample

	political awareness stratum				
	1 (low)	2	3 (mid)	4	5 (high)
Wave Two impression	.819*	1.03*	.849*	.699*	1.06*
	(.152)	(.279)	(.082)	(.173)	(.119)
newspaper exposure	-.331*	-.245	.172	-.052	-.053
	(.061)	(.176)	(.115)	(.155)	(.156)
television exposure	.292	.123	-.033	-.265	-.239
	(.242)	(.223)	(.130)	(.214)	(.178)
political discussion	.617	.695	-.053	.311*	.059
	(.513)	(.466)	(.131)	(.182)	(.155)
party identific.	-.996*	-.091	-.212	.313	-.182
	(.559)	(.445)	(.245)	(.380)	(.322)
intercept	5.10	3.23	1.95	2.51	1.47
	(3.37)	(5.03)	(2.05)	(3.88)	(3.19)
adjusted R^2	.57	.54	.68	.36	.67
N =	36	45	56	38	57

Table entries are unstandardized 2SLS regression coefficients. Standard errors are in parentheses.

* p≤ .10

Table 3.7 cont'd: Ford impression at Wave Three

Los Angeles subsample

	political awareness stratum				
	1 (low)	2	3 (mid)	4	5 (high)
Wave Two impression	.716*	1.22*	.932*	.668*	.947*
	(.126)	(.202)	(.168)	(.110)	(.112)
newspaper exposure	-.097	-.137	-.039	-.153	-.272*
	(.176)	(.196)	(.148)	(.113)	(.108)
television exposure	-.123	.095	-.049	-.356*	-.357*
	(.268)	(.277)	(.198)	(.162)	(.139)
political discussion	1.11*	-.051	.191	.102	-.033
	(.459)	(.279)	(.182)	(.161)	(.142)
party identific.	-.673	-.626	-.349	-.062	-.170
	(.587)	(.529)	(.413)	(.335)	(.312)
intercept	3.07	2.98	2.02	5.55*	5.19*
	(3.30)	(4.72)	(4.48)	(2.97)	(2.86)
adjusted R^2	.62	.64	.60	.47	.69
N =	30	34	40	50	50

Table entries are unstandardized 2SLS regression coefficients. Standard errors are in parentheses.

* $p \leq .10$

Table 3.8: Ford impression at Wave Four

Erie subsample

	political awareness stratum				
	1 (low)	**2**	**3 (mid)**	**4**	**5 (high)**
Wave 3 impression	.676* (.121)	.740* (.185)	.800* (.135)	.613* (.168)	.794* (.090)
newspaper exposure	-.392* (.174)	.074 (.172)	.209 (.152)	.084 (.167)	.127 (.115)
television exposure	.538* (.273)	.354* (.206)	-.157 (.186)	-.166 (.291)	.012 (.144)
political discussion	.200 (.293)	.171 (.244)	-.186 (.183)	.308 (.256)	-.064 (.150)
party identific.	-.147 (.627)	-.295 (.405)	-.039 (.332)	-.290 (.352)	-.497* (.287)
intercept	4.85 (3.57)	6.54* (3.84)	2.90 (3.26)	7.66* (3.14)	4.92* (2.69)
adjusted R^2	.57	.52	.41	.33	.67
N =	31	37	54	37	57

Table entries are unstandardized 2SLS regression coefficients. Standard errors are in parentheses.

* $p \leq .10$

Table 3.8 cont'd: Ford impression at Wave Four

Los Angeles subsample

	political awareness stratum				
	1 (low)	2	3 (mid)	4	5 (high)
Wave 3 impression	.725* (.162)	.289* (.138)	.654* (.162)	.894* (.123)	.864* (.115)
newspaper exposure	.092 (.221)	-.029 (.190)	-.078 (.175)	.148 (.122)	.105 (.133)
television exposure	-.094 (.257)	-.439* (.228)	-.383* (.173)	-.142 (.184)	-.123 (.173)
political discussion	.363 (.398)	.812* (.339)	.091 (.227)	-.115 (.187)	-.129 (.172)
party identific.	-.207 (.576)	-.271 (.507)	-.357 (.493)	-.111 (.350)	-.505 (.345)
intercept	4.99 (3.31)	13.8* (3.30)	6.82 (5.46)	5.21* (2.88)	5.04 (3.15)
adjusted R^2	.53	.38	.58	.58	.71
N =	27	29	30	43	39

Table entries are unstandardized 2SLS regression coefficients. Standard errors are in parentheses.

* $p \leq .10$

Table 3.9: Ford impression at Wave Five

Erie subsample

	political awareness stratum				
	1 (low)	2	3 (mid)	4	5 (high)
Wave 4 impression	.929*	.752*	.783*	.857*	.941*
	(.264)	(.132)	(.164)	(.129)	(.138)
newspaper exposure	.201	-.169	.072	.115	.035
	(.243)	(.154)	(.161)	(.137)	(.157)
television exposure	.462*	.416*	.202	.144	.130
	(.201)	(.203)	(.197)	(.186)	(.179)
political discussion	.565	-.225	-.230	-.121	.025
	(.308)	(.189)	(.170)	(.164)	(.166)
party identific.	1.07	.456	.944*	1.01*	.449
	(.811)	(.421)	(.423)	(.330)	(.399)
intercept	5.04	4.95	6.26	4.37	2.32
	(6.32)	(3.16)	(3.90)	(2.91)	(3.94)
adjusted R^2	.32	.55	.46	.70	.59
N =	31	33	51	39	56

Table entries are unstandardized 2SLS regression coefficients. Standard errors are in parentheses.

* $p \leq .10$

Table 3.9 cont'd: Ford impression at Wave Five

Los Angeles subsample

	political awareness stratum				
	1 (low)	2	3 (mid)	4	5 (high)
Wave 4 impression	1.19* (.368)	.798* (.197)	.608* (.195)	.707* (.163)	1.05* (.139)
newspaper exposure	-.443 (.462)	-.142 (.208)	.071 (.175)	-.162 (.153)	.034 (.142)
television exposure	1.52* (.589)	1.08* (.345)	-.104 (.272)	.296 (.235)	.093 (.172)
political discussion	-.392 (.470)	.393 (.351)	.169 (.276)	-.054 (.208)	.289 (.197)
party identific.	-1.43* (.804)	-1.09 (.666)	-1.29* (.545)	-1.08* (.438)	-.149 (.385)
intercept	4.25 (7.39)	7.80* (4.09)	11.6* (5.45)	8.33* (4.51)	2.57 (3.49)
adjusted R^2	.37	.51	.56	.46	.81
N =	27	30	30	42	37

Table entries are unstandardized 2SLS regression coefficients. Standard errors are in parentheses.

* $p \leq .10$

Table 3.10: Reagan impression at Wave Two

Erie subsample

	political awareness stratum				
	1 (low)	2	3 (mid)	4	5 (high)
Wave One impression	.495 (.399)	.961* (.429)	.737* (.310)	.827* (.381)	.736* (.185)
newspaper exposure	.514* (.257)	-.105 (.279)	-.072 (.215)	-.277 (.301)	.200 (.210)
television exposure	.536* (.233)	.093 (.350)	.198 (.232)	.437* (.205)	.546* (.307)
political discussion	.456 (.387)	.055 (.338)	.311 (.241)	-.436 (.331)	.078 (.183)
party identific.	-.647 (1.29)	1.14 (.884)	-.294 (.509)	.971 (.707)	.076 (.403)
intercept	3.71 (9.33)	2.28 (9.99)	4.29 (5.92)	1.90 (8.56)	2.13 (4.98)
adjusted R^2	.46	.23	.19	.15	.22
N =	22	36	57	36	56

Table entries are unstandardized 2SLS regression coefficients. Standard errors are in parentheses.

* $p \leq .10$

Table 3.10 cont'd: Reagan impression at Wave Two

Los Angeles subsample

	political awareness stratum				
	1 (low)	2	3 (mid)	4	5 (high)
Wave One impression	.896*	.562*	.845*	.827*	1.06*
	(.142)	(.178)	(.175)	(.134)	(.348)
newspaper exposure	.278	-.107	-.041	-.043	.133
	(.215)	(.185)	(.141)	(.114)	(.153)
television exposure	-.324*	-.374*	.199	-.121	-.241
	(.171)	(.188)	(.210)	(.141)	(.217)
political discussion	-.478	.167	.195	.275*	-.226
	(.367)	(.393)	(.192)	(.156)	(.248)
party identific.	.522	-1.32*	.018	-.696	.064
	(.630)	(.722)	(.578)	(.450)	(1.26)
intercept	3.11	14.3*	1.32	7.93*	1.03
	(4.26)	(5.73)	(5.79)	(4.32)	(9.56)
adjusted R^2	.60	.65	.61	.75	.61
N =	36	37	47	55	54

Table entries are unstandardized 2SLS regression coefficients. Standard errors are in parentheses.

* $p \leq .10$

Table 3.11: Reagan impression at Wave Three

Erie subsample

	political awareness stratum				
	1 (low)	2	3 (mid)	4	5 (high)
Wave Two impression	1.04* (.206)	.837* (.277)	.473* (.155)	.380 (.289)	1.06* (.162)
newspaper exposure	.375* (.220)	-.003 (.235)	-.111 (.187)	-.124 (.209)	-.312* (.177)
television exposure	.548* (.225)	.462* (.207)	-.125 (.212)	-.127 (.251)	.238 (.178)
political discussion	-.126 (.489)	.562 (.474)	.253 (.206)	.249 (.248)	-.170 (.184)
party identific.	.157 (.521)	-1.09* (.572)	.111 (.400)	.073 (.421)	-.367 (.304)
intercept	1.40 (3.76)	8.86 (5.99)	9.56* (3.78)	10.7* (5.05)	2.94 (3.81)
adjusted R^2	.68	.33	.19	.12	.56
N =	25	39	51	33	54

Table entries are unstandardized 2SLS regression coefficients. Standard errors are in parentheses.

* $p \leq .10$

Table 3.11 cont'd: Reagan impression at Wave Three

Los Angeles subsample

	political awareness stratum				
	1 (low)	2	3 (mid)	4	5 (high)
Wave Two impression	.494*	.517*	.834*	.668*	.660*
	(.241)	(.192)	(.236)	(.164)	(.186)
newspaper exposure	-.080	-.045	-.060	-.287*	-.286*
	(.304)	(.192)	(.147)	(.139)	(.134)
television exposure	-.258	-.242	-.136	.054	-.160
	(.474)	(.278)	(.201)	(.200)	(.167)
political discussion	.195	1.14*	.119	.153	-.022
	(.698)	(.278)	(.175)	(.193)	(.165)
party identific.	-.751	-1.03	-.459	-.566	-1.42*
	(.999)	(.663)	(.704)	(.557)	(.694)
intercept	10.9	8.64	4.85	8.28*	14.2*
	(8.01)	(5.47)	(6.64)	(5.05)	(5.81)
adjusted R^2	.19	.71	.67	.58	.72
N =	32	32	40	50	50

Table entries are unstandardized 2SLS regression coefficients. Standard errors are in parentheses.

* $p \leq .10$

At first glance, Tables 3.2 through 3.11 appear to contain a random scattering of statistically significant coefficients and many large batches of nonsignificant variables. The data quite clearly show that exposure to mass

media during a campaign, either television news or newspapers, has relatively infrequent and inconsistent direct effects on attitudes toward the candidates. Newspaper exposure carries a statistically significant coefficient in 26 of the 94 estimated models, and television exposure is statistically significant 29 times, in each instance roughly 30 percent of the model estimations. While not a spectacular showing, the number of incidents of significant media effects in these analyses far exceed the expectations of random chance, even at our nontraditionally inflated level of significance ($p \leq .10$).[20] This tells us that, infrequent and inconsistent as the effects may be, mass media messages do have a direct, measurable impact upon citizens' attitudes toward presidential candidates in a campaign setting.

Modest, yet consequential, attitude change effects result from media exposure, according to this analysis. For example, the newspaper exposure coefficient (β_2) for the Reagan model estimation in political awareness group one (low awareness) of the Erie subsample at wave three is -.375 (see part one of Table 3.11). This could be called a typical effect size among the statistically

---

[18] In addition, see Bartels (1993) for a cogent argument in favor of the conclusion that "...it would be rash to infer from the prevalence of 'insignificant' parameter estimates that there really are no underlying media exposure effects to be found" (p.271).

significant newspaper coefficients, which range in magnitude from .220 to .831 (discounting the very large coefficients in the wave two Carter models, which may be inflated because of statistical power and measurement error problems). The television exposure coefficients show a similar size range. Both newspaper and television exposure coefficients carry different signs in different model estimations, which means that exposure may lead to positive (pro-candidate) or negative (anti-candidate) attitude change, depending on the situation.[21]

These 2SLS coefficients are interpreted in the same fashion as OLS coefficients. The low-awareness-stratum newspaper exposure coefficient of -.375 mentioned above, for example, can be interpreted to mean that a one-unit positive change on the 14-point newspaper exposure scale yields a negative change of .375 units on the 31-point Reagan impression scale (see Appendix 3-B for details on the candidate impression and newspaper exposure scales). To put it another way, consider the case of two hypothetical inhabitants of this particular awareness stratum (the lowest one) in the Erie subsample. Inhabitant A cares not a whit for the outside world, so he never picks up a newspaper, and scores a zero on the newspaper exposure scale. Inhabitant B, on the other hand, is a certifiable

---

[19] Specifically, the sign of a given exposure coefficient depends upon the nature of the media signal to which the respondents are being exposed. Chapter 5 discusses this concept in much greater detail.

news junkie, paying particular attention to news of politics, and so she scores a 14 (out of 14) on the exposure scale. The -.375 newspaper exposure coefficient estimated for this group means that Mr.A would evince no change resulting from newspaper exposure in his attitude toward Reagan from wave two to wave three (-.375 * 0 = 0). Ms.B, on the other hand, would move a full 5.25 points in the negative direction on the Reagan impression scale between waves two and three, based on her newspaper exposure, all other factors being equal (-.375 * 14 = -5.25). These figures are estimates, of course, and are subject to the standard confidence interval that can be constructed around the point estimate, using the coefficient standard error. All other (statistically significant) newspaper and television exposure coefficients in Tables 3.2 through 3.11 can be interpreted in this way, with the caveat that the television exposure scale runs from zero through 12 rather than zero through 14.

In many cases, newspaper exposure has a significant impact in the absence of a significant television coefficient, and vice versa. This fact, coupled with the numerous instances in which the newspaper exposure and television exposure coefficients carry opposite signs, indicates that the decision to include newspapers and television as distinct parts of our conceptual model (see Fig. 2.4) was correct. This result is unsurprising, given the real-world differences in

structure, content and tone between newspaper coverage and television coverage of the same events (see Graber 1993 for a summary).

Our decision to estimate Equation 3.2 on the Erie and Los Angeles subsamples independently is also justified by the results: In nearly every instance, the effects of newspaper and, to a lesser extent, television exposure differ sharply between the two geographical areas. If the sample is treated as a single entity, many of the media effects may disappear. This geographical cancelling-out effect is visible in the current context by comparing some of the Erie coefficients to the Los Angeles coefficients for the same candidate at the same panel wave. In a few instances, for example the television exposure coefficient for knowledge group one (low awareness) for Reagan at wave two (see Table 3.10), both the magnitude and sign of the coefficient differ considerably between the two samples (β_3 = .536, se = .233, p≤.05 for the Erie subsample, β_3 = -.324, se = .171, p≤.10 for the Los Angeles subsample). For comparative purposes I estimate the same model for the combined sample, and the resulting television exposure coefficient is not statistically significant by any standard (β_3 = -.101, se = .241, p≤.65 for the full Patterson data set). The counter-valenced television exposure effect that occurs in each locale is washed out when the geographic subsamples are combined.

Differences among the political awareness strata

A closer examination of the behavior of the television and newspaper exposure coefficients across the five political awareness strata reveals some interesting patterns. The sizable coefficients are not as randomly distributed as they seem at first glance. Statistically significant effects, when they occur, tend to cluster together in pairs of awareness strata -- for example, the large newspaper exposure coefficients alongside one another in political awareness groups four and five in the second part of Table 3.11. In addition, the coefficients for the other three strata descend in magnitude as we move down the political awareness strata. Many other examples of this phenomenon -- anchored at either end of the awareness strata, or occassionaly in the middle -- are scattered throughout Tables 3.2 through 3.11. In fact, four basic patterns seem to emerge.

Data-derived examples of each of the common patterns of the distribution of large media effects coefficients are presented graphically in Figures 3.1 through 3.3. Each figure's Y-axis displays the *magnitude*, or absolute value, of the appropriate media exposure coefficient, either newspaper exposure (β_2 in Equation 3.2) or television exposure (β_3 in Equation 3.2). The X-axis of Figures 3.1 through 3.3 represents the range of the five political awareness strata. Each

graph, then, shows the *size* of the media exposure effect for one candidate, at a particular panel wave, for each political awareness group.

Figure 3.1: Magnitude of television exposure effect across awareness strata Ford impression at wave four, Los Angeles (from Table 3.8)

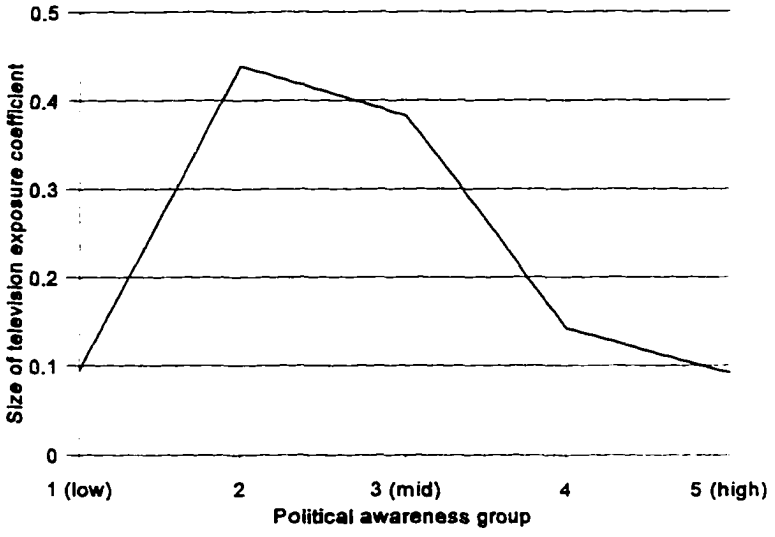


Figure 3.2: Magnitude of television exposure effect across awareness strata Ford impression at wave five, Erie (from Table 3.9)

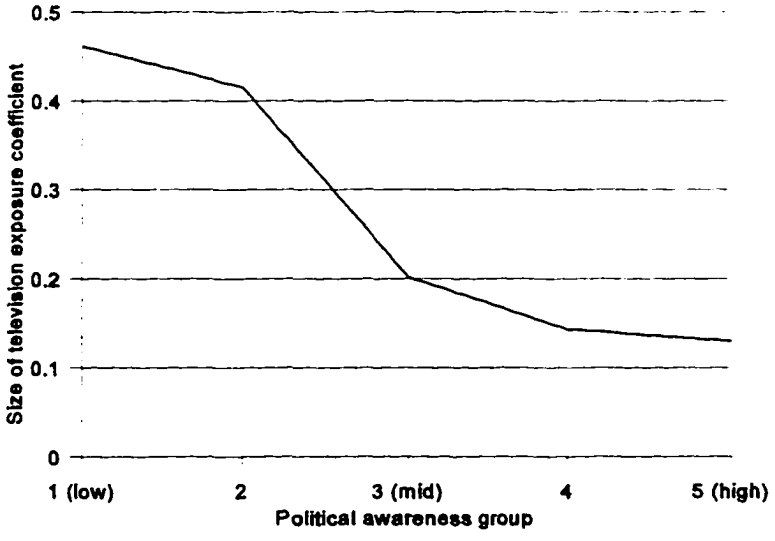
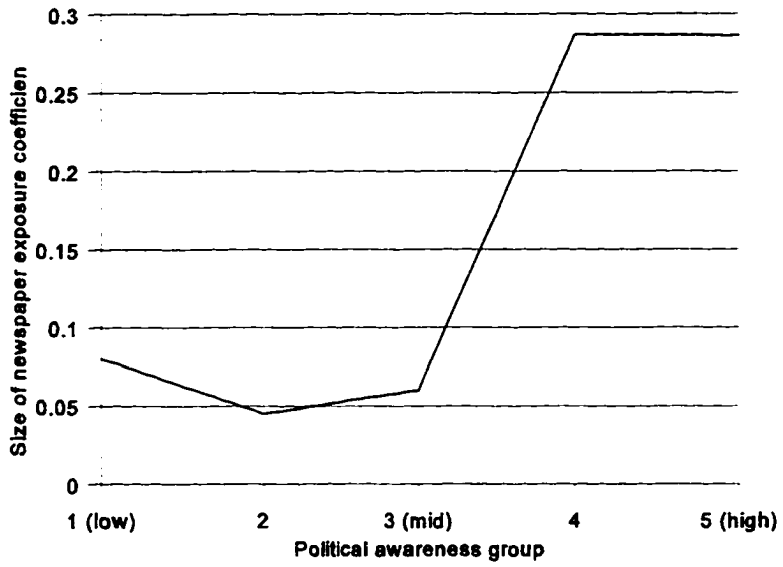


Figure 3.3: Magnitude of newspaper exposure effect across awareness strata Reagan impression at wave three, Los Angeles (from Table 3.11)

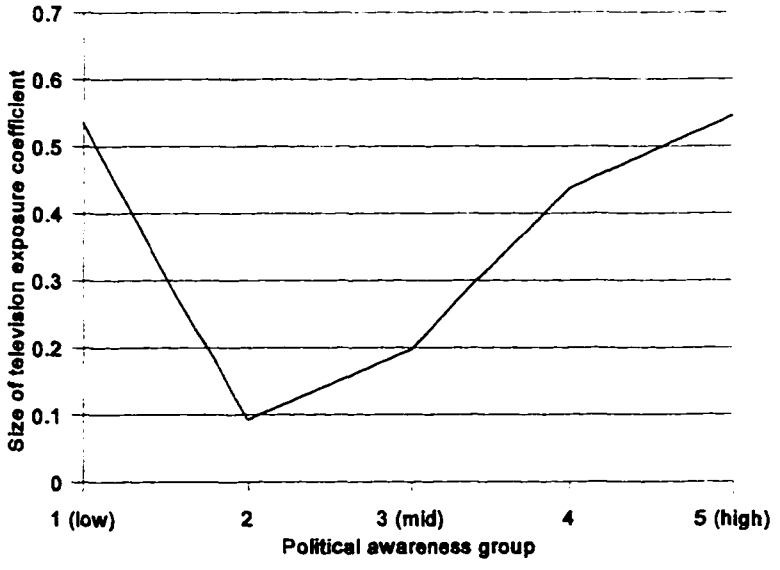


Figures 3.1 through 3.3, all derived from the empirical analyses presented earlier, bear a suspicious resemblance to the conceptual models illustrated in Figures 2.1, 2.5 and 2.6, respectively. Recall that Figure 2.1 is a conceptual depiction of the Converse-McGuire model, Figure 2.5 represents the Wellesian model and 2.6 illustrates the rotisserie league model of responsiveness to mass media signal. Apparently, no single responsiveness model is the "correct" one. Instead, in grand social-science fashion, and in tune with McGuire's (1983) contextualist theory of knowledge, they are *all* "correct" in different instances.

The Wellesian pattern occurs a total of 15 times in these model estimations; the rotisserie league pattern appears six times; and the Converse-McGuire pattern shows up five times. The conditions under which one model predominates over the others is the focus of Chapter 5.

One other pattern of responsiveness also appears amid the forest of coefficients presented in Tables 3.2 through 3.11. In these instances, the largest magnitude of exposure effects occurs at each end of the awareness spectrum simultaneously, with the midrange of exposure exhibiting the smallest effects. An example is provided in Figure 3.4, below.

Figure 3.4: Magnitude of television exposure effect across awareness strata Reagan impression at wave two, Erie (from Table 3.10)



The responsiveness pattern presented in Figure 3.4 resembles none of our hypothetical responsiveness patterns presented in Chapter 2. Instead, it appears to be the opposite of the Converse-McGuire model, resembling the letter "U" rather than the "inverted-U" (or "∩", to take advantage of the font capabilities of WordPerfect 6.1). In the pattern depicted in Figure 3.4, those highest *and* lowest in political awareness are responding to media messages by exhibiting change in candidate impressions, while those at the midrange of awareness are unaffected. For lack of a better moniker, I dub this responsiveness pattern the "U-shaped model."[22] As noted above, attempting to puzzle out the reasons for the occurrence of all four of these responsiveness patterns in the context of a presidential campaign is the subject of Chapter 5. The reader should also note that in seven instances among these model estimations (four among the newspaper exposure coefficients, and three among the television exposure coefficients), no measureable exposure effect is present.

In addition to the four patterns pointed out above, the political-awareness-based differences in the magnitude of the exposure coefficients make another important point: Just as geographical locale may mask or cancel out real media effects, so to may subpopulation differences in political awareness. This effect is

---

[22] Sorry, but inspiration ran out on this one.

easily demonstrated by comparing the coefficients generated by running our model upon the population as a whole to the coefficients generated by estimation on the different awareness strata independently. Table 3.12 shows the results of estimating Equation 3.2 on Ford impression at wave four for the Erie subsample without stratifying the subsample by political awareness.

Table 3.12: Ford impression at Wave Four, no awareness stratification Erie subsample (compare to Table 3.8, part one)

Wave 3 impression	.800*
	(.062)
newspaper exposure	.031
	(.060)
television exposure	-.043
	(.085)
political discussion	.042
	(.086)
party identific.	-.164
	(.161)
intercept	4.28*
	(1.44)
adjusted R^2	.51
N =	216

Table entries are unstandardized 2SLS regression coefficients. Standard errors are in parentheses.

* $p \leq .10$

Compare the coefficients in Table 3.12 to the coefficients generated by estimating the same model for all five political awareness groups, presented in part one of Table 3.8. The strong newspaper exposure and television exposure effects shown for awareness group one (newspaper exposure coefficient β_2 = -.392, se = .174, p≤.05; television exposure coefficient β_2 = .538, se = .273, p≤.05) and awareness group two (television exposure coefficient β_2 = .354, se = .206, p≤.10) in Table 3.4 are statisitically indistinguishable from zero in the unstratified sample estimates shown in Table 3.12. As is the case when we fail to separate the two geographic subsamples, the statistically significant effects of media exposure on the different political awareness strata wash out when we fail to examine them separately.

Other variables in the model

Impression at time *t-1*, the first explanatory term in each model, behaves just as we would expect. In every estimation of Equation 3.2, it is the single largest contributor to the variance of candidate impression, and its coefficient (β_1 in Equation 3.2) approaches 1.0 in most cases, which means that the remainder of the explanatory variables are indeed explaining *change* in the dependent variable, candidate impression at time *t*. The β_1 coefficient in the early Carter models

exhibits a great deal of variation, ranging from 1.26 to as low as .242 across the various model estimations. This fluctuation is partially a result of substantive instablility in early attitudes toward Carter. This interpretation should be made with caution, however, because Carter's status as a relative unknown will cause substantial noise, or measurement error, in the observed values of Carter impressions. The vissicitudes evinced by the β_1 coefficients in the early Carter models are almost certainly the result of a combination of substantive variation in true attitudes and random measurement error.[23]

The "control" variables in Equation 3.2, political discussion and party identification, offer sporadic contributions to the variance of the candidate impression variables througout the estimated models. Interpersonal communication about politics varies widely in both the direction and size of its contribution to candidate impressions, in seemingly unpredictable ways. Of

---

[21] It is worth noting that the smaller β_1 coefficients tend to be clustered at the lower end of the political awareness spectrum throughout all 94 of the model estimations, suggesting one (or both) of two things: That those low in awareness exhibit greater random fluctuation in attitudes (nonattitudes), or that those low in awareness exhibit greater amounts of change in true attitudes across time (instability). The pattern is a weak one, however, and so does not bear greater discussion here. Besides, this matter has been discussed with considerably greater expertise and authority (to say the least) by Converse (1964), Achen (1975), Zaller and Feldman (1992) and many others in the long-running "attitudes vs. nonattitudes" debate.

course, without some measure of the content of those discussions, or at least some notion of the political character of the discussion dyads or groups to which the respondents belong, any conclusions concerning the political discussion coefficients would be speculative at best. An effective examination of the nuances of interpersonal communication's effects upon candidate impressions during a campaign would, in fact, require another dissertation.[24]

The behavior of the party identification coefficients (β_5 in Equation 3.2) is more readily addressed. The impact of party identification upon impressions of the candidates is sporadic, although considerably less volatile than the impact of media exposure. Remember that the Patterson panel stretches from February through election day during the 1976 campaign. Party identification, in its role as a voting cue, serves a considerably different function during the primary campaign from the role it plays in the general election. In fact, some scholars have argued that party identification plays no substantive role at all during the primary season (see Bartels 1988 for a summary).

At the very least, the situation is complicated by the fact that a partisan individual may be faced with choosing among any number of candidates, all of

---

[22] No thanks. See Lenart (1994), Mackuen (1990), work by Huckfeldt and his colleagues (Huckfeldt and Sprague 1987; Huckfeldt, Beck, Dalton and Levine 1995) and Myers and Hubbard (1996) for in-depth treatments of this topic.

whom represent the party to a subjectively greater or lesser degree. Hence, the effects of party identification in the first four waves of the panel are unpredictable. For example, in most of the Carter equations in panel waves one through three, the party identification variable carries a positive coefficient, meaning that Republican-inclined individuals are more likely to change their impressions of Carter in a more favorable direction between waves. Perhaps Carter, with his Southern origins and Christian-oriented morality rhetoric, appeals to the more conservative aspects of Democratic partisanship, especially when compared to the other nomination candidates like Ted Kennedy and Hubert Humphrey. The party identification coefficients for the early-wave Ford models, on the other hand, tend to bear negative coefficients, indicating that stronger Republican partisans tend to move their impressions of Ford in a negative direction. Again, this may be a function of inter-candidate comparison during primary season. In fact, the party identification variable seems to behave more like ideology than like the traditional Michigan-school psychological attachment interpretation during the early, primary-season panel waves.[25]

The party identification measure settles into its traditional role in the

---

[23] If anyone cares, the author and S. Best are in the midst of a project that addresses, among other things, the role of party identification in primary-season voting behavior.

wave-five equations, however, with a negative coefficient for the Carter models and a positive one for the Ford models. That is, moving to the right (in the Republican direction) on the party identification scale has a negative effect on changes in impressions of Carter and a positive effect on changes in evaluations of Ford in the weeks leading up to the election. This is the result we would expect when a direct comparison between a Republican and a Democratic candidate is the dominant political decision task.

Summary discussion: Hidden media effects

In terms of media effects, then, we can draw a couple of conclusions from the complex pattern of results presented above. First, to restate the obvious, newspaper and television exposure do not directly influence political attitudes all the time, even during the heat of a political campaign. Instead, the effects are sporadic, and appear at first glance to be unpredictable. Upon further examination, however, the effects of mass media exposure do exhibit some visible patterns in terms of their magnitude and valence among different segments of the political awareness spectrum. Specifically, *the observed exposure effects appear to follow one of four conceptual models of attitudinal responsiveness to media signal*: the Converse-McGuire model, the Wellesian

model, the rotisserie league model or the "U-shaped" model. These patterns and their underlying causation will be pursued further in the next chapter of this dissertation.

The second conclusion to be drawn from this analysis is that *failure to account for the intersection of the effects of political awareness, geographical differences and campaign stage have led to an underestimation of mass media's impact upon citizens' attitudes toward presidential candidates.* The results of the empirical application of our attitude-change model provide evidence that different types of people are more or less affected by mass media messages at different stages of the campaign. A conflicting pattern of impact, occurring for different segments of the population at different times, and in different geographical locales, may give *the overall impression of minimal effects by masking partial-population effects or cancelling them out altogether.*

The geographical aspect of this masking or washing-out effect is readily visible using the Patterson data, as demonstrated earlier. The problem is compounded by several orders of magnitude when researchers use a national sample to search for media effects -- the respondents in a national sample like the NES are all being exposed to wildly different media signals, even if respondents are all interviewed at exactly the same time. This criticism is perhaps less valid

for network television news than for newspapers because network news is fairly uniform across the country (aside from commercial breaks and broadcast time differences), although local context may cause the same information to have a considerably different impact. In the current analysis, the greater homogeneity of television signal may account for the marginally greater differences between the Erie and Los Angeles samples in terms of newspaper exposure coefficients, and greater uniformity it terms of television exposure coefficients. It also explains why Bartels (1993) has more success in uncovering television exposure effects in the 1980 NES panel and little success in discovering newspaper exposure effects.

The analyses presented in this chapter reveal that individuals at different levels of political awareness respond differently to mass media messages, apparently following one of our four conceptual models. But *why* do these patterns of responsiveness vary across the course of the campaign? Asserting that these patterns are simply a function of campaign stage is somewhat facile. What, exactly, about the different stages of the campaign *cause* these differential response patterns? The remainder of this dissertation is primarily concerned with one possible answer: *The differential response patterns are a result of differences*

in media signal.[26]

Differential responsiveness to media messages may occur because mass media signal intensity, or volume, varies according to campaign stage, a suspiscion strengthened by other research (Bartels 1988; Westlye 1991; West 1993). The intensity of media signal may show peaks and valleys throughout the course of a political campaign. During times of little available information, or low signal strength, only the most closely attuned individuals will be affected by these media messages, as in the rotisserie league model. During times of major campaign events, media signal may be turned up to a roar, causing large media effects to be suddenly visible among the least sophisticated elements of the population, as in the Wellesian model. Finally, a middling level of signal intensity may cause the only visible media effects to occur in the midrange of the awareness spectrum, as hypothesized by the Converse-McGuire model.

In addition, we must keep in mind that sometimes media messages may have little or no impact on anyone because they contain little or no evaluative content. Even if a very strong signal -- defined simply as amount or volume of

---

[24] This is also Zaller's (1991, 1992, 1993) contention (one of many propositions in an immensely complex body of work). However, Zaller *infers* these theoretical media signal differences from his observed responsiveness patterns. In Chapters 4 and 5 of this dissertation I set out to actually *measure* the signal differences that we suspect are driving the responsiveness pattern differences.

information concerning a candidate -- reaches the most attitudinally frangible individuals, that signal will not change their attitudes if there is nothing in the signal to cause any changes. A viable measure of media signal must capture *both* the volume *and* the evaluative tone elements of the ambient media messages concerning a candidate. I examine the nature of the media signal intensity and its evaluative content in the 1976 campaign in Erie and Los Angeles in Chapter 4. I further apply the signal concept to the Patterson survey data in Chapter 5, where I attempt to explain the pattern of magnitude and valence changes in the media exposure coefficients presented in this chapter using the signal measures presented in Chapter 4.

Appendix 3-A:
Comparing Patterson's panel to the 1976 National Election Studies

As noted in the text, few significant differences exist between the Patterson panel and the 1976 NES, which serves as a sort of benchmark for political survey endeavors. In terms of demographics, very few differences exist between the two samples, with family income exhibiting the largest divergence. Some relevant comparisons are presented in Table 3-A.1, below. Demographics for the Patterson sample are measured at each respondent's initial interview, whether the respondent was first contacted in February, April or June.

Table 3-A.1:
Demographic comparisons, Patterson versus NES samples

	Patterson sample	1976 NES
Mean age	44.2 yrs	45.6 yrs
Sex: % female	55.1%	57.8%
Education:% BA or more	17.9%	15.0%
Race: % nonwhite	10.5%	13.0%
Family income: % >$20k	19.3%	26.9%
	N = 1,236	N = 2,871

As noted by Feldman (1989), differences between Patterson's sample and

the 1976 NES are somewhat more pronounced in terms of political attitudes and behaviors. Specifically, Patterson's respondents are somewhat more politically involved and aware, especially in terms of willingness to venture an opinion on various issues. Feldman reports that on the issue questions that are similar across the two data sets, about 15 percent of the NES sample falls into the "no opinion" category, compared to about eight percent of the Patterson sample.

If the Patterson sample is indeed somewhat more politically "savvy" or politically sophisticated than the NES sample, we need not despair. Given the principal hypothesis under investigation here -- that the politically unaware (or unsophisticated) are more likely to respond to campaign media messages than the politically aware -- a sample skewed toward more awareness simply presents a more stringent test. If the politically clueless are undersampled, a smaller portion of the sample will show the effects for which we are searching. For the statistically-minded, our probability of Type II error has increased somewhat -- we may be more likely to accept the null hypothesis of "no media effects" when in fact, media effects are occurring in the real world. While this is certainly a potential problem in terms of publishing results from this dissertation, it raises no red flags in terms of the advancement of science, where the status quo is king anyway. If our results are positive, we've shown them under strict conditions; if

they are negative, we have a reason to go on with the search using a different survey sample. "Better a missed opportunity than a false alarm" seems to be the reigning attitude among social scientists.

Questions of political sophistication aside, the Patterson sample and the NES sample evince marked similarity along other political dimensions. For example, Table 3-A.2 shows how the samples compare in their responses to the conventional seven-point summary scales[27] of party identification and ideology. The two samples are largely comparable along these dimensions, although the Patterson sample contains a few more "Strong Democrats" and "extreme liberals" than the national NES sample, perhaps because of the influence of the heavily urbanized Los Angeles portion of Patterson's respondents.

---

[25] The party identification question is asked in the usual two-stage fashion in both samples. The ideology question is asked in a two-stage format in the NES sample, but respondents are simply asked to place themselves on a single seven-point scale in the Patterson sample. The similarity between the two samples on the ideology dimension is remarkable given the differences in the survey instrument.

Table 3-A.2: Sample comparisons, party identification and ideology

Party identification

	Str Dem	Weak Dem	Lean Dem	Ind	Lean Rep	Weak Rep	Str Rep
P'trson	.170	.199	.093	.104	.044	.124	.069
	(210)	(247)	(115)	(129)	(55)	(154)	(85)
NES	.147 .247	.117	.144	.096	.142	.088	
	(422)	(711)	(337)	(415)	(277)	(409)	(255)

Ideology

	Ext Lib	Some Lib	Lean Lib	MOR	Lean Con	Some Con	Ext Con
P'trson	.039	.060	.102	.297	.098	.054	.038
	(48)	(74)	(126)	(367)	(121)	(67)	(47)
NES	.013	.066	.080	.251	.123	.109	.022
	(39)	(192)	(229)	(720)	(353)	(314)	(62)

Note: Entries are proportions of each sample falling into each category. Proportions for "other party," "apolitical" and "no answer" are not shown but the full sample is used to calculate cell entries.

N = 1,236 Patterson; N = 2,871 NES.Cell N's are in parentheses.

The two samples are similar in other ways as well, including comparable measures of political behavior. For example, 52 percent of NES respondents claiming to have voted in 1972 (N = 1,723) voted for Nixon; 50.6 percent of the

Patterson sample's alleged 1972 voters (N = 829) went for Nixon. Close to 75 percent of both samples claimed to be registered to vote in time for the 1976 election. A brief quote from Feldman (1989) should serve to dispense with this issue:

> On the basis of these comparisons, there seems to be no reason to believe that the Patterson data, or the subset of people in the five-wave panel, are so peculiar as to make generalization of the results of a study of response stability especially tenuous (Feldman 1989, p. 58).

I contend that the conclusion Feldman draws concerning his study of response (in)stability applies to a more general study of political attitudes as well.

Appendix 3-B: Survey question wording

The full text for the dependent and independent variable measures used in this dissertation appear below:

Dependent variable measures[28]

Respondents rate each candidate still in the race at the time of the interview along four trait dimensions, after indicating whether they recognize and "know something about" each candidate and rating each known candidate along a general favorability dimension. The interviewer gives the respondent a handout containing the candidates' names and a visual representation of the seven-point rating scales. The initial recognition and favorability measures are worded as follows:[29]

I am going to read the names of people who have been mentioned as possible candidates for the Democratic and Republican presidential nominations. {HAND RESPONDENT EXHIBIT BOOKLET} Please look at Card 1. As I read each name tell me if you have: Never heard the name before; if you have heard the name, but really don't know anything about him; or if you know something

---

[26] Of course, a lagged version of each of these dependent measures functions as an explanatory variable in the appropriate equation.

[29] Source: ICPSR Codebook #7990.

about him. First, what about [candidate]*? Just read me the number of your answer. {REPEAT FOR EACH CANDIDATE}*

Now I'd like to get your feelings on those candidates who you know something about. Please look at Card 2. You can use this scale to give us an indications of your feelings toward the candidates. If you feel extremely favorable toward a candidate, you would give him the number 1. If you feel fairly favorable, you would give hime the number 2. If you feel only slightly favorable, you would give him a 3. If your feelings are mixed between favorable and unfavorable, you would give him a 4. Suppose, however, that you feel unfavorable toward a candidate. You would give him a 7 if you feel extremely unfavorable, a 6 if fairly unfavorable, and a 5 if only slightly unfavorable. {ASK FOR EACH CANDIDATE RESPONDENT "KNOWS SOMETHING ABOUT."} First, the Democratic candidates. Which number on the scale best describes your feelings about [candidate]?

Now the Republicans. How about [candidate]*?*

The four trait ratings follow a similar format. The interviewer shows the respondent a card, containing a graphical representation of a scale with seven points, with the number eight out to the side representing "Don't Know." The interviewer asks the respondent to place her response to each candidate on the scale, for each trait dimension. Respondents rate only those candidates they claim to "know something about" based on the earlier question. Order of presentation of the candidates and the traits varies at each panel wave.

Now, we'd like to discuss a few of the presidential candidates with you. People have different opinions about the specific qualities of individual candidates. Look at Card 4.

1. *Some people think that a certain candidate is very trustworthy, that is, they feel he is completely sincere, truthful, straightforward, and honest. Others might*

think that the same candidate is very untrustworthy. Which number best describes your feeling about [candidate] *or don't you know how trustworthy or untrustworthy he is?*
[repeat for all candidates respondent "knows something about"]

2. *Next, whether or not a candidate is an excellent leader, that is, can lead and inspire others. Which number best describes your feeling about* [candidate] *or don't you know about him?*

3. *Next, whether or not a candidate has an attractive personality, that is, is engaging, interesting and appealing. Which number best describes your feeling about* [candidate] *or don't you know about him?*

4. *Next, whether or not a candidate has a great deal of ability, that is, competent, capable, and skillful. Which number best describes your feeling about* [candidate] *or don't you know about him?*

These ratings -- the four trait dimensions plus the overall favorability dimension -- can be scaled together to form an overall "candidate impression" variable, which is considerably more convenient to report upon than five separate dependent variables for each candidate.[30] Scaling these responses together has the added bonus of creating a dependent variable with a far greater range (from five to 35, both in theory and within the sample) than the single seven-point items. Scaling the trait dimensions yields excellent results in terms of reliability as well. Cronbach's α for the Carter, Ford and Reagan impression scales are greater than

---

[28] I am sidestepping the issue of the dimensionality of candidate impressions, because I am simply concerned with overall favorability rather than the relationships among the different dimensions.

.9 for all five panel waves, and range as high as .94. Descriptive statistics for all 13 of these scales are available from the author.

Explanatory variables

Most of the rest of the variables used in the Patterson data are measured in a more conventional way, without the use of visual aids. Presented below are question wordings and response categories for the television, newspaper and interpersonal communication exposure measures and their scaling properties, the political awareness scale and the demographic measures used in this study.

Media exposure and interpersonal contact measures

Television exposure, newspaper exposure and frequency of interpersonal communication about politics are all measured by a series of questions which are obviously designed with an eye toward scaling the responses into indexes, which is exactly what I do with them. Although responses to the scale questions vary slightly from one wave to the next, they are extremely consistent. Below are the question wordings:

Television exposure:

1. *Is there a television set in your home? (If yes) Is it in working order?*
   (working set/not)

2. *Many people do not watch the evening news regularly because they are eating supper, not home, busy or not interested. What about you? Do you watch netweork news regularly, somewhat often, only once in a while or almost never?* (scale 1-4)

3. *Within the last 24 hours, did you see anything about politics on network television?* (yes/no)

4. *Although network news can be seen on weekends, the regular network news with Cronkite, Chancellor, and Reasoner is televised only on the five weekdays, Monday through Friday. How many of the past five weekday evenings did you watch the network news?* (scale 0-5)

Scaling these items together yields a scale ranging from zero (least exposure) to 12 (most exposure). Cronbach's α for the television exposure scale is .76 (Erie)/.80 (Los Angeles) in wave two, .75/.80 in wave three, .76/.80 in wave four, and .76/.80 in wave five.

Newspaper exposure:

1. *Now let's talk about newspapers. Do you usually read a daily newspaper?* (yes/no)

2. *Most people don't have the time or interest to read the entire newspaper. They normally read only certain parts such as the sports, comics, the news, the business pages, the women's pages and so on. How often do you read the news pages of your daily newspaper? Do you read the news pages regularly, somewhat often, only once in a while or almost never?* (scale 1-4)

3. *Within the last 24 hours, did you read anything about politics in the newspaper?* (yes/no)

4. *A lot of people don't find the time to read their daily newspaper every day. During the past seven days, how many days did you actually read the daily newspaper?* (scale 0-7)

Scaling these items together yields a scale ranging from 0 (least exposure) to 14 (most exposure). Cronbach's α for the newspaper exposure scale is .75 (Erie)/.75 (Los Angeles) in wave two, .72/.72 in wave three, .74/.73 in wave four, .75/.74 in wave five.

Interpersonal contact:

1. *Generally speaking, how often do you talk about politics with others? Would you say regularly, somewhat often, only once in a while or almost never?* (scale 1-4)

2. *Within the last 24 hours, did you talk about politics with anyone?* (yes/no)

3. *In the last week about how many times did you talk about politics with others?* (scale 0-8, where 8="more than seven")

Scaling these items together yields a scale ranging from one (least amount of political discussion) to 13 (largest amount of political discussion). Cronbach's α for the interpersonal contact scale is .80 (Erie)/.80 (Los Angeles) in wave two, .79/.78 in wave three, .78/.80 in wave four, .79/.79 in wave five.

Political awareness scale

Political awareness is probably the most crucial concept used in this dissertation. While Patterson's survey unfortunately doesn't include any measures explicitly designed to probe the political awareness concept, two different elements of the survey can be combined into a reasonable test of political knowledge (see Chapter 2 for a discussion of what constitutes a "reasonable test").

The first element of the awareness scale is the series of recognition questions given to each respondent during every interview (see the dependent variable section in this appendix for question wording and format). At the time of the first wave of interviews (Febrary 6-24), the bulk of the 19 presidential hopefuls (13 Democrats and 6 Republicans) presented to respondents were not particularly well-known. Using this first-wave measure as part of our political awareness scale has the drawback of limiting our initial pool of respondents to 1,002 (recall that 234 respondents were added in waves two and three).

The second element of the test comes from a series of questions in which respondents place the Democratic and Republican parties (as well as the candidates, and themselves) on a series of contemporary issue questions, and on an ideology scale. Many political awareness or knowledge tests require

respondents to "correctly" place the Democratic party to the ideological left of the Republican party (Delli Carpini and Keeter 1993). The spatial placement scales run from one to seven. The six issue questions and the ideology question are worded as follows:

1. *Some people think achieveing racial integration of schools is so important that it justifies busing children to schools out of their own neighborhoods. Others think letting children go to their neighborhood schools is so important that they oppose busing...Where would you place* [party] *on the scale or don't you know about their position?*

2. *As a way to reduce unemployment, most people feel the government should help business to prosper so that more jobs are created. But people have different opinions about the government directly providing jobs. Some people want a federal job program, where the government directly provides jobs to those who cannot otheroese find employment. Others do not want the government directly to provide jobs to those out of work... Where would you place* [party] *on this scale or don't you know about their position?*

3. *Some people think our military strength has diminished in comparison to Russia and that much more must be spent on planes, ships, and weapons to build a stronger defense. Others feel that our military defense is adequate and that no increase in military spending is currently necessary...Where would you place* [party] *on the scale or don't you know about their position?*

4. *There is a lot of talk these days about the level of spending by the federal government for social welfare programs. Some people feel that the current level of social welfare spending is necessary because almost everyone receiving this government help really needs it. Others feel a great deal of this social welfare spending is wasted becasue a lot of people receiving this governemnt help don't deserve it...Where would you place* [party] *on the scale or don't you know about their position?*

5. *Some people favor legalized abortion, that is, they feel that a woman who desires an abortion should be able to have one. Other people are against legalized abortion...Where would you place* [party] *on the scale or don't you know about their position?*

6. *Most everyone favors a cut in personal income taxes, but there is disagreement about the nature of a tax cut. Some people want a tax cut that is intended to benefit all income groups about the same. Other people want a tax cut that is intended to benefit modest and low income groups much more than it benefits the high income groups...Where would you place* [party] *on the scale or don't you know about their position?*

7. *There's a lot of talk these days about liberals and conservatives. Some poeple consider themselfves extremely liberal when it comes to politics. Others consider themselves extremely conservative when it comes to politics. Most people are somewhere in between...Where would you place* [party] *on the scale or don't you know about their position?*

The awareness, or knowledge, scale is constructed as follows: The respondent scores a "correct" for each political figure she claims to recognize or "know something about." The respondent also scores a "correct" for placing the Democratic party to the ideological left of the Republican party on the issue questions listed above, and on the ideology scale. The number of "corrects" is totaled and divided by the total number of questions (19 political figure recognition items, six party issue placement items and the party ideology placement item), yielding a scale theoretically ranging from zero to 26. In the combined Erie and Los Angeles samples, the scale actually ranges from three to 26, with a mean and median of 16 (indicating a very nearly symmetrical

distribution). Cronbach's α for the awareness/knowledge scale is .866.

As noted in the text, this scale is used to stratify both the Erie and Los Angeles samples into five different groups in order to determine whether newspaper and television exposure have differing impacts at different levels of awareness. The five groups are not of equal sizes because the cut points for the groups are based on actual scale values. In addition, the cut points differ slightly for the two subsamples. For example, the lowest knowledge group in the Erie sample consists of everyone who scores an 11 or lower on the scale, while the cut point for the same group in the Los Angeles sample is 12. These differences result from trying to keep the five groups roughly uniform in size.

Demographics

Full question wordings for demographic items is available from the author, or in ICPSR Codebook #7990. Education is scored on an eight-point scale ranging from "no schooling" to "beyond college." Family income is scored on an 18-point scale which ranges from "none" to "$35,000 and over." Respondents' sex and race are coded by the interviewer.

Appendix 3-C: Comparing simple-model coefficients

The coefficients presented in the next four tables result from three different methods of estimating the simple model laid out in equation 3.1, namely a covariance structure approach estimated using Bentler's (1989) EQS program, ordinary least squares, and a two-stage least squares estimation of the instrumental variables approach. Only the coefficients for the television exposure and newspaper exposure variables (β_2 and β_3, respectively, in Equation 3.2)are included in the tables; presenting all of the coefficients for each of the models is quite unwieldy, and unnecessary given that the "real" (i.e. substantive) analyses are presented in the chapter text. Coefficients for other variables exhibit similar characteristics across the three estimation methods -- that is, the coefficients vary in unpredictable ways for different methods, but are generally comparable within any given equation.[31] Coefficients for the lagged dependent variables (β_1) in most equations are usually close to 1.0, which indicates that the other independent variables are indeed explaining *change* in attitudes.

The tables are laid out as follows: Tables 3-C.1 and 3-C.2 present the

---

[29] A full accounting of all of the coeffiecients for all 80 of the estimated equations is available from the author.

television exposure and newspaper exposure coefficients, respectively, for all five of the Ford trait ratings (presented in Appendix 3-B) at panel waves two through five. Panel wave one is cannabalized to construct an instrument for the lagged dependent variable in the wave two equation for 2SLS estimation. The models are estimated for the full data set, combining the Erie and Los Angeles subsamples. Tables 3-C.3 and 3-C.4 present the same coefficients for the Carter dependent variables. Model N's range from 508 for most of the Ford equations to 120 for the wave 2 Carter trait estimates.

Table 3-C.1: Coefficient comparisons for television exposure, Ford trait impression measures

Dependent var.	EQS est.	OLS est.	2SLS est.
Leadership, W2	.033 (.028)	.021 (.026)	.053 (.030)
Wave 3	-.016 (.026)	-.009 (.025)	-.015 (.026)
Wave 4	.016 (.027)	.019 (.026)	.009 (.029)
Wave 5	-.072 (.027)	-.034 (.025)	-.045 (.026)
Ability, W2	.034 (.027)	.032 (.025)	.046 (.028)
Wave 3	.003 (.026)	.004 (.025)	.005 (.026)
Wave 4	.021 (.026)	.025 (.025)	.002 (.026)
Wave 5	-.068 (.027)	-.048 (.025)	-.050 (.026)
Trustworthy,W2	.007 (.028)	.002 (.026)	.009 (.030)
Wave 3	.050 (.025)	.037 (.024)	.023 (.025)
Wave 4	.034 (.026)	.030 (.026)	.001 (.027)
Wave 5	-.089 (.028)	-.063 (.027)	-.073 (.029)
Personality,W2	.018 (.027)	.014 (.025)	.036 (.027)
Wave 3	-.003 (.025)	-.003 (.023)	-.022 (.026)
Wave 4	.035 (.028)	.020 (.027)	.016 (.027)
Wave 5	-.056 (.027)	-.033 (.025)	-.041 (.029)
Favorable, W2	.009 (.030)	.006 (.028)	.018 (.030)
Wave 3	-.030 (.028)	-.038 (.027)	-.023 (.027)
Wave 4	.041 (.029)	.040 (.028)	.021 (.030)
Wave 5	-.066 (.029)	-.045 (.027)	-.043 (.029)

Standard errors are in parentheses.

Table 3-C.2: Coefficient comparisons for newspaper exposure, Ford trait impression measures

Dependent var.	EQS est.	OLS est.	2SLS est.
Leadership, W2	-.045 (.028)	-.049 (.026)	-.043 (.030)
Wave 3	.080 (.025)	.080 (.023)	.036 (.025)
Wave 4	-.017 (.023)	-.004 (.023)	-.011 (.027)
Wave 5	-.015 (.024)	-.012 (.023)	.017 (.025)
Ability, W2	.015 (.027)	.007 (.023)	.004 (.028)
Wave 3	.043 (.024)	.046 (.025)	.026 (.025)
Wave 4	.010 (.022)	.016 (.023)	.017 (.024)
Wave 5	-.039 (.024)	-.034 (.022)	-.002 (.026)
Trustworthy,W2	.036 (.028)	.023 (.026)	-.003 (.030)
Wave 3	.057 (.023)	.046 (.022)	.059 (.024)
Wave 4	.038 (.023)	.036 (.023)	.049 (.025)
Wave 5	.043 (.025)	.032 (.025)	.061 (.028)
Personality,W2	.028 (.027)	.003 (.025)	.002 (.027)
Wave 3	.041 (.023)	.053 (.022)	.037 (.025)
Wave 4	.011 (.024)	.020 (.024)	.023 (.025)
Wave 5	.005 (.024)	-.033 (.023)	.022 (.028)
Favorable, W2	.017 (.024)	.012 (.028)	.008 (.030)
Wave 3	.078 (.026)	.071 (.025)	.079 (.026)
Wave 4	-.040 (.025)	-.024 (.025)	-.006 (.028)
Wave 5	.023 (.026)	-.002 (.025)	.037 (.028)

Standard errors are in parentheses.

Table 3-C.3: Coefficient comparisons for television exposure, Carter trait impression measures

Dependent var.	EQS est.	OLS est.	2SLS est.
Leadership, W2	.031 (.027)	.026 (.026)	.010 (.055)
Wave 3	.047 (.026)	.045 (.025)	.053 (.028)
Wave 4	.031 (.028)	.030 (.027)	.023 (.035)
Wave 5	.038 (.027)	.018 (.025)	.032 (.026)
Ability, W2	.047 (.027)	.028 (.028)	.028 (.045)
Wave 3	.075 (.025)	.059 (.023)	.055 (.025)
Wave 4	.018 (.027)	.022 (.027)	.017 (.032)
Wave 5	.117 (.027)	.093 (.025)	.097 (.025)
Trustworthy,W2	.033 (.028)	.021 (.027)	.002 (.021)
Wave 3	.075 (.025)	.053 (.024)	.064 (.027)
Wave 4	.031 (.030)	.021 (.029)	.017 (.034)
Wave 5	.096 (.029)	.070 (.027)	.082 (.031)
Personality,W2	-.007 (.026)	.001 (.025)	-.007 (.046)
Wave 3	.026 (.030)	.031 (.029)	.027 (.026)
Wave 4	.055 (.028)	.047 (.026)	.048 (.035)
Wave 5	.041 (.030)	.038 (.029)	.041 (.030)
Favorable, W2	.025 (.030)	.015 (.029)	-.004 (.052)
Wave 3	.066 (.026)	.047 (.025)	.046 (.026)
Wave 4	.069 (.033)	.045 (.029)	.028 (.036)
Wave 5	.069 (.029)	.055 (.027)	.048 (.030)

Standard errors are in parentheses.

Table 3-C.4 Coefficient comparisons for newspaper exposure, Carter trait impression measures

Dependent var.	EQS est.	OLS est.	2SLS est.
Leadership, W2	.037 (.027)	.037 (.025)	.003 (.056)
Wave 3	.004 (.024)	.001 (.023)	.006 (.027)
Wave 4	-.009 (.025)	-.003 (.025)	-.002 (.033)
Wave 5	-.008 (.024)	.005 (.023)	.001 (.024)
Ability, W2	.026 (.027)	.032 (.022)	-.001 (.045)
Wave 3	-.010 (.023)	-.002 (.024)	.002 (.024)
Wave 4	-.010 (.024)	-.005 (.025)	-.006 (.029)
Wave 5	-.006 (.026)	.011 (.026)	-.011 (.030)
Trustworthy,W2	.057 (.028)	.062 (.026)	.021 (.061)
Wave 3	-.010 (.023)	-.013 (.022)	.005 (.025)
Wave 4	-.060 (.026)	-.060 (.026)	-.059 (.029)
Wave 5	-.006 (.026)	.011 (.025)	-.011 (.030)
Personality,W2	.050 (.029)	.053 (.023)	.013 (.046)
Wave 3	-.002 (.024)	.007 (.026)	.019 (.025)
Wave 4	-.011 (.026)	-.003 (.024)	.005 (.032)
Wave 5	-.011 (.025)	.009 (.028)	.015 (.028)
Favorable, W2	.027 (.030)	.038 (.028)	.007 (.052)
Wave 3	-.020 (.024)	-.007 (.023)	.004 (.026)
Wave 4	-.103 (.029)	-.050 (.027)	-.052 (.032)
Wave 5	.008 (.026)	.030 (.025)	.006 (.029)

Standard errors are in parentheses.

Appendix 3-D: Instrumental variables for lagged endogenous variables

This appendix discusses the instrumental variables technique used to calculate the instruments which are substituted for the lagged dependent variable in each estimation of Equation 3.2. In essence, the instrumental variables technique is equivalent to regressing a set of exogenous variables on the endogenous explanatory variable, obtaining predicted values from this equation, and substituting these predicted values for the endogenous predictor in the structural equation of interest, using OLS regression for both estimation procedures. However, although the parameter estimates are correct after two successive applications of OLS, the standard errors of the estimates and R^2 statistics in the structural equation -- the second stage of the estimation procedure -- are incorrect (Hanushek and Jackson 1977). Using the two-stage least squares (2SLS) procedure in SPSS, or any other statistical package for that matter, avoids this problem, since the 2SLS procedure calculates standard errors and fit statistics using the observed values of the explanatory variables rather than the estimated ones.

Unfortunately, the 2SLS procedure in SPSS does not provide fit statistics for the first stage equation (the creation of the instrumental variable). I obtain the

R^2's and correlation coefficients presented below by separately estimating the first stage of each model and obtaining predicted values for the endogenous variables. Any instrumental variable estimation in which the first-stage R^2 is less than .1 can be considered a poor instrument (Bollen 1996), although a low first-stage R^2 does not preclude a successful second-stage estimation. The key to a successful instrumental variables estimation is a substantial correlation between the observed variable and its instrument. Both the R^2s and observed variable - predicted value (instrument) correlations are presented below. All parameters from the first-stage estimations are available from the author.

The exogenous instruments used to predict the lagged endogenous variable in each equation are: age, employment status, family income, education level, occupational status (blue vs. white collar), race, religious preference, sex, presidential vote in 1972, ideology measured at the contemporaneous panel wave, and a presidential approval scale constructed from four question asked very late in each interview. Table 3-D.1 presents the R^2 statistic from the regression of these variables upon each candidate impression variable at panel waves one through four, the correlation of the resulting instrumental variable with the observed values of its appropriate endogenous variable, and the number of cases used in each equation. The statistics are presented for the Erie and Los Angeles

samples independently, because the estimation presented in the text of the chapter was done in this fashion.

The early Carter equations, which generate R^2s are as low as .03 in Table 3-D.1, perform so poorly because few people are willing to venture an opinion of him early on in the campaign (note the small first-wave Ns). Those opinions that are offered tend to be rather invariant, clustered around the neutral point. This problem turns out to be partially moot anyway, because some of the knowledge strata contain so few cases for early Carter impressions that no estimation can be attempted (see Table 3.2 in the chapter text).

Table 3-D.1: First-stage R^2s and correlations between observed candidate impression and candidate impression instrumental variable

Erie sample

	Carter impression			Ford impression			Reagan impression		
	R^2	corr.	n	R^2	corr.	n	R^2	corr.	n
wave									
1	.11	.33	65	.54	.73	321	.22	.47	276
2	.04	.20	222	.49	.70	270	.15	.38	245
3	.03	.17	235	.56	.75	266	-	-	-
4	.26	.51	210	.60	.77	247	-	-	-

Los Angeles sample

	Carter impression			Ford impression			Reagan impression		
	R^2	corr.	n	R^2	corr.	n	R^2	corr.	n
wave									
1	.16	.40	71	.61	.78	315	.46	.68	310
2	.05	.21	174	.60	.77	232	.41	.64	234
3	.10	.32	193	.64	.80	221	-	-	-
4	.24	.49	141	.56	.75	180	-	-	-

Chapter 4: Measuring Media Signal in Campaign '76

Lack of knowledge about what is being covered is a weakness of many attempts to study mass media influence on political attitudes. The analyses presented in Chapter 3 provide a considerable amount of new evidence concerning the power of mass media to influence political attitudes at the individual level. Our understanding of the situation is not yet complete, however, because several questions remain unanswered (and unmeasured). What drives the appearances of the four distinct patterns observed among the media exposure coefficients in the survey data analysis? What aspects of the media signal to which the survey respondents are being exposed are actually causing attitude change? How can we explain the direction or the magnitude of the media exposure coefficients without some understanding of the evaluative nature of the media signal? In other words, measures of exposure alone are not enough.

I contend that a measure of information flow is necessary for the study of political attitudes during a campaign. Ideally, a complete picture of the information environment would be available. Such a picture would consist of television, radio, newspaper and magazine signals including news content and

campaign advertising; amount and type of interpersonal communication concerning the campaign; candidate contact via mail, telephone or personal appearance; and number and placement of billboards and other candidate advertising media. In other words, any potential source of information concerning the candidates or the campaign would be measured, quantified and included in our model of campaign media effects.

Painting such a complete picture of a campaign information environment approaches the level of a pipe dream, of course. Time, money and other research resources are all-too-limited. Instead we must work with the available tools, and the most obvious element of the campaign information environment to measure is mass media signal. As outlined in Chapter 1, mass media are arguably the single most important source of information about the campaign, and are subsequently the most obvious culprit for the prime mover in the area of campaign-based political attitude change, whether exposure to mediated campaign information is intentional, accidental or incidental (Fiorina 1990).

Media signal as a measure of information flow

Prior studies of the effects of mass media on political attitudes have suffered from a number of problems, some of which were addressed in Chapter 3 of this dissertation. Unfortunately, nearly all prior analyses, including the

previous chapter, have been knowingly or unwittingly guilty of using self-reported level of mass media exposure as a proxy for a true measure of media signal. This problem is endemic to political science and communication studies of political attitudes going back at least as far as the early Columbia studies (Lazarsfeld, Berelson and Gaudet 1944). Much of the blame for the long history of mixed results in political media effects research lies at the feet of this long-standing fallacy.

A crude analogue to the practice of using self-reported exposure as a measure meant to ascertain the impact of mass media on attitudes can be found in the example of a customer of a tanning salon.[1] How much will the tanner's skin tone change as a result of his trips to the tanning bed? We might estimate an answer to this question by simply asking the tanner how much time he spends in the bed on any given trip, and measuring the darkness (or redness) of his skin after each trip. We could then project the amount of change in skin tone that would occur in future trips of varying lengths.

Our estimate of future tanning success will meet with decidedly mixed results, however, because of one rather obvious overlooked fact: Tanning beds have variable settings. If our tanner consistently uses the same bed at the same

---

[1] I hardly need point out that the following example is a matter of hearsay and assumption rather than direct experience (one look at the author's pallor should provide plenty of evidence for this assertion).

setting during every trip to the salon, our estimates presumably will be accurate. If the setting -- and hence, the intensity of the radiation to which he is being exposed -- changes from trip to trip, or if the intensity varies from bed to bed, or if the intensity control is not precise or accurate enough, then our estimates will be inconsistent at best, useless at worst. Even if our iodine-hued subject accurately reports the length of each exposure, we only have part of the information necessary to predict how much his skin tone will change as a result of that exposure.

To exit the salon and return to "reality," consider the case of the survey respondent during a political campaign. She *may* accurately report the amount of mass media signal exposure she receives.[2] We have no idea how "strong" or "intense" was the media signal to which she was exposed, however, nor do we have any idea of its "direction" in terms of evaluative impact. Our survey respondent, unlike our tanning salon customer, has no control whatsoever over the intensity or direction of the signal. Therefore, using media exposure alone as a means of ascertaining media impact on attitudes is an incomplete methodology. We must know both the amount of exposure to the signal and the nature of the signal itself. With this hopefully illustrative example in mind, I now turn to

---

[2] This assumption is questionable, of course, as mentioned in the previous chapter. See Neuman and de Sola Pool (1986) for a discussion of various problems with self-reported media exposure measures.

constructing a measure of media signal useful for our current analysis.

Measuring media signal: The case of newspapers

My use of the term "media signal" throughout this dissertation is simply shorthand for the content -- amount, semantic characteristics, evaluative characteristics -- of what I consider to be the primary means of communication of information concerning the relevant actors in the 1976 presidential campaign; namely, the mass media. Careful empirical analysis, whether qualitative or (as in the present case) quantitative, requires a systematic, arguably objective method of measuring this communication flow. According to Berelson (1952), "Content analysis is a research technique for the objective, systematic, and quantitative description of the manifest content of communication" (p. 18). Content analysis is the obvious methodological weapon of choice for our purposes.

My measure of media signal during the 1976 presidential campaign consists of a quantitative content analysis of campaign stories in the major printed source of information about the candidates in each of the two geographical areas of Patterson's survey sample: Erie, Pennsylvania and Los Angeles, California. While television is a more pervasive medium than newspapers, the political content of newspapers is generally richer and more varied, and televised political news tends to follow the lead of print journalism in

most cases (Hess 1981). In addition, the level of detail necessary for a substantively meaningful content analysis is simply unavailable for the television news programs for our time span of interest.[3]

I utilize the *Erie Morning News* and the *Los Angeles Times* as the two content sources. The *Erie Morning News* operates in tandem with its sister evening publication, the *Erie Times*. The two newspapers share reporting and editorial staffs, and news content, editorial slant, news placement and other aspects of the two papers are virtually identical, with the obvious exception of late-breaking news. There was no compelling reason to choose one over the other, so I elected to code the morning paper because it was more readily available. The two papers combine for the weekend edition, known as the *Erie Times-News*. Combined circulation for the two papers, as reported in *Editor and Publisher Market Guide for 1976*, was 51,683 for the Monday through Friday editions, 68,320 on Saturdays and 92,544 on Sundays. As a general impression, the Erie papers have the look, feel and level of professionalism of an average small-town American daily. A sizable portion of the content of the Erie papers,

---

[3] Network news programs from 1976 are abstracted in the Vanderbilt Archives publication *Television News Index and Abstracts*, but the summaries contained in the abstracts may be too cursory to allow for a detailed enough content analysis to achieve the goals outlined here. Of course, if someone wishes to give the author a book contract and some research money, he would be happy to verify matters one way or the other.

both political and nonpolitical, comes from the Associated Press wire service.

The *Los Angeles Times*, on the other hand, is one of the largest and most professionalized newspapers in the United States. The 1976 circulation figures for the *Times* were 1,024,040 Monday through Friday, 957,378 on Saturdays and 1,230,468 on Sundays. This newspaper is a regional powerhouse, and falls just shy of joining the ranks of the national papers -- *The New York Times*, the *Washington Post* and the *Wall Street Journal* -- in terms of both sheer size and political influence within the Washington Beltway community (Hess 1981). As a point of reference, the single newspaper most comparable to the *Los Angeles Times* in terms of size, influence and journalistic respectability is probably the *Chicago Tribune*. The *Times* has maintained a sizable Washington bureau for several decades, so most of the national political news reported in the *Times* comes from staff reporters rather than the wire services.

As mentioned above, focusing on the major print media in our two sampling areas provides us with the makings for a richer, more detailed picture of the media signal during campaign '76 than could be provided by focusing on television. Before this print media content is of any use in our analysis, however, it must be quantified, coded, and analyzed in some fashion. The methods and procedures used for the content analysis of the *Erie Morning News* and the *Los Angeles Times* are outlined below.

Quantitative content analysis procedures

The content analytic methods utilized in this study follow the general outlines of the procedures originally outlined by Berelson (1952) and elaborated upon by Holsti (1969), Krippendorff (1980) and Weber (1990). As a result of practical resource considerations, however, in disagreement with Weber (1990), I use trained human coders rather than computer-based textual analysis. While formulaic, by-the-numbers procedures are indisputably better implemented by computational methods, trained coders tend to have better success in interpreting the evaluative nuances of verbal material (Smith, Feld and Franz 1992). The importance of the evaluative nature of the media signal is paramount in the context of the current project.

Generally speaking, after defining the problem or subject to be examined, a content analytic enterprise should proceed in the following stages: 1) choice of content source; 2) definition and selection of a sample of the content source; 3) choice and definition of the context unit; and 4) category definition and enumeration. These preparatory stages are followed, of course, by the training of coders (or selection of computer coding software) and the actual coding of content, calculation of intercoder reliability, data entry and analysis.

The first stage of the enterprise, choice of a content source, has already been discussed above. The second stage, sample selection, bears further

discussion. The subject to be examined, to flog a severely ailing horse, is media signal concerning the presidential candidates during the course of the 1976 presidential campaign, in the geographical areas of Erie and Los Angeles, with a particular eye toward the evaluative tone of the signal. This subject definition is already problematic, however. What exactly, temporally speaking, is "during the course of the 1976 presidential campaign?" One could argue with reasonable confidence that the 1976 campaign began the instant Gerald Ford took the oath of office on August 9, 1974 (Witcover 1977). Hence, our selection of a sample must deal with the question of temporal length.

Fortunately, our problem is partially solved by the particular nature of this study. As should be apparent by now, we are concerned with establishing a link between the political attitudes of the respondents in Patterson's panel survey and the campaign-oriented media messages to which they were being exposed during the course of the survey. Therefore, the problem can be rephrased as: How soon before the first wave of panel interviews do we begin measuring media signal?

Interviewing began on February 6, 1976. Zaller and Price (1990) have shown that memory for most news stories decays rather rapidly, and is essentially gone in all except the most salient, Simpsonesque instances after one month. In terms of the candidates themselves, only Ted Kennedy, Ronald Reagan (in Los Angeles only) and, for obvious reasons, Gerald Ford were well-known figures as

of January 1976 (Witcover 1977). Carter was basically a nonentity at this time, so most impression formation concerning the Georgia governor would have happened somewhat later in the year, beginning with the Iowa caucus and New Hampshire primary campaigns.

With this in mind, it seems reasonable to assume that beginning to code more than one month before the first wave of interviews would be a poor use of resources. Therefore, the sample to be coded consists of all stories dealing with the presidential campaign (either directly or by discussing the candidates) appearing in the news section (Section A) of the *Erie Morning News* and the *Los Angeles Times* between January 1, 1976, and election day (November 3) 1976. In addition, "special" election stories such as those appearing under the heading "Campaign '76 in Focus" or something similar, and editorial and "op-ed" columns are also coded, in order to broaden the range of evaluative material in the sample. This sample frame yielded a total of 2,088 articles of campaign coverage to be coded, 797 of them from the *Erie Morning News* and 1,291 from the *Los Angeles Times*.[4]

The third stage in implementing a content analysis, as noted above, is the choice and definition of a "context unit", which, for our present purposes, is "the

---

[4] Hard copies of all 2,088 coded articles are available from the author to anyone foolhardy enough to pay for copying and shipping expenses.

smallest body of content in which the appearance of a reference is counted" (Berelson 1952, p. 147).[5] The context unit in the present study is an entire news article or editorial. The reason for choosing this more "holistic" unit of analysis rather than a more "atomistic" unit such as word, sentence or paragraph is, once again, the paramount importance of discerning the evaluative nature of the media signal. After a few rounds of "dry-run" coding of news stories outside our target sample, it became apparent that evaluative tone was most readily discerned if coders took the news article as single units, rather than dividing each article into its component parts. Semantic validity -- intercoder agreement on the meaning or connotation of ambiguous words -- is much easier to achieve in this fashion (Krippendorff 1980). In addition, "large units of analysis provide as accurate a picture of subject matter and partisanship as small units of analysis, and with less investment of time" (Berelson 1952, p.146). An added benefit to this approach is that successfully training coders to code each story as a whole turns out to be easier than training and successfully implementing a more atomistic scheme while maintaining acceptable levels of intercoder reliability.

---

[5] Berelson (1952) and others distinguish between a "context unit" -- the largest body of content to which the coder may refer when inferring meaning -- and a "recording unit," the smallest unit of analysis as defined above. I make no such distinction here since the two units are identical when the unit of analysis is a full newspaper article (Holsti 1968).

Coding categories

The fourth procedural stage noted above consists of the definition and enumeration of subject matter content categories, in preparation for the actual coding. In a content analytic enterprise, "coding is the process whereby raw data are systematically transformed and aggregated into units which permit precise description of relevant content characteristics" (Krippendorff 1980). Three different coders were involved in this project.[6] Each coder coded a different section of the overall sample. In addition, each coder coded the same randomly selected subsample of 50 articles in order to establish intercoder agreement.

Coders categorized each article according to the following characteristics: source newspaper (*Erie Morning News* or *Los Angeles Times*); month and day of article's appearance; sequential number of article (if more than one article appeared on any given day); article placement (section and page number);[7] the nature of the article (straight news, analysis, editorial etc.); article authorship (staff reporter, wire service etc.); main topic of article; main and secondary actors in the story; evaluative nature of action (critical, affirmative, mixed, neutral)

---

[6] Deep, profound and heartfelt thanks to my coders: At Stony Brook, Eileen Ausset; at Michigan, Wendy Seronko and (especially) Dan Braga. Thanks also to Alice Stopkowski at UNH for able assistance with data entry.

[7] Most articles, of course, come from the "A" or news section of each newspaper. Special campaign sections, and editorial/op-ed pages tend to drift among sections, however.

undertaken by the actors in the story; main and secondary objects of the action in the article; and evaluative tone of article toward main and secondary actors (a five-point positive-negative scale, with "mixed" as a midpoint, and a "straight description" option when no evaluative material is discernable). Content categories for the "actor," "object" and "topic" codes include each presidential candidate or nomination candidate, the U.S. Congress, foreign policy and domestic issues, primary and caucus results, and so on. The complete version of the content analysis coding sheet, as used by the coders, is included as Appendix 4-A at the end of this chapter.

The single most crucial coding category in the analysis is the "evaluative tone of article" category. As discussed fully in Chapter 5, I expect the evaluative material concerning the candidates contained in the media signal to produce changes in survey respondents' attitudes toward those candidates, at least in some instances. Unfortunately, the evaluative tone coding category is the most subjective category in the analysis, and depends more heavily on coder judgment than any other. In attempting to ensure consistecy in this category, every effort was made to lay out the parameters of "positive," "negative," "mixed" and "neutral" evaluative content to each of the coders.

Essentially, coders read each article twice. The first time through, coders recorded the various "mechanical" or judgment-free coding categories, such as

article placement, length, actors appearing in the article, and so on. The coders used the second reading to form an overall impression of how the content of the article reflected upon each actors' reputation, taking on the role of a "typical reader" in order to do so. In determining this "reputational impact," coders made no attempt to differentiate between the "voice" of the journalist and the voices of other sources within the story. In other words, this coding scheme does not differentiate between a candidate's real-world misfortune and journalistic "bias," both of which are sources of evaluative material which could reflect upon a candidate's reputation.[8] Hence, any news story or editorial that a reader (or a coder, acting as a regular reader) would interpret as making, say, Carter look bad would be coded as having a negative evaluative tone toward Carter. Any story making Carter look good would be coded as having a positive evaluative tone toward Carter, and so on. The coders did not consider the source of the evaluative material when making the coding decision.[9]

---

[8] The coding scheme does allow for identification of the source of an overt attack (or praise) of a candidate, although the information is not used in this analysis. An exhaustive and inconclusive debate continually rages, largely in the popular press but occassionally reaching academic circles, concerning the question of media bias. See Barbour (1994) for a small sample of such debate.

[9] Obviously, failure to consider the source of the evaluative material is a compromise between ease of coding and the complexity of reader reaction to verbal material. For example, strong Democratic partisans are likely to view the same objective piece of information as reflecting less negatively upon Carter than

(continued...)

Intercoder reliability

After the coding scheme was finalized, and coders were briefed on the nature of the evaluative tone category, the three coders completed the coding across a period of several months. As noted above, each coder also coded the same random sample of 50 articles in order to establish intercoder agreement, or reliability. In addition, the author coded the same 50 articles in order to further test the rigor of the coding scheme.

Holsti (1968) notes two forms of coding reliability: individual reliability and category reliability. *Individual reliability* refers to the "traditional" interpretation of intercoder agreement, that is, how often two or more coders agree with one another in categorizing content. *Category reliability* depends upon the creator of the coding scheme, that is, this concept points out the fact that disagreement among coders may be the result of ambiguities in the coding scheme rather than insufficient training or attentiveness on the part of the coders. Each is calculated the same way, however, by simply creating a score based on agreement among the judges. Holsti (1968) calls this *composite reliability*, and it

---

(...continued)
are strong Republican partisans, because of party identification's role as a "perceptual screen" (Campbell, Converse, Miller and Stokes 1960). Strongly held attachments to or previous evaluations of the candidates would have the same effect (Petty and Cacioppo 1986). Zaller (1992) points to this aspect of the persuasion process as one reason why large-scale mass media attitude-change effects are relatively rare.

is calculated using the formula

$$CR = \frac{N * (\text{average inter-judge agreement})}{1 + [(N-1) * (\text{average inter-judge agreement})]} \quad (4.1)$$

where N is the number of judges or coders.

A number of other schemes for calculating intercoder agreement have been created during the past few decades. One of the most conservative, and hence most useful, is Scott's *pi*, which is discussed by Holsti (1968). Scott's *pi* goes beyond a simple frequency count of intercoder agreement, and accounts both for the number of categories used in any given variable and the frequency of their use -- in essence, a correction for a predicted "baseline agreement" among random coders. This reliability measure is calculated using the formula

$$\text{Scott's } pi = \frac{\%\text{ observed agreement} - \%\text{ expected agreement}}{1 - \%\text{ expected agreement}} \quad (4.2)$$

Expected agreement is calculated by finding the proportion of coding units falling into each category of a given category set (variable) and summing the square of those proportions.

As should be apparent from the above formulae, these measures can be applied to single category sets (variables) within the overall content analysis, or

averaged to provide an overall reliability "statistic" for the content analytic enterprise as a whole. Simple intercoder agreement for the three coders and the author, plus composite reliability and Scott's *pi* for the coding scheme as a whole, calculated using the 50 sample articles noted above, are summarized in Table 4.1.

Table 4.1
Intercoder reliability for content analysis

	Coder A	Coder B	Coder C	Coder D
Coder A	----	.88	.90	.95
Coder B	.88	----	.78	.93
Coder C	.90	.78	----	.89
Coder D	.95	.93	.89	----

Composite Reliability = .968
Scott's *pi* = .879

N= 50 randomly selected articles from the overall content sample.

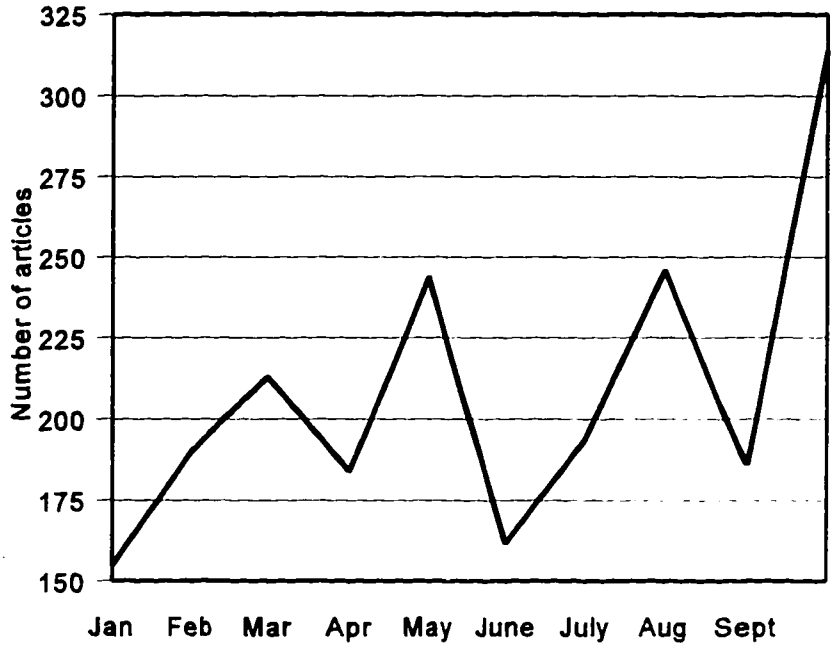
Although not presented in Table 4.1, intercoder agreement for different aspects of the coding scheme -- that is, different coding sets or variables -- vary as one would normally expect. For example, 100 percent agreement among all four coders is achieved for the "source newspaper" coding category (this

"variable" is not included in the intercoder reliability coefficient because it involves no judgment on the part of the coder). As coder judgment becomes more prominent in the assignment of coding units to coding categories, intercoder agreement declines somewhat, as expected. The least agreement among coders occurs, naturally enough, in the "evaluative tone toward main actor" variable, which has an average composite reliability score of .83 and Scott's *pi* of .72. Both the CR score and Scott's *pi* for this aspect of the coding alone is high enough for use in analysis, however (Holsti 1968; Krippendorff 1980). With this in mind, I now turn to a summary of the findings of our content analysis.

Media signal in Campaign '76: Content analysis results

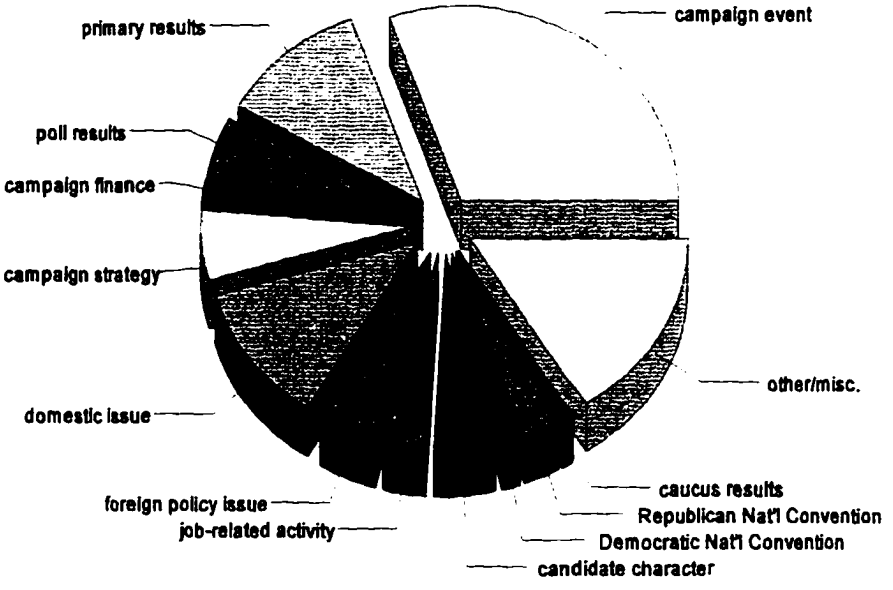
The general outlines of the content analytic results conform to theoretical and common-sense expectations. For example, the volume of coverage of the campaign, as measured by the number of articles in our two newspapers devoted to it, increases across the course of the campaign. The coverage pattern is graphically depicted in Figure 4.1.

Figure 4.1: Volume of campaign coverage,
Erie Morning News* and *Los Angeles Times



As shown in Figure 4.1, early peaks in signal volume are reached toward the end of February, coinciding with the New Hampshire primary, and in May, as the embarrassing spectacle of Ronald Reagan's powerful, impudent challenge to President Ford's renomination became more and more salient and heavily covered. A third peak is reached in late summer, around the time of the party conventions. Media coverage surges dramatically in the late stages of the Ford-Carter contest,with the most coverage by far occurring just before the election (the "October" point on the X-axis in Figure 4.1 includes the first two days of November as well).

Figure 4.2: Topics of campaign-related articles,
Erie Morning News* and *Los Angeles Times



Topics of coverage

The primary topics covered by the newspapers during the campaign are also in line with prior research (see Robinson and Lichter 1991; Graber 1993). As shown in Figure 4.2, the single largest block of the 2,088 coded stories concerns "campaign events" such as press conferences, speeches,

announcements, personal appearances and so on. Large amounts of coverage are devoted to campaign strategy, primary and caucus results, poll results, the conventions, and miscellaneous other non-issue-related topics.

In short, the bulk of the coverage of the 1976 presidential campaign is devoted to so-called "horse-race" coverage, which is (apparently) unwarranted mass media focus on the strategic, "winning-vs.-losing" aspect of political campaigns (such as trial-heat poll results, campaign finance problems, order-of-finish presentation of primary elections, predicted responses to candidate advertising offensives, and so on). The usual accusation is that important policy issues are ignored as a result of this focus (see, e.g., Patterson 1980; Graber 1993; Jamieson 1992; Robinson and Lichter 1991, and many others for discussions of horse-race coverage and its implications).

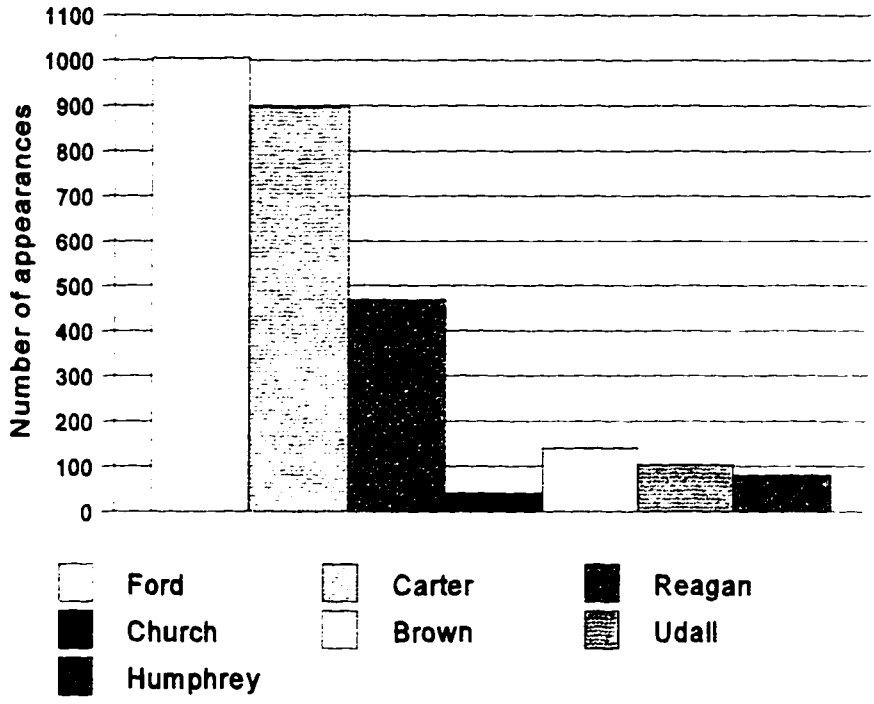
In the current sample as in most other studies, "substantive" coverage such as attention to domestic and foreign policy issues, or candidate character issues, is certainly present, but it takes a back seat to the more conflictual, and hence more journalistically appealing, world of "horse-racism." In this sense, campaign coverage has changed very little since the 1976 campaign (see Patterson 1995 or Jamieson 1992 for the necessary and proper academic admonishment of the journalistic establishment). In this sense at least, coverage

of the 1976 presidential campaign was no different in Erie or Los Angeles from elsewhere in the nation.

How the candidates fared

Once again, few surprises are in store when we examine differential coverage of the various candidates. For the record, the "recognized" candidates for the Democratic nomination included Birch Bayh, Lloyd Bensten, California Governor Jerry Brown, Georgia Governor Jimmy Carter, Frank Church, Fred Harris, Hubert Humphrey, Washington Senator Henry "Scoop" Jackson, Massachusetts Senator and political legacy Edward Kennedy, Edmund Muskie, Milton Shapp, Sargent Shriver, Arizona Congressman Morris Udall and, up to the time of the Democratic National Convention, Alabama Governor George Wallace. The more manageable Republican field consisted of incumbent President Ford, a fiery conservative challenger in California Governor Ronald Reagan, and a handful of benchwarmers in Howard Baker, Charles Mathias, Charles Percy and New York political legacy Nelson Rockefeller . Wallace, after failing to capture the Democratic nomination, was the only notable post-conventions entrant into the race. The differential coverage received by the most visible of these candidates is presented in Figure 4.3.

Figure 4.3: Amount of coverage received by candidates,
Erie Morning News* and *Los Angeles Times



The numbers represented by the bars in Figure 4.3 are aggregated across the time span of the newspaper sample. Not surprisingly, President Ford is the leader in coverage, followed by the Democratic nominee Carter. The more than 400 stories concerning Ronald Reagan point out the strength of his challenge to Ford, when one considers that coverage of the Republican challenger effectively ceased after the party's August convention.

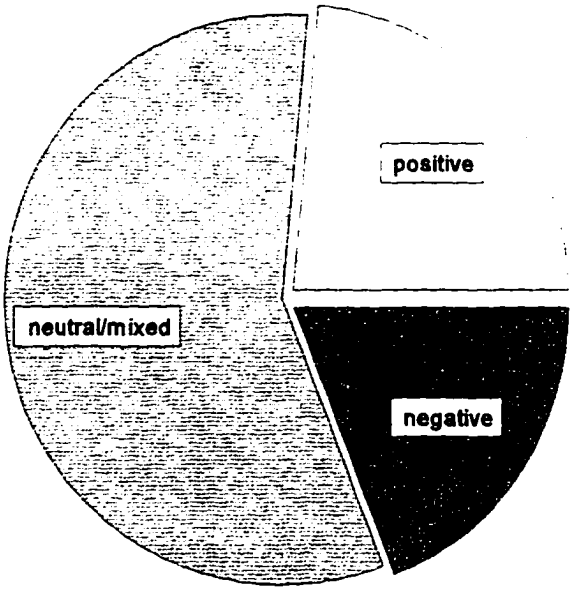
No great surprises are in store when examining the evaluative tone of the coverage of the candidates. Keep in mind that we have no interest in this study in determining whether media coverage of the candidates is "biased" in any fashion. The evaluative reflection of the story upon the actors and objects in each article is our concern. Hence, we make no attempt to separate evaluation of a candidate by the writer of an article from evaluation of a candidate by a source within an article -- for example, criticism from another candidate.

The proportions of positive, negative and neutral coverage for all of the candidates collectively are presented in Figure 4.4. The proportions presented in this figure come from all instances in which any candidate was either a primary or secondary actor in a story, or a primary or secondary object (being acted upon). The "evaluative tone" coding category is collapsed from a five-point scale into a simple three-point scale; neutral "straight news" stories and mixed evaluations are included in the neutral category.

Unsurprisingly, neutral coverage dominates, as is apparent from Figure 4.4. This result is in keeping with journalistic training and values implemented in this country since the 1930s; an overwhelming amount of positive or negative coverage would fly in the face of our knowledge of mass media news reporting. However, plenty of evaluative action is occurring within the sample. In keeping

with recent work on this topic, when evaluative content exists, it is more likely to be positive (24 percent) than negative (19 percent), which leaves 57 percent of the coverage either neutral or mixed positive/negative (for extensive discussion of candidate evaluation in media coverage, see Robinson and Lichter 1991; Smith and Lichter 1996).

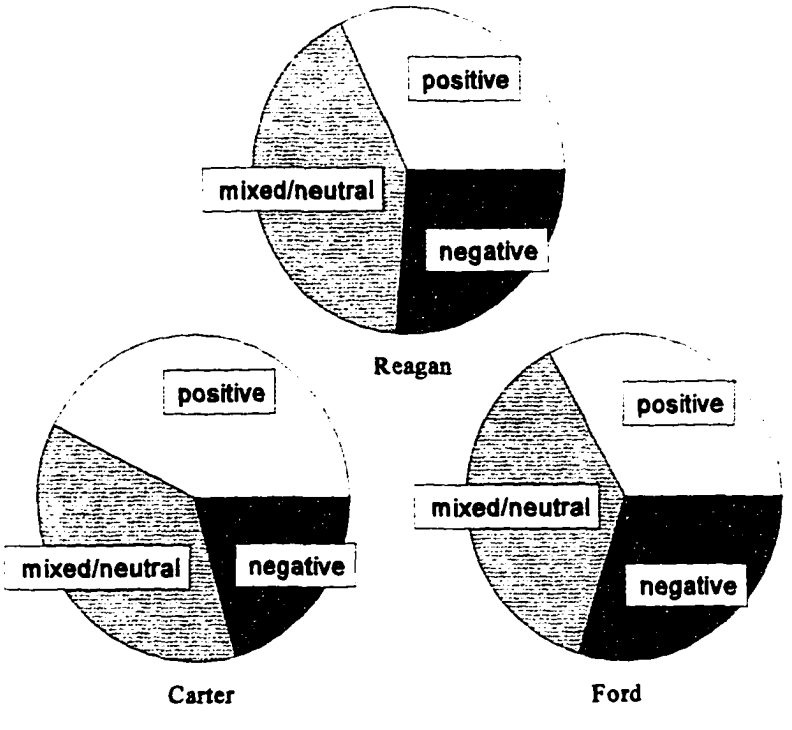
Figure 4.4: Evaluative tone of coverage, all candidates,
Erie Morning News* and *Los Angeles Times



Some minor differences exist in press coverage of different candidates. Figure 4.5 presents the equivalent of Figure 4.4 for Ford, Carter and Reagan. These proportions come from each story in which the candidate in question was the primary actor or primary object in a story.

It is apparent from Figure 4.5 that Carter received more positive coverage than either Ford or Reagan. Much of Carter's advantage comes from early in the campaign, as his momentum was building during a string of early caucus and primary victories. This momentum phenomenon is well-documented in numerous studies (see Graber 1993 for a summary).

Figure 4.5: Evaluative tone of coverage, three candidates, *Erie Morning News* and *Los Angeles Times*



Although not included in the figure, some of the minor, "dark-horse" candidates received even more positive coverage than Carter, which supports the idea of "kid-gloves" treatment of minor candidates (Robinson and Lichter 1991).

Differences between the papers

Are there major differences in the coverage provided by the *Erie Morning News* and the *Los Angeles Times*? Figures 4.6, 4.7 and 4.8, which are disaggregated versions of the previous three figures, shed some light on this question. It is apparent from these figures that despite the differences in circulation, profession-alization and funding discussed earlier, the end product of campaign coverage is more similar than different between these two newspapers.

Figure 4.6: Coverage volume, all candidates,
Erie Morning News* compared to *Los Angeles Times

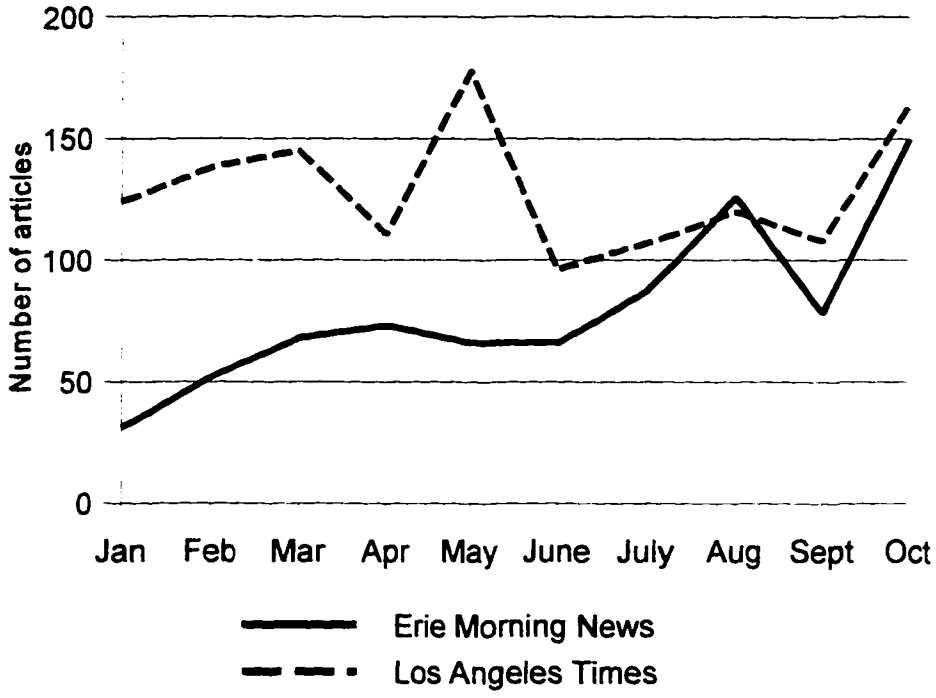
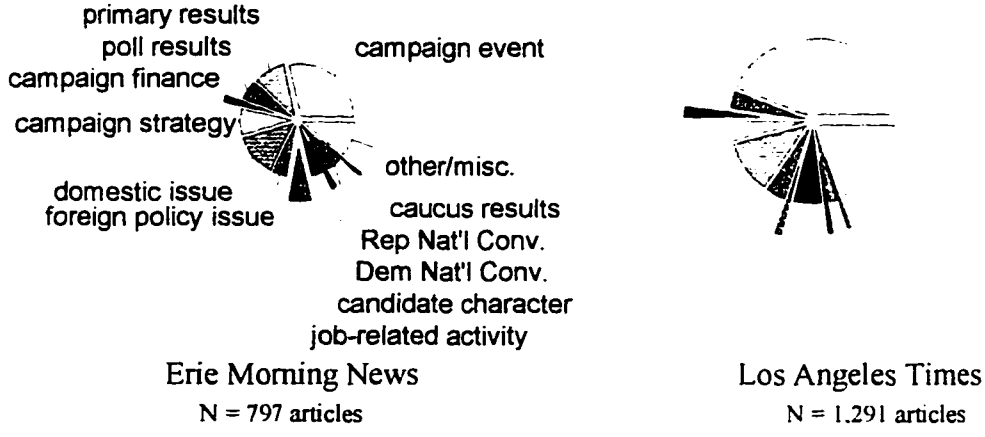


Figure 4.6 shows that relative coverage volume follows roughly the same patterns in each newspaper, although the absolute coverage volume is considerably higher in the *Erie Morning News* than in the *Los Angeles Times.* This difference is natural, considering the differences in the scope and coverage between the two newspapers, as discussed earlier (recall also that a total of 1,291 campaign articles from the *Los Angeles Times* appear in our sample frame,

compared to 797 in the *Erie Morning News* during the same time period). In addition, it is apparent from Figure 4.6 that the May peak in coverage volume shown earlier in Figure 4.1 is driven entirely by the *Los Angeles Times*, most likely as a result of the *Times*' interest in covering Ronald Reagan's nearly successful run for the Republican nomination.

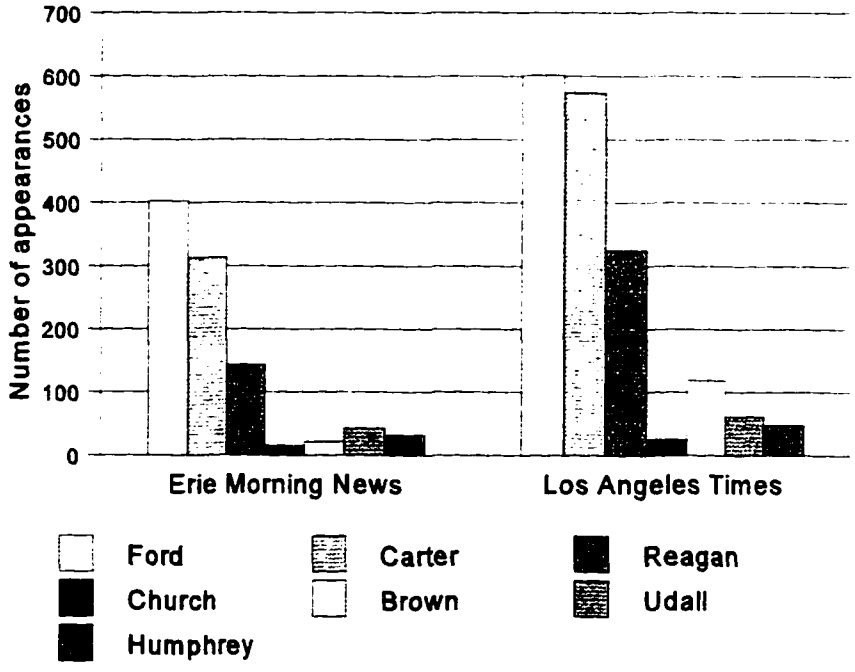
Figure 4.7: Topics of campaign-related articles,
Erie Morning News* compared to *Los Angeles Times



The similarity of topics covered by the two papers is shown in Figure 4.7 (no labels are included for the *Los Angeles Times* for ease of reading; all pie wedges are in the same order as those in the *Erie Morning News* pie). As shown in Figure 4.7, very few differences exist between the two papers in the campaign-

related topics covered. The candidates also received approximately the same proportional amount of coverage, as shown in Figure 4.8, with the understandable proportional increase in coverage of Reagan and Brown, a former and then-current California governor, respectively, in the *Los Angeles Times* as opposed to the *Erie Morning News.*

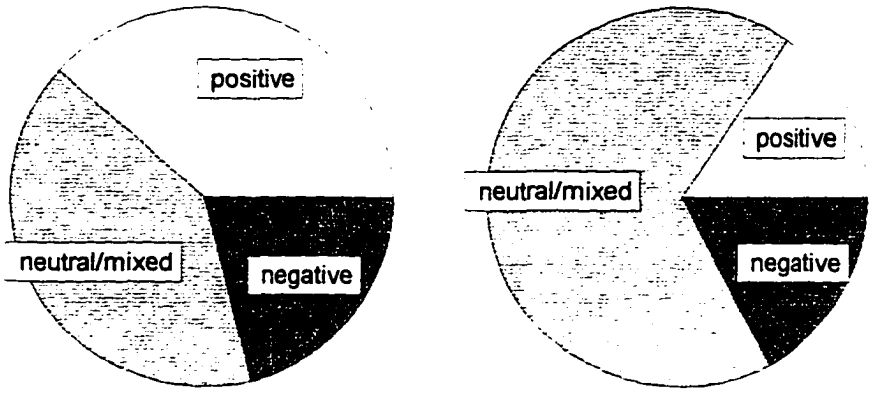
Figure 4.8: Amount of coverage received by candidates



One rather striking difference between the two papers becomes apparent

when we examine the difference in evaluative tone of the coverage. Figure 4.9 duplicates Figure 4.4 for both the *Erie Morning News* from the *Los Angeles Times*, using the same procedure described earlier.

Figure 4.9: Evaluative tone of coverage, all candidates



Erie Morning News
N = 797 articles

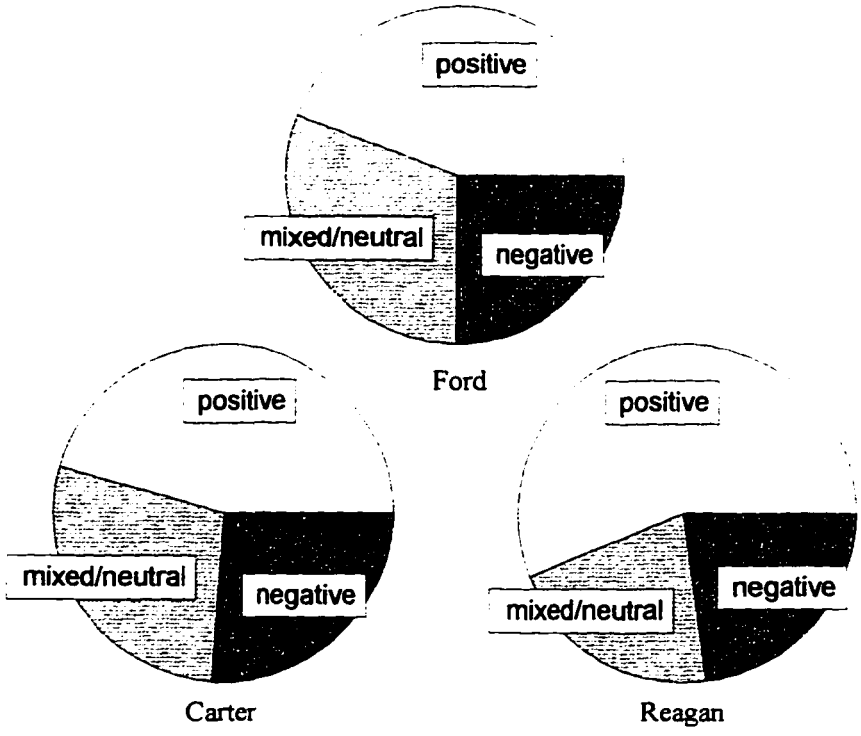
Los Angeles Times
N = 1,291 articles

Overall, coverage of the candidates in the Erie paper is more positive than the coverage in the *Times*. The difference -- 38 percent positive in Erie, 16 percent positive in Los Angeles -- may be attributable to the greater degree of professionalization at the *Los Angeles Times*. Presumably, better-qualified journalists are more likely to report in a neutral fashion rather than contributing evaluative material to a story. Or, it may be the case that the events reported

upon, particularly the actions and speeches of the candidates concerning each other, were more likely to be positive in the rural environment of Erie, Pennsylvania. Interestingly, the proportion of negative coverage in each paper is quite similar, 19 percent in Erie to 17 percent in Los Angeles.

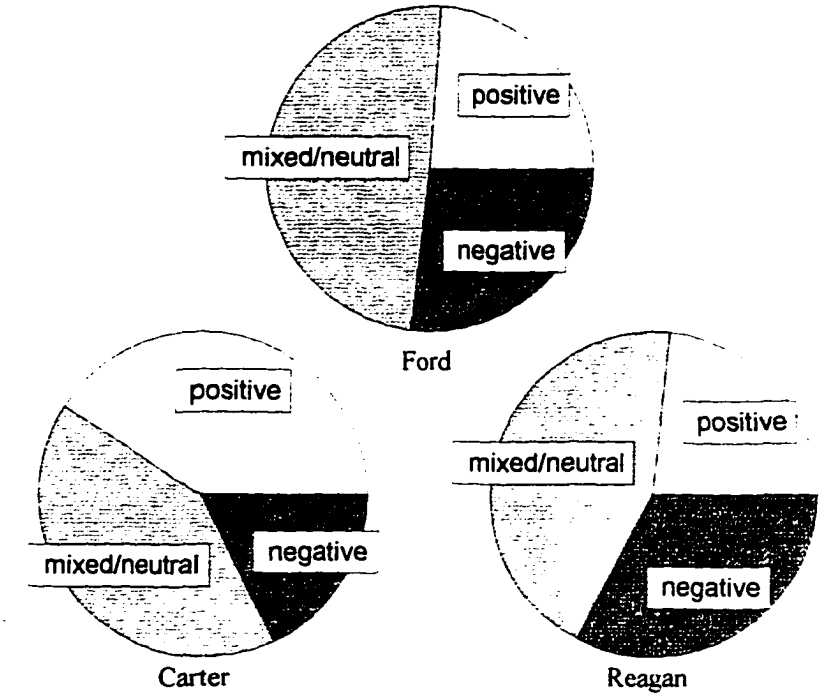
Figure 4.10 presents the proportions of positive, negative and neutral or mixed coverage garnered by Ford, Carter and Reagan in the two locales.

Figure 4.10: Evaluative tone of coverage, three candidates



Erie Morning News

Figure 4.10 cont'd: Evaluative tone of coverage, three candidates



Los Angeles Times

As is apparent from the figure, each candidate is treated more positively in the *Erie Morning News* than in the *Los Angeles Times*. Only Carter has a large amount of positive coverage in the *Los Angeles Times*, perhaps as a result of his outsider status and early primary victories, as mentioned earlier. Once again, the differences between the two papers on this dimension may be attributable to the differing professionalization levels of the two newspapers, or to behavioral differences on the part of the candidates when dealing with a rural as opposed to

an urban area (or some combination of the two).

Despite these differences in the evaluative nature of the coverage in the *Erie Morning News* compared to the *Los Angeles Times*, overall newspaper signal in the two locales is definitely more similar than different. The relative similarity between these two newspapers in terms of campaign coverage is not particularly surprising. Despite the fact that differences in quality certainly exist, the basic training and methods of political journalism are fairly constant throughout this country, which leads to a similar end product (Graber 1993). Also, reliance on the wire services by both of these newspapers contributes to further homogenization (Bagdikian 1992).

Newspaper signal: Carter, Ford and Reagan

Our primary purpose in implementing the content analysis described in this chapter is to provide a measure of media signal which will be used to explain the media exposure responsiveness patterns uncovered in Chapter 3. We noted at the end of Chapter 3 that a viable measure of media signal needs to comprise both volume, or intensity, and evaluative tone. I construct such a measure (of *newspaper* signal, obviously, because we have no information about television

signal) in the following fashion:[10] Each news story, news analysis and editorial (signed or unsigned) in which a candidate is an actor or object is coded "1" if the story reflects positively[11] upon the candidate and "-1" if the story reflects negatively upon the candidate. A story that the coder judges "mixed but balance positive" is scored ".5", and a story she judges as "mixed but balance negative" receives a "-.5." Straight news articles containing no evaluative tone and articles that are evenly split between positive and negative tone are scored as "0."

I present graphical depictions of the newspaper signal volume and tone devoted to candidates Carter, Ford and Reagan by each newspaper on a day-by-day basis in Figures 4.11 through 4.13, below. One unit on the "signal" axis (the Y-axis) of each graph represents one article with a positive (negative) evaluative tone on that particular day; half-units are present because of the cancelling-out effect outlined above. The X-axis is gradiated by day. For example, a score of

---

[10] The signal variables are constructed by modifying (recoding) some of the original content analysis coding, so the coding scores described here do not match up exactly with those presented in the appendix. The raw data have not been substantively altered, merely rescaled. The original coding categories used to create this signal variable are "12. Type of action in article" and "14. Evaluative tone of article" in Appendix 4-A.

[11] Recall that "reflects positively" simply means that the information contained within the story is judged to be positive by the coder. The coding scheme makes no distinction between a real-world positive event objectively reported in a news story and a calculated editorial containing normative arguments in support of a candidate. Both of these situations are coded '1' according to the coding scheme.

"4" on July 16th means that a total balance of four positive stories (or some combination of "positive" and "mixed but balance positive" stories) appeared on that day. This does *not* mean that no negative stories concerning the candidate appeared on that day; instead, the *balance* of the positively and negatively valenced evaluative information was "+4." The notion of volume, or intensity, is captured on these graphs by the cumulative nature of each day's total. The shaded areas between the vertical reference lines on each chart identify the interview dates of the five waves of Patterson's panel, giving the reader a graphical depiction of the newspaper signal concerning the candidates during the periods in which the respondents were being interviewed.

Keep in mind that a score of "zero" on a given day does *not* indicate that no stories about the candidate appeared that day. It means either that there were no stories containing any evaluative content (straight news only), or that the positive evaluative content cancelled out the negative. In fact, a few of the *evaluatively* barren periods in these graphs contain unvalenced informational stories, a result of the modern journalistic ideal of objectivity (Fink 1988).[12]

---

[12] Although we might expect differences to emerge in cognitive responses to "no information" compared to "unvalenced information" (Petty and Cacioppo 1986), "no information" periods are too infrequent to make any exploration of these differences. Almost all of the "no information" situations occur in the early coverage of Carter, where, as noted in Table 3.2, not enough respondents expressed opinions of Carter to permit any meaningful statistical analysis.

Figure 4.11a: Carter newspaper signal, *Erie Morning News*

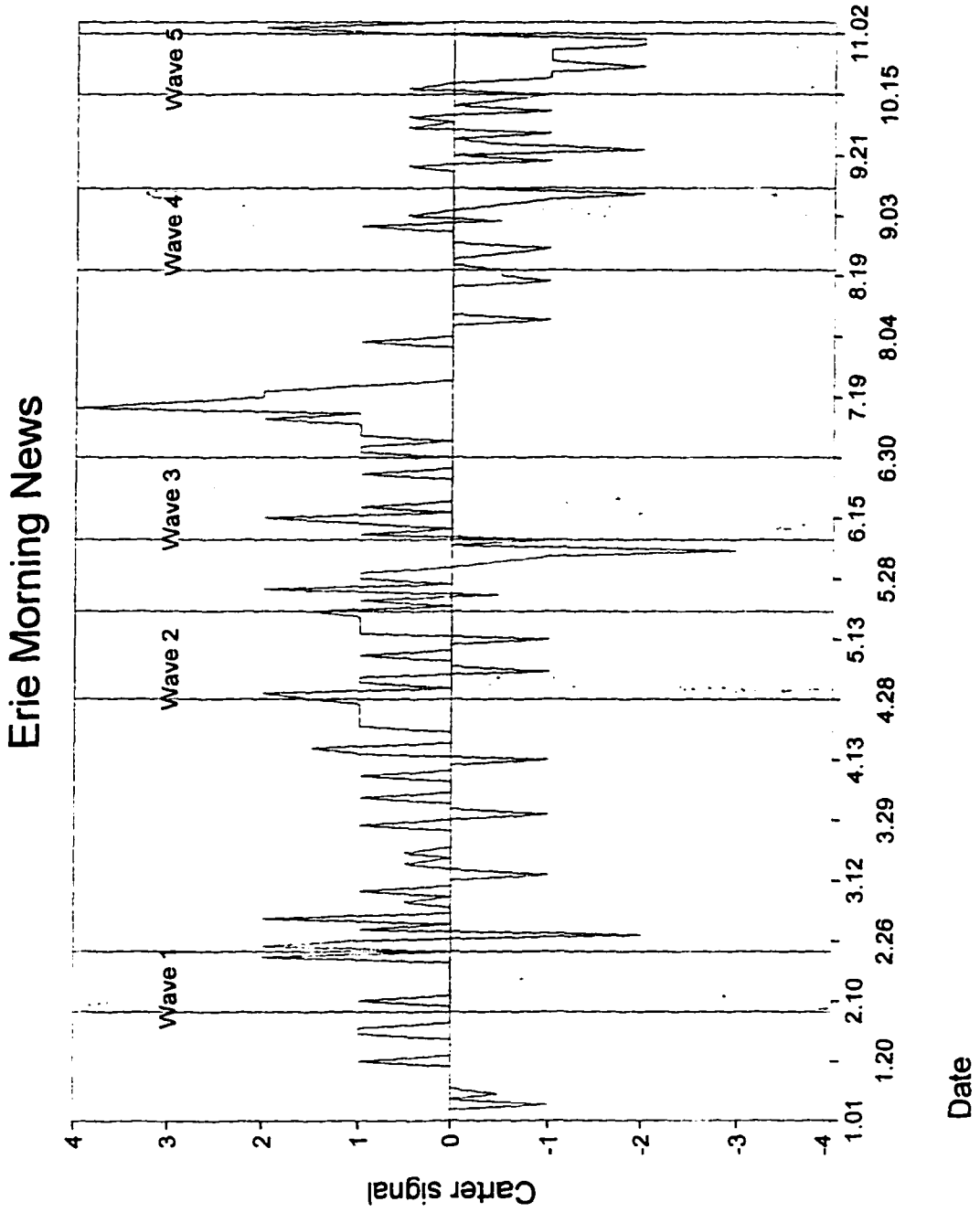


Figure 4.11b: Carter newspaper signal, *Los Angeles Times*

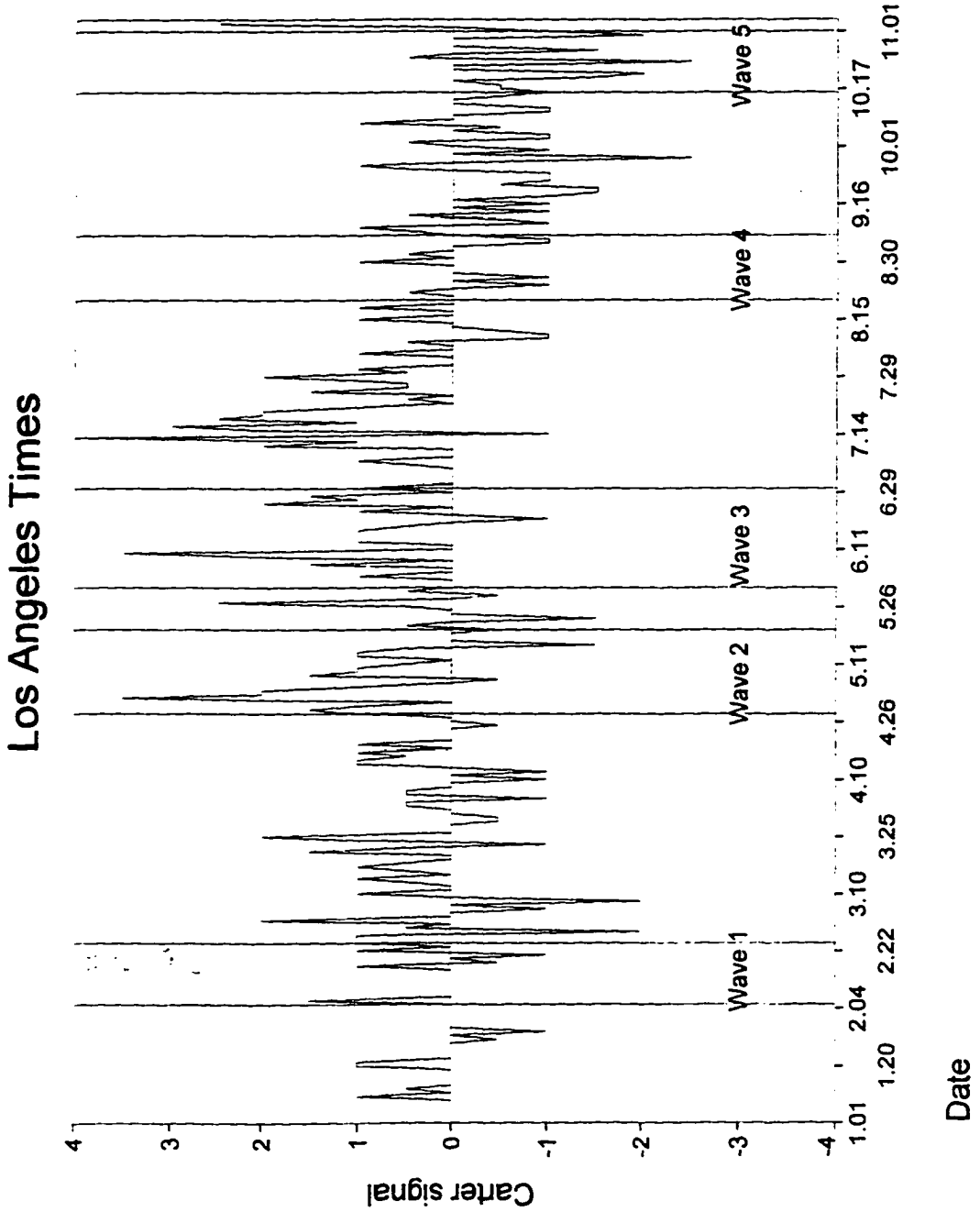


Figure 4.12a: Ford newspaper signal, *Erie Morning News*

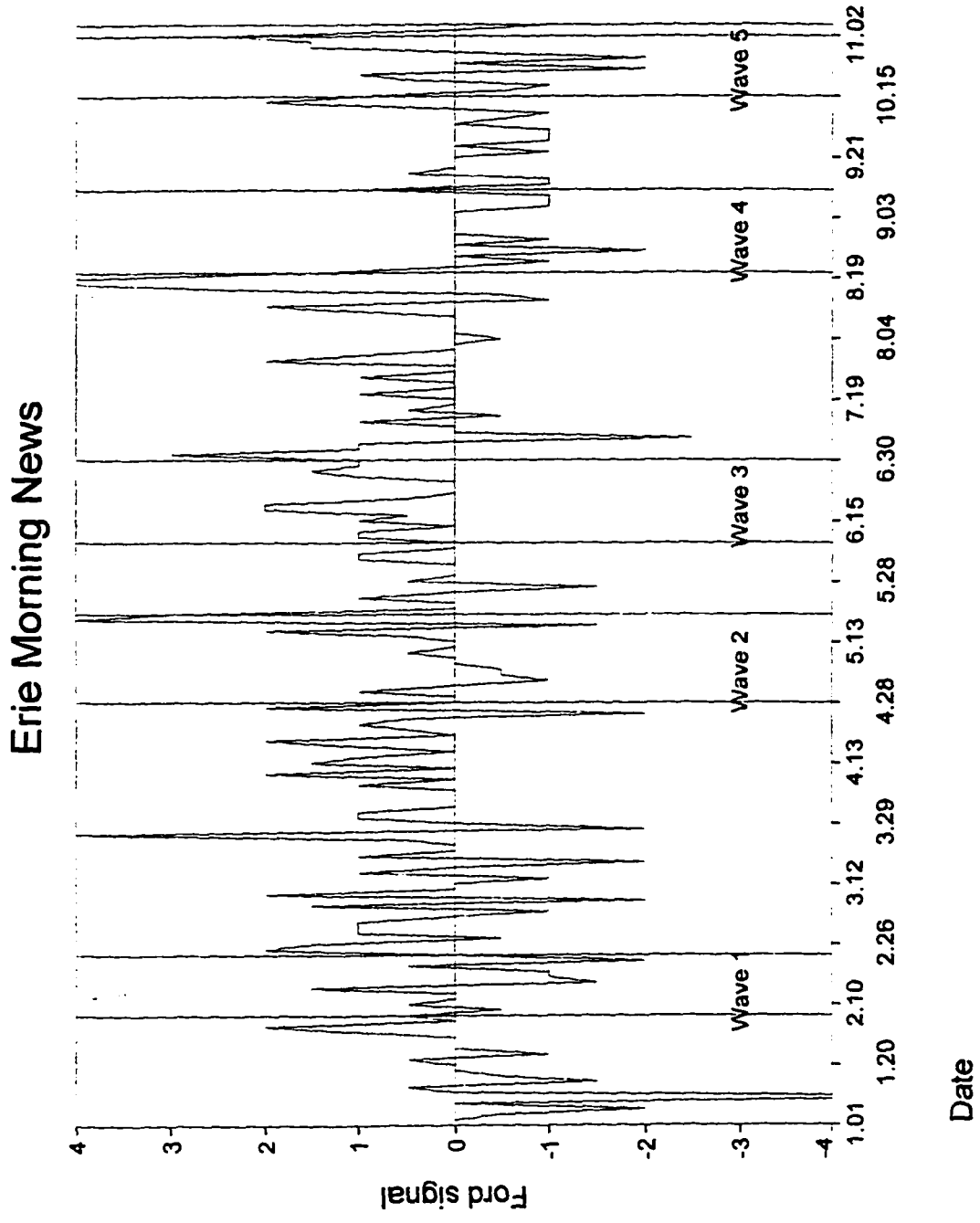


Figure 4.12b: Ford newspaper signal, *Los Angeles Times*

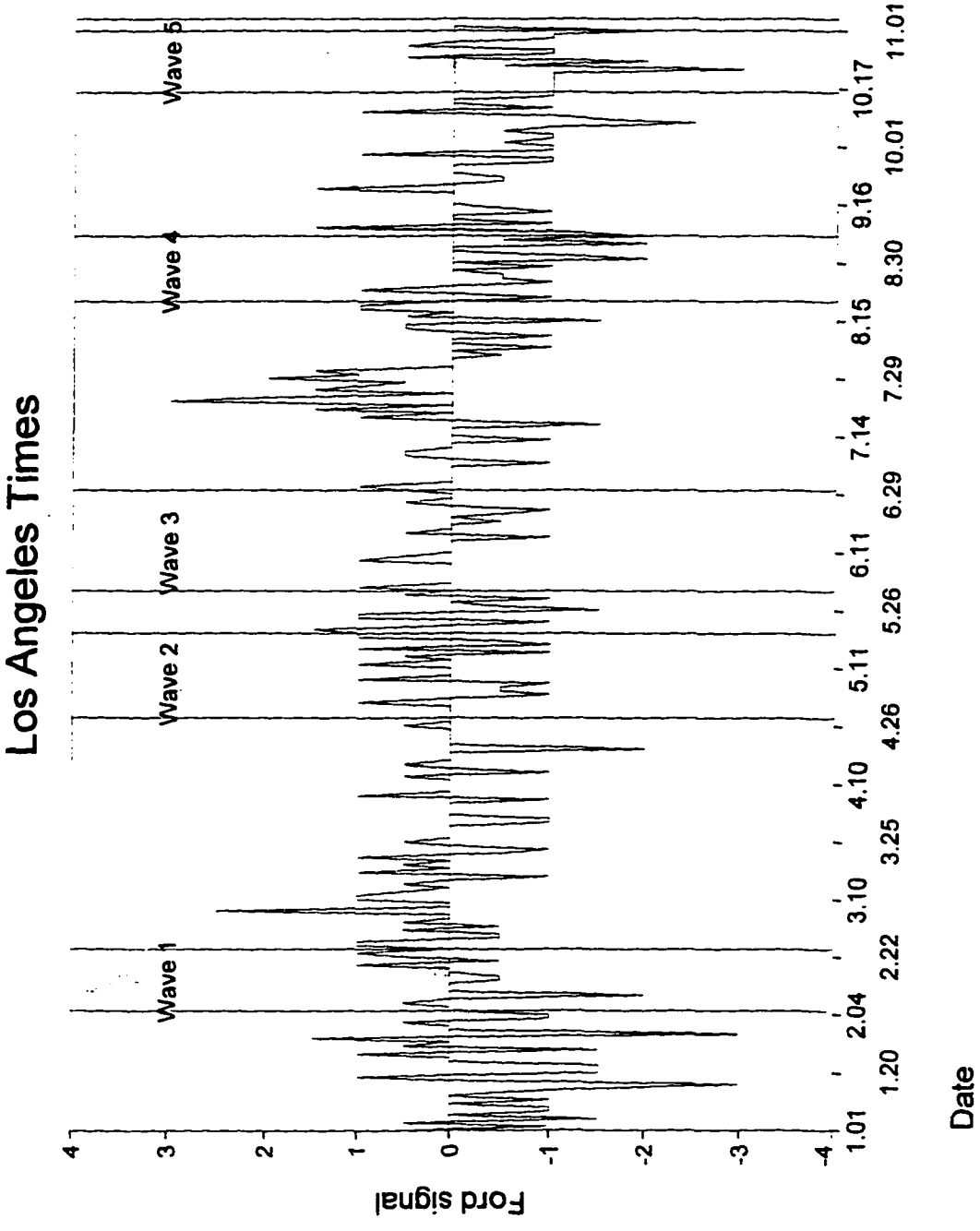


Figure 4.13a: Reagan newspaper signal, *Erie Morning News*

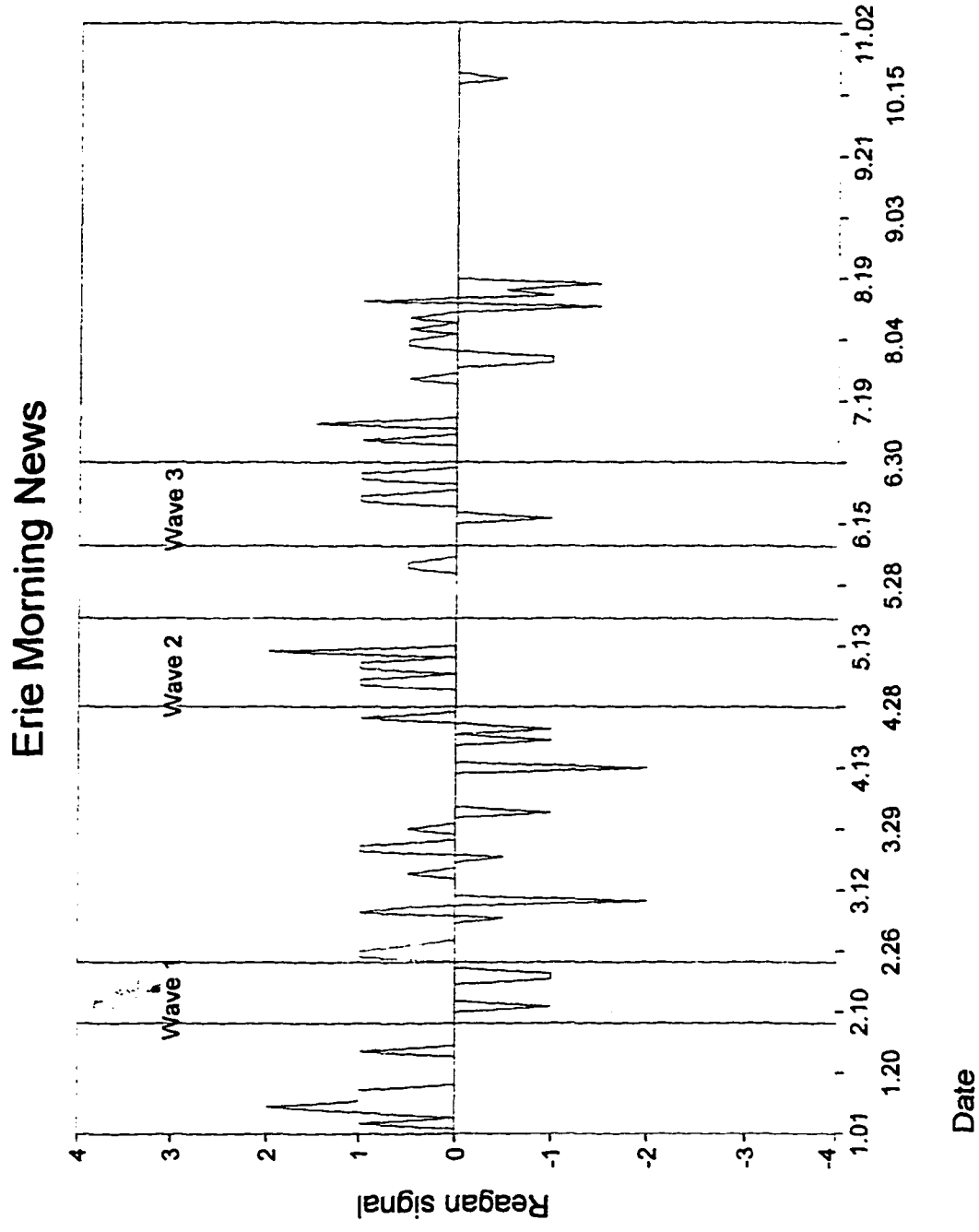
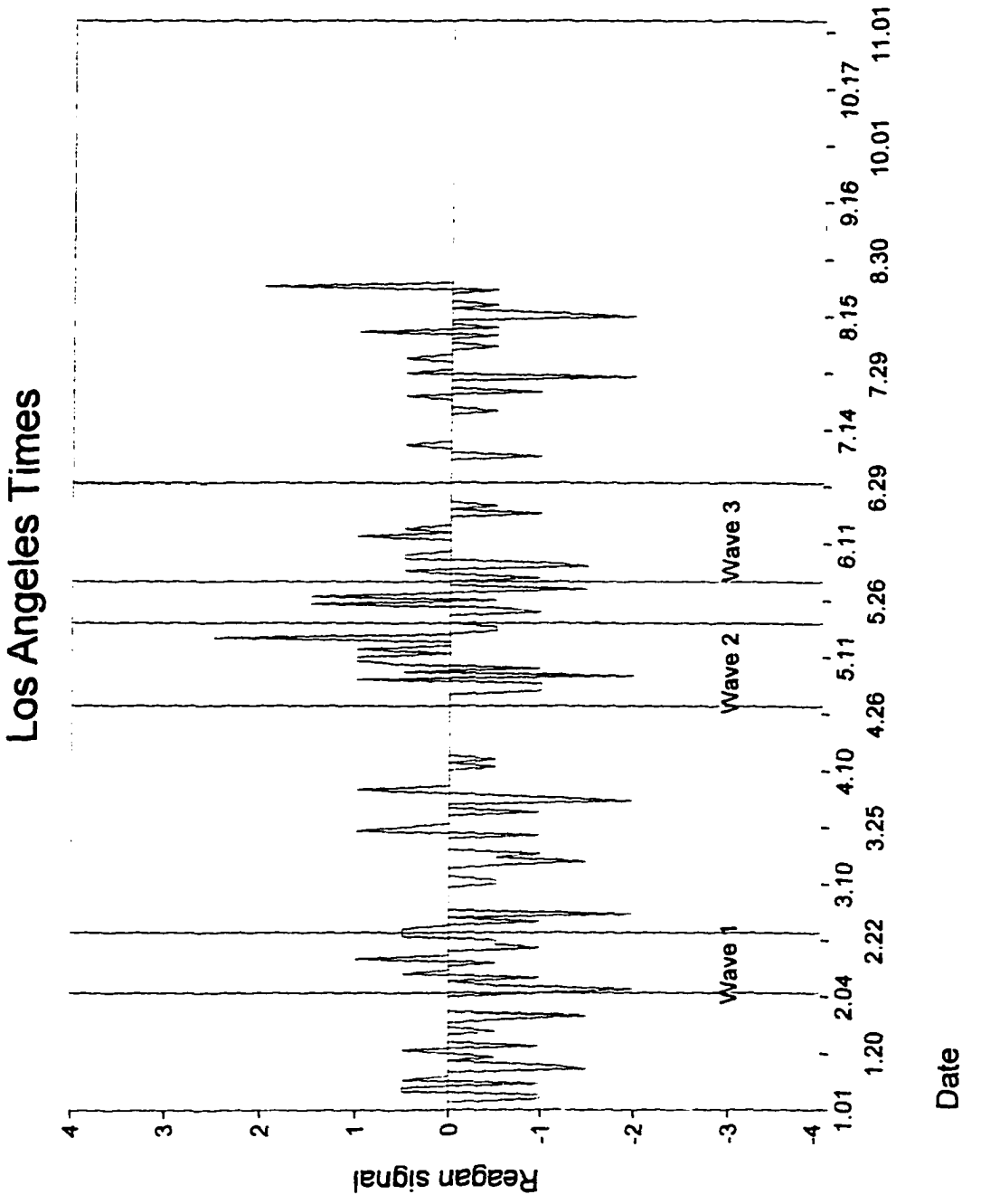


Figure 4.13b: Reagan newspaper signal, *Los Angeles Times*



Figures 4.11, 4.12 and 4.13 demonstrate that a fair amount of evaluative information is being sent out to newspaper readers during the campaign. In very few cases does the balance of the evaluative information on a given day exceed the equivalent of four articles in the positive or negative direction, however. Again, this relative evaluative restraint on the part of the newspapers is unsurprising given the modern (American) norm of journalistic objectivity.[13] In Chapter 5 I further dissect the concept of newspaper signal, and use it to explain the responsiveness patterns that emerged from the Chapter 3 analysis.

---

[13] For the sake of contrast, consider the following quote from a front-page story in Joseph Pulitzer's *New York World* on May 17, 1896, concerning the situation in Cuba in the days leading up to the Spanish-American War: "No man's life, no man's property is safe. American citizens are imprisoned or slain without cause. American property is destroyed on all sides...Blood on the roadsides, blood in the fields, blood on the doorsteps, blood, blood, blood!...Not a word from Washington! Not a word from the president!" (quoted in Folkerts and Teeter 1989, p.275). Accurately assessing the volume and evaluative tone of this sort of news signal would require a new scale.

Appendix 4-A:
Newspaper content analysis codebook

Newspapers analyzed: Erie Morning News, Jan 1 - Nov 3, 1976
Los Angeles Times, Jan 1 - Nov 3, 1976

Sample size: Articles are coded for every day. Stories in the news section (Section A or Section 1), any special election stories (i.e. stories under the heading "Campaign '76" or some other slogan), and columns and letters in the op-ed pages are coded.

Context unit: The unit of analysis for the coding is the entire article.

Article selection: All articles dealing with the presidential campaign or the candidates (including primary candidates) are coded.

Variables:

1. Newspaper. 1=Erie News, 2=LA Times.

2. Month article appears.

3. Day article appears.

4. Sequence number. If more than one article in a day, number sequentially.

5. Placement of article.
   1= section A
   2= section B
   3= section C

6. Page number on which story appears.

7. Nature of article.
   1=news article(events from past 48 hrs)
   2= news analysis (evaluation of events)
   3= unsigned editorial
   4= signed editorial (local)
   5= signed editorial(syndicated)
   6= letter to editor
   7= misc. (ad, cartoon, etc.)

8. Byline on article.
1= staff reporter
2= wire story (AP, UPI)
3= signed editorial (local)
4= signed editorial (syndicated)
5= other (letter to editor, unsigned editorial, etc.)

9. Main topic of article.
1= campaign-related event(press conference, speech, announcement of candidacy, campaign visit, etc.)
2= primary returns
3= poll/survey results
4= campaign finance disclosure
5= campaign strategy
6= domestic issue(unemployment,welfare,crime, etc.) [specify on coding sheet]
7= foreign policy issue (anything non-domestic: Soviet Union, China, trade policy,etc.) [specify on coding sheet]
8= job-related activity (Pres. action for Ford, Carter as governor, etc.)
9= candidate "character" (personal background of candidates, family life, etc.)
10= Democratic National Convention
11= Republican National Convention
12= miscellaneous/other [specify on coding sheet]

10. Main actor in article, or main subject if article contains no specific action.Consider the first actor mentioned as the main actor. Use the codes listed in Appendix A.

11. Secondary actor in article, or secondary subject. This is the second actor mentioned. It is not the same as the object(see v13).If no secondary actor/subject, code "0." Otherwise, use the same codes as v10, in Appendix A.

12. Type of action in article. For example, "Ford criticized Reagan for false campaign statements" would be a critical action on Ford's part. "Ford praised farm workers" would be an affirmative action.

1= critical action
2= affirmative action
3= mixed
4= neutral
5= can't determine/n.a.

13. Object of article. In the first example above, Reagan would be the object, Ford the actor. Once again, use the same codes as v10, in Appendix A.

14. Evaluative tone of article. Article reflects positively on the main actor/candidate,reflects negatively on the main a/c,or consists of simple descriptive material.

1= reflects positively/ supports
2= mixed but balance is positive
3= mixed
4= mixed but balance is negative
5= reflects negatively/ criticizes
6= straight description
7= can't determine/n.a.

Story actor/subject/object codes
(for variables 10, 11 & 13)

1= Gerald Ford

2= Jimmy Carter

3= Ronald Reagan

4= Frank Church

5= Jerry Brown

6= Morris Udall

7= Hubert Humphrey

8= other candidate [specify on coding sheet]

9= House of Representatives

10= Senate

11= "Congress" (both houses)

12= individual Rep. or Senator who is not a candidate
[specify on coding sheet]

13= Democratic National Committee, or "Dem. party headquarters"

14= Republican National Committee, or "Rep. party headquarters"

15= Democratic Party, or "Dem. Party leaders"

16= Republican Party, or "Rep. Party leaders"

17= citizens' group (ACLU, etc.) [specify on coding sheet]

18= other organization [specify on coding sheet]

19= unorganized group, people or voters (farmers, blacks, etc.)
[specify on coding sheet]

20= The Supreme Court, or a Sup. Ct. decision

21= a domestic issue [specify on sheet]

22= a foreign policy issue [specify on sheet]

23= other [specify on sheet]

Note to coders: In the case of more than two actors, code the extras under "secondary actors" (v11) using a comma to separate codes, starting with the first noted. Code multiple objects (v13) the same way. Expand this list past 23 if necessary (if comething I didn't include comes up consistently, code it "24" and so on). The same goes for variable 9, "main topic of article."[14]

---

[14] Several categories were added as coding proceeded, as previously unencountered (and unforeseen) topics came up. The final number of categories was 29.

Chapter 5: Media Signal and Patterns of Response

The purpose of presenting the content analysis measures in Chapter 4 was to provide ammunition for explaining the four patterns that revealed themselves in the media exposure coefficients in Chapter 3. The instruments I will use to do so are the newspaper signal measures presented in Figures 4.11 through 4.13. Before proceeding with a discussion of the relationship between newspaper signal and the responsiveness patterns, it may be helpful to briefly summarize the patterns of coefficients uncovered in the Chapter 3 analyses.

Table 5.1 contains the number of occurrences of each of the four visible response patterns among the newspaper exposure coefficients, originally presented in Tables 3.3 through 3.11.[1] Recall that each of the first three response patterns -- the Wellesian, the rotisserie league and the Converse-McGuire-- are introduced conceptually in Chapter 2. Empirical instances of their appearance, along with an unexpected fourth pattern, the "U-shaped" pattern, are documented

---

[1] Only newspaper coefficients are included because they are the only ones that can be directly explained using a measure of newspaper signal. The first Carter estimations (Carter impression at wave two, coefficients presented in Table 3.2) are not included here because the low number of cases involved in their estimation leads to many missing coefficients, as shown in Table 3.2.

in Chapter 3.

Table 5.1 is divided by candidate for each of the two newspapers. Each row contains the frequency of a particular response pattern for a particular candidate, the panel interview wave in which it occurs, and the appropriate Chapter 3 table where the raw coefficients can be reviewed. The candidates are presented in the order in which they are discussed in this chapter.

Table 5.1: Frequency of responsiveness patterns, newspaper coefficients only

Carter models

response pattern	Erie subsample freq	Erie subsample Wave / Table	Los Angeles subsample freq	Los Angeles subsample Wave/Table
Wellesian	--	--	2	3 / 3.3b; 4 / 3.4b
rotisserie league	1	4 / 3.4a	1	5 / 3.5b
Converse-McGuire	2	3/ 3.3a; 5 / 3.5a	--	--
"U-shaped"	--	--	--	--

Note: "a" and "b" denote the first and second panels of each Chapter 3 table, respectively.

Table 5.1 cont'd: Responsiveness pattern frequency, newspaper coefficients

Ford models

response pattern	Erie subsample freq	Erie subsample Wave / Table	Los Angeles subsample freq	Los Angeles subsample Wave/Table
Wellesian	3	2/ 3.6a; 3/ 3.7a; 4/ 3.8a	--	--
rotisserie league			2	2/ 3.6b; 3/ 3.7b
Converse-McGuire			--	--
"U-shaped"	--	--	--	--

Note: "a" and "b" denote the first and second panels of each Chapter 3 table, respectively.

Reagan models (estimated for waves 2 and 3 only)

response pattern	Erie subsample freq	Erie subsample Wave / Table	Los Angeles subsample freq	Los Angeles subsample Wave/Table
Wellesian	1	2/ 3.10a	--	--
rotisserie league	--	--	1	3/ 3.11b
Converse-McGuire	--	--	--	--
"U-shaped"	1	3/ 3.11a	--	--

Note: "a" and "b" denote the first and second panels of each Chapter 3 table, respectively.

As shown in Table 5.1, the pattern of coefficients representing the Wellesian model occurs six times among the newspaper coefficients, the rotisserie league model occurs a total of five times, the Converse-McGuire model cofficient pattern occurs twice, and the "U-shaped" model pattern occurs once. Although not immediately apparent from Table 5.1, there are four instances in which no significant newspaper exposure coefficients are present at all (the Reagan model in the Los Angeles sample at wave two; the Ford model in the Erie sample at wave five; and the Ford models in the Los Angeles sample at waves four and five).[2] The reader should refer to the appropriate Chapter 3 table to examine the magnitude and direction of the coefficients that make up the patterns.

Explaining the four responsiveness patterns

Unfortunately, the newspaper signal graphs presented in Chapter 4 (Figures 4.11 to 4.13) do not engender any immediate epiphanies concerning our four responsiveness patterns. Newspaper signal as presented in the graphs appears to be unrelated to the occurrences of the responsiveness patterns

---

[2] Again, this count does not include the wave two Carter estimations, because there are no coefficients to count in the first three political awareness strata.

summarized in Table 5.1. Upon closer inspection, however, the signal graphs do provide at least part of the explanation for both the magnitude and direction of the media exposure coefficients first presented in Chapter 3. If we dissect the newspaper signals concerning each of our three candidates, a coherent picture of the origins of the four responsiveness patterns emerges. Before we can discuss the response patterns, however, we need to give a closer examination to the newspaper signal measures, in order to address a deficiency in their construction.

Newspaper signal: The "elite - mass" distinction

The main problem with the newspaper signal graphs presented in Figures 4.11 through 4.13 is that they may hide more than they reveal. All newspaper information sources are not created equal; *Peanuts* and *Doonesbury* contain a different style of information than *Dear Abby* and *Hints from Heloise*. By the same token, an AP wire report is quite distinct from a David Broder political column, in style, content, evaluative tone, and -- most importantly -- audience. An extensive literature, most of it in the communications and marketing fields, demonstrates conclusively that *different types of people exhibit different patterns of newspaper readership* (Bryant 1981 provides a nicely concise overview).

Diversity in readership patterns may provide an explanation for the

mixed success of the editorial endorsement research tradition described in Chapter 1. Lundberg (1926), Gosnell (1937) and some of the other early scholars may have had difficulty in uncovering substantial endorsement effects because of their failure to account for the targeted nature of newspaper readership. Speculatively, if these researchers had studied the impact of editorial endorsements *among elite readers only*, the electoral effects of endorsements may have shown up more forcefully and consistently.[3] The indeterminate results of the later (1970s) studies of editorial endorsement effects may also be partially attributable to failure to account for differences in elite-mass readership patterns.

Although ignored by the editorial endorsement crowd, the marketing truism of differential readership patterns is reflected by the more academic concerns of communications scholars, particularly proponents of uses and gratifications theory, and by scholars of selective exposure. In a (very small) nutshell, uses and gratifications theory states that people follow the news, and

---

[3] In fact, an interesting exercise in historical communication research would be to return to the ward-level data used by Gosnell (1937; Gosnell and Schmidt 1936) and attempt to differentiate between wards populated by "elites" and wards containing mostly middle-to-lower income residents, perhaps through research into property values or tax bases. If my hypothesis is correct, the elite wards should evince considerable endorsment effects while the rank-and-file wards should be more responsive to voting cues like union endorsement and party machine boosterism.

other forms of mass media, in order to satisfy their curiosity and survey their environment, to be entertained and escape from reality, or to become or remain socially and psychologically well-adjusted (see Graber 1993; Bennett 1996; Katz 1987 for overviews). Different types of people expose themselves to different forms of media, and more specifically to different forms of news, in order to satisfy these impulses. For our current purposes, the upshot of this line of research is that *politically aware, sophisticated, knowledgeable individuals are exposed to different parts of the available newspaper signal than are the less politically sophisticated.* Graber (1984) and Zillman and Bryant (1985) provide convincing support for this statement.

Specifically, the politically aware are much more likely to be exposed (or, more properly, to expose themselves) to the more "politically elite"[4] aspects of newspapers. These elite aspects include the editorial pages, which contain a newspaper's official political endorsements and commentary; the op-ed pages, which contain the handiwork of syndicated political columnists; the letters

---

[4] I say "politically elite" rather than simply "elite" because other aspects of newspaper signal are "elite" in other ways -- the baseball box scores are "sports elite," the stock quotes are "business elite" and so on. The point is that individuals with a high degree of domain expertise are attracted to the aspects of the newspaper signal concerned with their particular domain. A political sophisticate may never crack open the sports or business pages; the opposite is true for the baseball fanatic or businessman.

column, and so on. These sections of the newspaper are loaded with political information and evaluation. The less politically aware, to the extent that they are exposed to printed news about politics at all, are much more likely to be exposed to the more accessible "mass" sections of the paper -- the news pages. Fortunately, the coding scheme used for the content analysis presented in Chapter 4 (see Appendix 4-A) distinguishes between different types of news sources -- particularly, we have the ability to separate the "elite" newspaper signal, in the form of editorial material, from the "mass" aspects of the signal, in the form of news reports.[5]

I construct the "elite" newspaper signal by removing the "unsigned editorial," "signed editorial (local)," and "signed editorial (syndicated)" units from the overall signal (see variable number five, "Nature of article" in Appendix 4-A). These three elements comprise the elite signal. The "mass" signal consists of what remains, namely news articles and news analyses that appear in the news sections of our two newspapers. Note that the mass signal is considerably more bulky in terms of sheer numbers of articles, but the positive/negative balance of the evaluative tone of the mass aspect of the signal is not necessarily more

---

[5] I would like to take this opportunity to introduce an aphorism concerning content analysis research: "Fail thee not to code everything now, no matter how tedious, lest ye would come up short later."

extreme because the vast majority of the news articles that make up the mass signal receive an evaluative tone score of zero. I use the newly-divided signal measure to explain the responsiveness patterns below.

I take up each of the four patterns separately, breaking down the analysis by candidate for ease of presentation. At this point I should note that the explanations below can only be substantively applied to the patterns in the newspaper exposure coefficients, because our measure consists only of newspaper signal. Any extension of the reasoning outlined here to television exposure would have to be purely speculative (although see the fourth contextual anecdote presented in the next chapter for a fairly convincing qualitative explanation for one of the television exposure responsiveness patterns).

Newspaper signal and responsiveness: Carter

Breaking down newspaper signal concerning the candidates into the constituent "elite" and "mass" signals results in a considerably different picture of the situation than the overall signal graphs presented at the end of Chapter 4. The elite and mass aspects of the freshly divided Carter newspaper signals are presented for the Erie and Los Angeles subsamples in the two parts of Figure 5.1.

These figures will then be used to explain the occurences of the Wellesian, rotisserie league and Converse-McGuire response patterns that emerged from the analyses in Chapter 3, and are presented in the first panel of Table 5.1. The first panel on each page of Figure 5.1 (and the rest of the figures in this chapter) depicts the volume (or intensity) and evaluative tone of the elite aspect of the newspaper signal, and the second panel on each page presents the mass aspect of the signal. These graphs allow for a quick visual check of the positive/negative (toward the target candidate) balance of the evaluative nature of the newspaper signal concerning the candidates during the campaign. The first page of each figure presents the two signal aspects for the Erie subsample, and the second page contains the Los Angeles subsample.

Figure 5.1a: Carter newspaper signal -- elite aspect

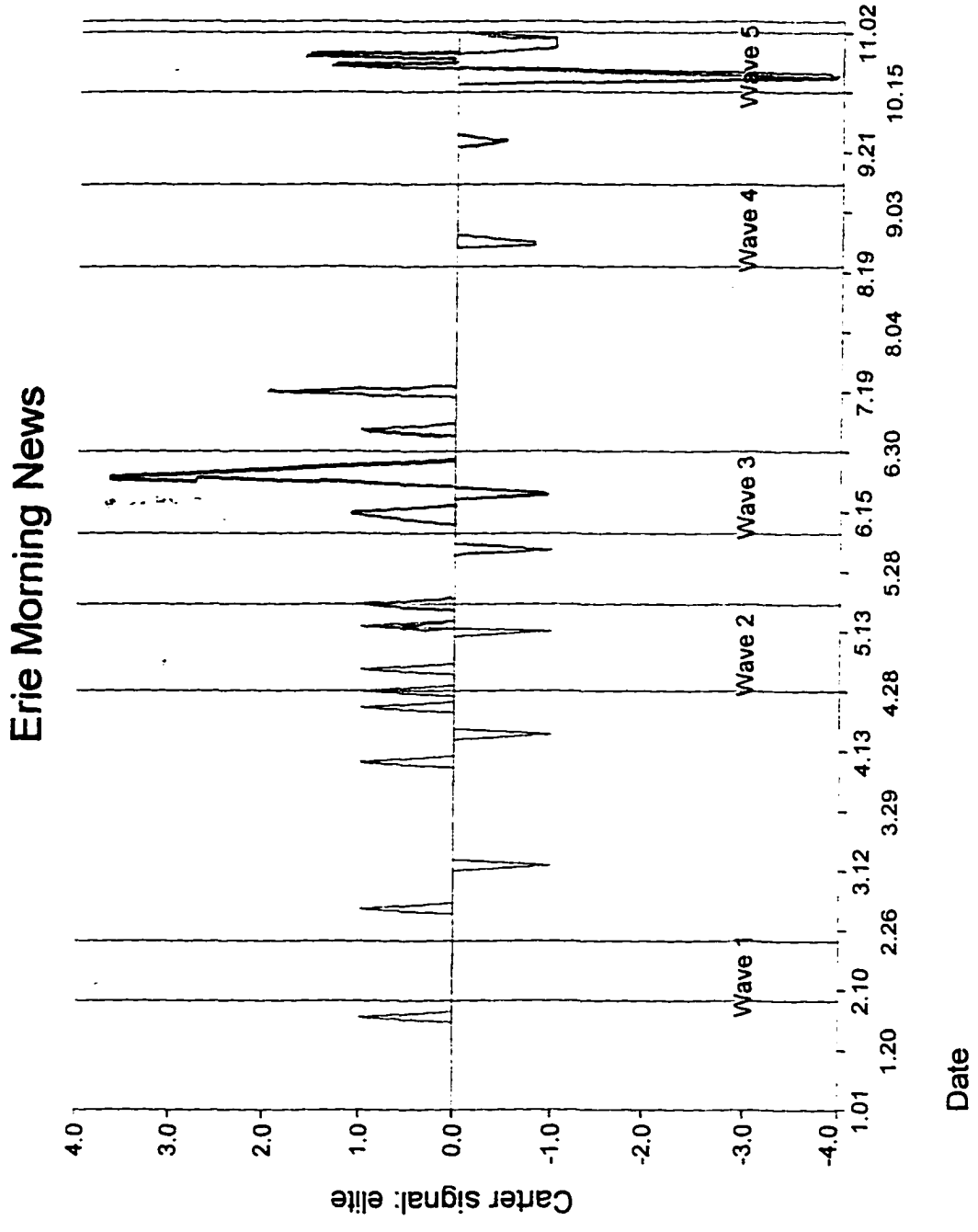


Figure 5.1b: Carter newspaper signal -- mass aspect

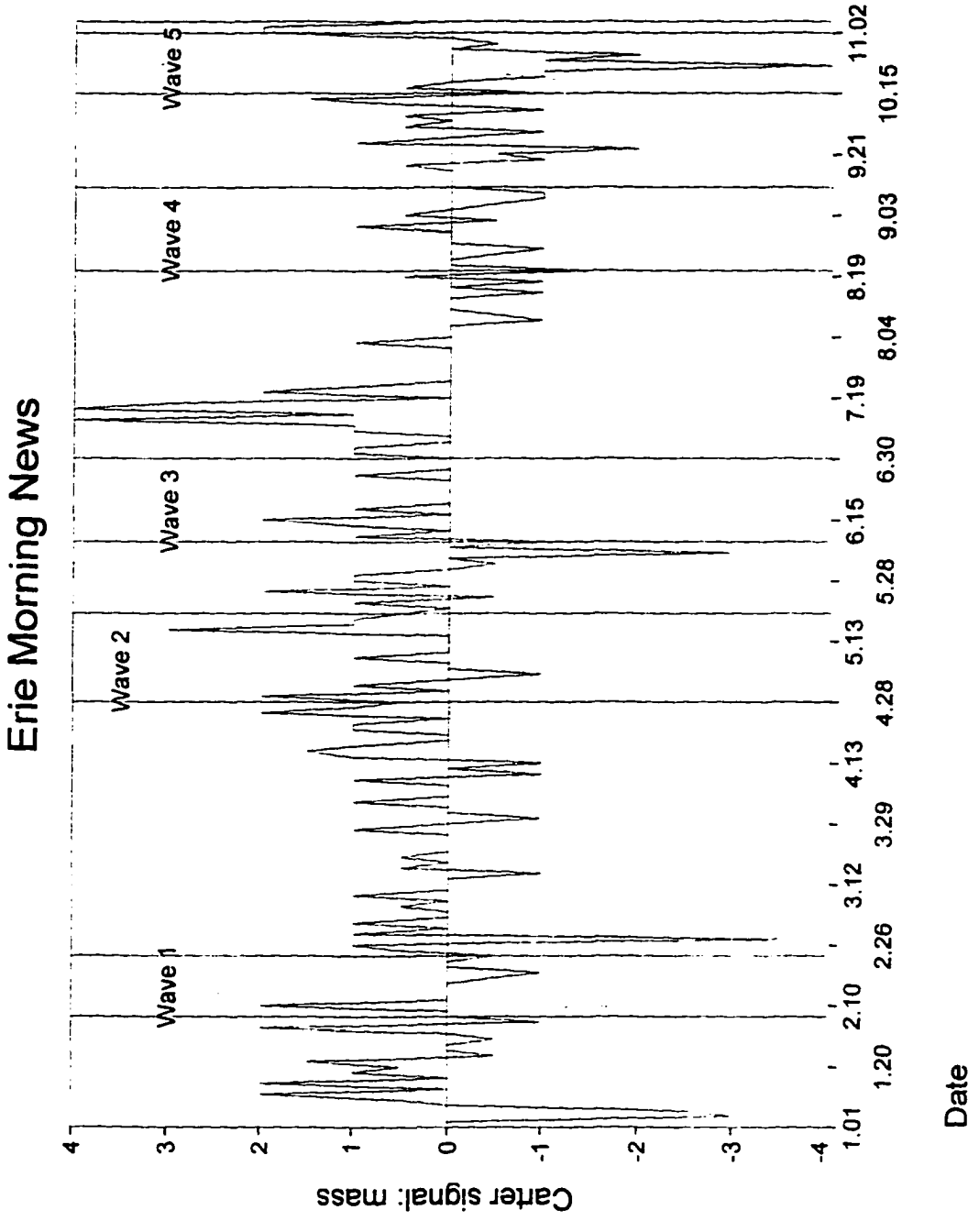


Figure 5.2a: Carter newspaper signal – elite aspect

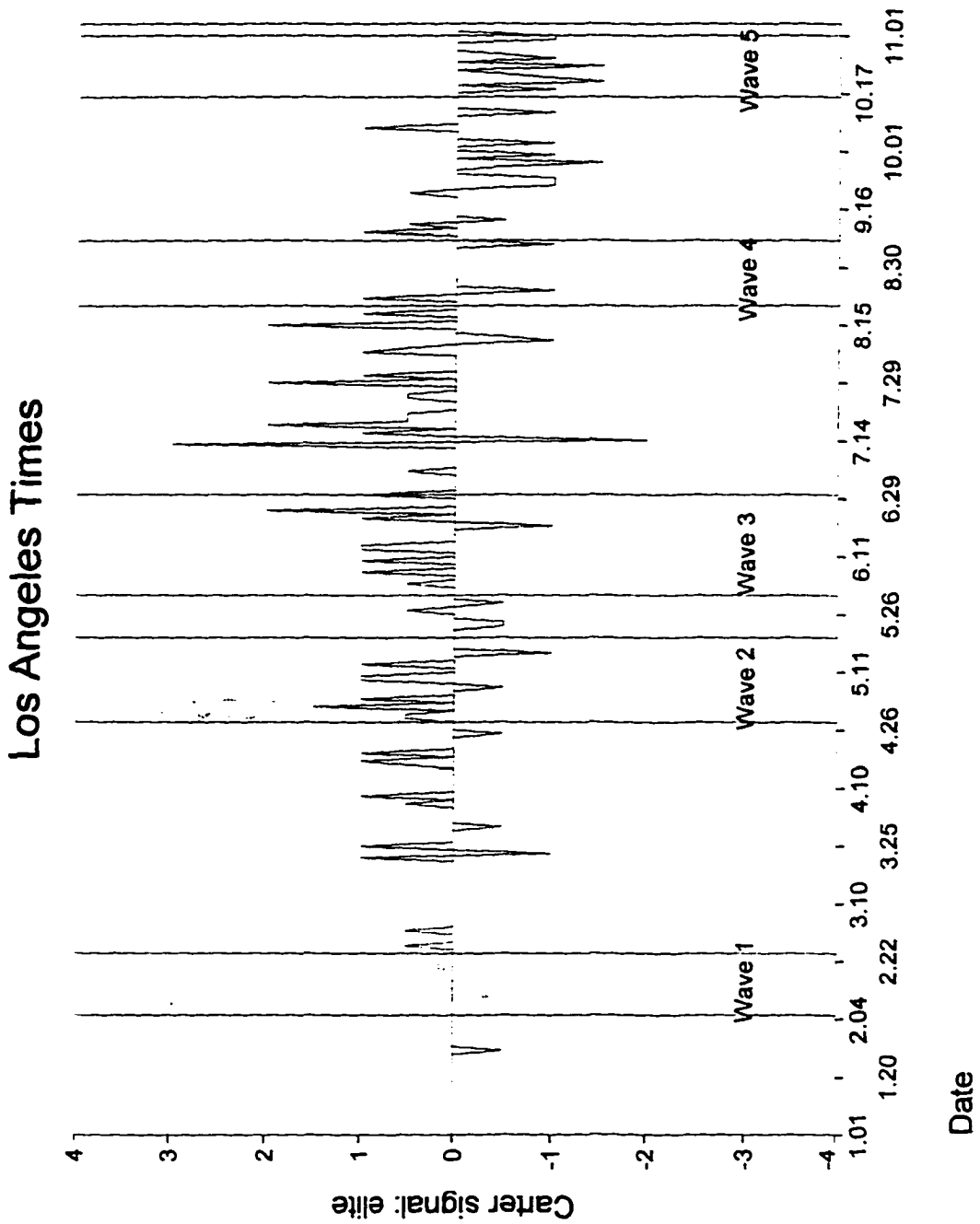
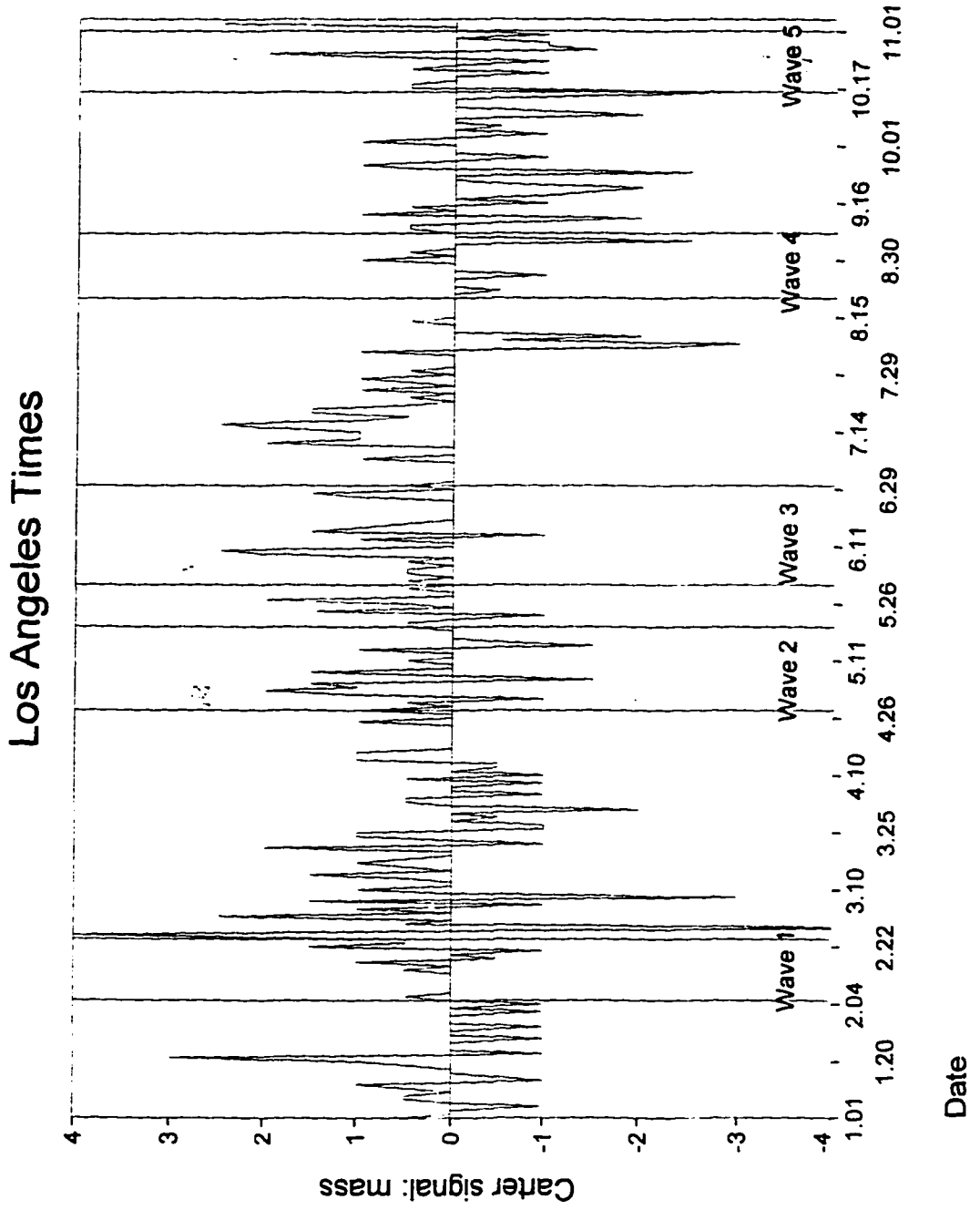


Figure 5.2b: Carter signal -- mass aspect



These graphs presented in both parts of Figures 5.1 and 5.2 contain the information we need to explain the appearances of each of the three responsiveness patterns that show up in the Carter models. The figures help us understand the valences as well as the magnitudes of the newspaper exposure coefficients. Each appearing responsiveness pattern is taken up below. The patterns will be discussed in the context of the Carter model estimation, and presented with less discussion in the context of the other candidates (except for the "U-shaped" responsiveness pattern, which only appears in the Reagan model estimations and is discussed in the appropriate section). First, however, in order to discuss the newspaper signal patterns more precisely, I need to introduce the concept of the *evaluative signal balance* of newspaper messages concerning the candidates.

The concept of evaluative signal balance

For each panel wave, I sum the evaluative signal across the dates of interviewing, demarcated by the shaded areas between the vertical reference lines in Figures 5.1 through 5.6. The resulting number represents the positive-negative balance of the evaluative tone of the newspaper signal that occurs contemporaneously with the survey interviews conducted during a given wave.

Consider the case of a panel wave in which no evaluative information appears to be present -- for example, in the first page of Figure 5.1, the elite signal in the *Erie Morning News* during wave one, an interviewing period that runs from February 6 to February 24. The lack of peaks within this time frame indicates one of two possibilities: First, no elite evaluative information is present on any day between the 6th and the 24th -- that is, no evaluatively valenced editorials appear. The second possibility is that the positive evaluative information present on any given day is exactly balanced by the negative information appearing on the same day. Therefore, the evaluative signal balance for the elite signal concerning Carter in the *Erie Morning News* during wave one is exactly zero. Now consider the elite aspect of the Carter signal in the *Los Angeles Times* at wave five, from October 16 to November 1, presented on the first page of Figure 5.2. Only negative information is present, or on several days during this time span the number of negative articles concerning Carter outweighs the number of positive articles. Summing across the 17-day interview period yields an evlauative signal balance of -2.5 for elite signal concerning Carter in the *Los Angeles Times* during the wave five interviews (in this and all following discussion, I round evaluative signal balance to the nearest half a point). In other words, two and a half more negative than positive articles (editorials, in the elite case) about Carter appeared

during this time span. A rough approximation of evaluative signal balance for a given time frame is readily distinguishable from a glance at the appropriate graph, but it is both easier and more precise to discuss the concept in terms of a numerical figure.

The Wellesian model:Carter

The pattern of coefficients I've chosen to call the Wellesian model, under which only those at the lowest levels of the political awareness spectrum evince newspaper exposure-induced attitude change (see Figure 2.5 for the conceptual representation of the Wellesian model, and Figure 3.2 for an empirical occurrence), occurs twice in the Carter models, at waves three and four in the Los Angeles subsample. A distinct newspaper signal pattern accompanies both of these occurences: a very strong, almost unidirectionally valenced mass signal, accompanied by a nearly perfectly-balanced-at-the-zero-point elite signal (see Figure 5.2). In terms of evaluative signal balance, the wave three instance of the Wellesian model is accompanied by a +12 mass signal balance, and a zero elite signal balance. Newspaper signal contemporaneous to the wave four occurrence of the Wellesian pattern in the survey data shows a +13 mass balance and, again, a zero elite balance. The direction of the exposure coefficients matches the

direction of the mass evaluative signal balance in both cases.

The Wellesian response pattern, then, appears to be stimulated by a particularly "loud" and unidirectional mass newspaper signal, one with enough "broadcast power" to show up on the radar screens of individuals at the lowest levels of the political awareness continuum (to overextend an already mixed metaphor). The attitudes of those at the upper end of the awareness spectrum show no movement resulting from newspaper exposure because there is little or no evaluatively valenced "elite" information to induce any changes. Those at the high end of the spectrum are presumably resistant to the "mass" type of valenced information, through the mechanisms of attitudinal inertia, crystallization and counterarguing.

Differences in response to elite and mass signal

The hypothesized response differences to the elite--mass signal distinctions stem directly from the social-psycological attitude change theory discussed in Chapter 2. The clearest statement of the relation between *type* of message (elite vs. mass, in this case) and *response* to the message (operationalized as amount of attitude change) comes from the attitude-change literature. The sixth postulate of Petty and Cacioppo's *Elaboration Likelihood*

Model of persuasion speaks directly to this point: "As motivation and/or ability to process arguments is decreased, peripheral cues become relative more important determinants of persuasion. Conversely, as argument scrutiny is increased, peripheral cues become relatively less important determinants of persuasion" (p. 20).

In other words, Petty and Cacioppo (1986) posit that a person considering a persuasive argument on its merits -- taking the *central* route to persuasion, a scenario much more likely for print media as opposed to televised media -- is likely to weigh the accumulated evidence and make an objective decision about whether to change an attitude based on the new information:

> When a person has the *ability* to process a message in a relatively objective manner, this means that the person has the requisite knowledge and opportunity to consider the arguments impartially. When a variable enhances argument scrutiny in a relatively objective manner, the strengths of cogent arguments should become more appartent as should the flaws in specious ones. Similarly, when a varible reduces argument scrutiny in an unbiased fashion, the strengths of cogent arguments should become less apparent as should the flaws in specious ones (p. 19).

The variable in question is political awareness. High levels of political domain expertise confer "the requisite knowledge," while the act of reading a newspaper (which requires cognitive engagement) confers "the opportunity" to "consider the arguments impartially." Hence, a politically aware person reading a

newspaper editorial -- being exposed to the elite signal balance, in terms of this study -- is likely to respond to the arguments contained therein. Newspaper political editorials, which are expressly designed to change the political attitudes of informed readers, are likely to have some success in doing so. Therefore, politically aware individuals in the sample are likely to respond to the elite evaluative signal balance. The mass signal balance, which is made of of the bulk of standard newspaper reporting on the candidates, is relatively less likely to succeed in changing the attitudes of the politically sophisticated, because it is for the most part persuasively barren -- that is, regular news coverage makes no overt attempt to marshal evidence in order to change attitudes. Therefore, the politically aware are less likely to respond to the mass signal balance by changing their attitudes toward the candidates.

The politically unaware or unsophisticated are in a different positition *vis á vis* this attitude change scenario. In fact, as outlined in Chapter 2, the politically unaware are unlikely to have the *ability* to process the sophisticated arguments laid out in most political editorials. Therefore the politically unaware are unlikely to respond to the evaluative or persuasive information contained in the elite signal balance. According to the sixth postulate of the ELM quoted above, these non-sophisticates are more likely to respond to the simpler

information, or *peripheral cues*, contained in the news reports which make up the mass signal balance: "...if any influence occurs at all, it will be the result of simple positive or negative cues that become associated with the advocacy, or simple inferences based on cues that permit the adoption of a subjectively reasonable position while conserving cognitive resources" (Petty and Cacioppo 1986, p.20). Such cues include the advocate or source of the argument (a newspaper in this case, or an individual within a story to whom information is attributed), the sheer number of arguments or amount of information, any visual (photojournalistic) information that might be present, the placement of a story in the newspaper (front page versus inside, above the fold or below) and other non-argument-related factors. Therefore, while political unsophisticates are unable and therefore unlikely to respond to the carefully constructed arguments of editorials (elite signal), they are able to respond to the cues surrounding and contained within the bulk of the news coverage of the candidates (mass signal).

This argument, and the attitude-change theory that underlies it, applies to the Wellesian response pattern and all of the other response patterns as well. Put simply, because of the juxtaposition of cognitive elaboration likelihood and media signal content, highly aware individuals are likely to examine media signal on its merits. Elite-oriented messages tend to pass muster under this type of

scrutiny, and therefore may change attitudes. Mass-oriented messages do not, and therefore will engender little or no attitude change among sophisticates. Politically unaware individuals, on the other hand, lack both the ability and motivation to engage in heavy elaboration of political media signal. The careful argument construction of elite messages will be lost on these people; in fact, unaware individuals are unlikely to even be exposed to elite signal because of lack of interest. Mass-oriented messages, on the other hand, contain a considerable amount of simple (peripheral) cues, which either directly affect attitude or enable the politically unsophisticated to make the "simple inferences based on cues that permit the adoption of a subjmectively reasonable position while conserving cognitive resources" (Petty and Cacioppo, p.19). Since political nonsophisticates are chronic peripheral processors (in terms of the ELM) of political information, they are likely to respond to the mass signal balance by evincing attitude change. A mass signal balance that is strongly one-sided (pro- or anti-candidate) will cause change in the appropriate direction among the politically unaware, because the very one-sided nature of the signal serves as a peripheral cue to nonsophisticates. Political sophisticates, on the other hand, will not respond to such cues because they tend to evaluate the message, no matter how one-sided, based upon its merits. Such a situation, then -- a strongly

unidirectional mass evaluative signal balance in concert with a weak or nonexistent elite evaluative signal balance -- leads to a situation in which the politically unsophisticated are responding to mass media signal concerning a candidate, while the politically sophisticated are unmoved. This situation is, of course, represented by the Wellesian response pattern in the current context. The social-psychological reasoning laid out here applies to the remainer of the discussion concerning the four response patterns for all of the candidates.

The rotisserie league model:Carter

The rotisserie league responsiveness pattern is the conceptual (and empirical) opposite of the Wellesian model. Under the rotisserie league model, those at the upper end of our five awareness strata evince attitude change as a result of newspaper exposure, while those in the middle and bottom of the spectrum show no significant effects (see Figure 2.6 for the conceptual version of this model, and Figure 3.3 for an empirical example). This responsiveness pattern occurs twice among the Carter model estimations, once in the Erie sample at wave four, and once in the Los Angeles sample at wave five. Once again, a distinctive pattern of elite/mass newspaper signal accompanies both occurences of this responsiveness pattern. Specifically, a relatively weak, but measureable,

elite signal balance (-1 in the Erie wave four instance, -2.5 in the Los Angeles wave five instance) is accompanied by an evaluatively balanced mass signal (-0.5 in the *Erie Morning News*, zero in the *Los Angeles Times*). Again, the direction of the significant exposure coefficients matches the evaluative signal balance, this time of the elite signal.

Based upon this evidence, the rotisserie league responsiveness pattern seems to occur when there is a small, but distinct, evaluative tone balance to the elite editorial signal being sent out concerning a candidate. This signal lacks the intensity to be noticed by any but the elite elements of the political awareness spectrum. At the same time, the mass signal to which all are exposed either contains little evaluative content, or is well-balanced between positive and negative evaluative information, and so provides no impetus for attitude change for the politically unsophisticated. A stongly one-side mass signal balance, on the other hand, would serve as a peripheral cue for political nonsophisiticates, engendering attitude change among them -- precisely the situation encountered with the Wellesian response pattern (see the discussion of Zaller's work on one- versus two-sided messages in Chapter 2 for more on this; see also Zaller 1992, p.207-211).

The Converse-McGuire model: Carter

The famous "inverted-U" (or "∩") of the Converse-McGuire model posits that only those at the midrange of the political awareness spectrum should evince media-induced attitude change, while those at the high and low ends remain stable in the face of potentially attitude-changing media messages (see Figure 2.1 for a graphical depiction of the conceptual version of this model, and Figure 3.1 for an empirical instance). This pattern appears twice amid the newspaper exposure coefficients for the Carter impression models, at waves three and five in the Erie subsample.

Once again, a distinct pattern of elite/mass newspaper signal accompanies both instances of the appearance of this response pattern in the estimated models. In this case, the strongest recorded instances of elite evaluative signal balance (+4.5 at wave three and -4 at wave five) within the content analysis sample are coupled with a "medium-strong" level of mass evaluative signal balance (+8 and -6.5 at waves three and five, respectively). In line with the classic Converse-McGuire hypothesis, it seems to be the case that the mass elements of the evaluative signal balance, when coupled with the relatively powerful elite evaluative signal balance, are strong enough to induce attitude change among those at the midrange of the awareness spectrum. These people -- the individuals

in the third political awareness stratum in our analyses, and in some cases those in the second and fourth -- have some elements of the resistant qualities of those at the high end of the spectrum, which explains why they fail to evince attitude change when a Wellesian situation (a powerful mass evaluative signal balance) occurs. However, they apparently lack the attentiveness of those at the high end of the spectrum, which explains wny they fail to respond to a relatively "quiet" rotisserie league-level elite signal. The Converse-McGuire pattern arises when the presumably more persuasive elite signal becomes strong enough to pentrate the awareness of those in the midrange, bolstered by the "medium-strong" level of mass evaluative signal balance. The elite signal balance remains imperceptible to those individuals in the lowest awareness strata, and the peripheral cues surrounding the mass evaluative signal balance are not powerful enough to reach those at the bottom.

One problem exists with this explanation, however. Why don't the individuals at the high end of the awareness spectrum respond to the intense elite evaluative signal balance? Figures 5.1 and 5.2 reveal a possible (although speculative) answer, one that is hidden by the numerical elite evaluative signal balance: In both occurences of the Converse-McGuire response pattern, the overall elite evaluative signal balance masks several measureable instances of

countervailing evaluative information. It may be the case that the political sophisticates at the high end of the spectrum are uniquely able to take advantage of the countervailing information provided in the opposing editorials, an ability that is lacking amid the less sophisticated people in the awareness midrange. While somewhat tenous, this argument is logical in terms of the large volume of social cognition and persuasion research demonstrating the attitude-defensive capabilities of sophisticated individuals (for reviews see Petty and Cacioppo 1981; 1986).

If the logic of this explanation for the appearence of the Converse-McGuire pattern is on the mark, then apparently a rather rarefied set of circumstances is required to produce an empirical instance of the "inverted-U" model. First, some level of mass evaluative signal balance must be present, one powerful enough to affect those in the midrange of awareness but not powerful enough to penetrate the lower echelons of political sophistication. Furthermore, a strong elite evaluative signal balance must be present in order to move the attitudes of those in the midrange of awareness, but this powerful signal balance must mask some amount of countervailing evaluative information, which provides fodder for the attitudinal resistance of those at the high levels of sophistication. If this chain of supposition is accurate, then the real-world

scarcity of such a combination of circumstances may explain the relative rarity of empirical confirmations of the Converse-McGuire model in prior research (e.g. Norpoth and Baker 1980).

Newspaper signal responsiveness: Ford

The elite and mass aspects of newspaper signal concerning Ford are presented in Figures 5.3 and 5.4. Again, I apply these graphs, and the concept of evaluative signal balance, to explain the observed newspaper exposure coefficient patterns. The discussions of the models following the graphs is more cursory, however, since essentially the same newspaper signal patterns appear to produce the same responsiveness patterns in the survey respondents.

Figure 5.3a: Ford newspaper signal – elite aspect

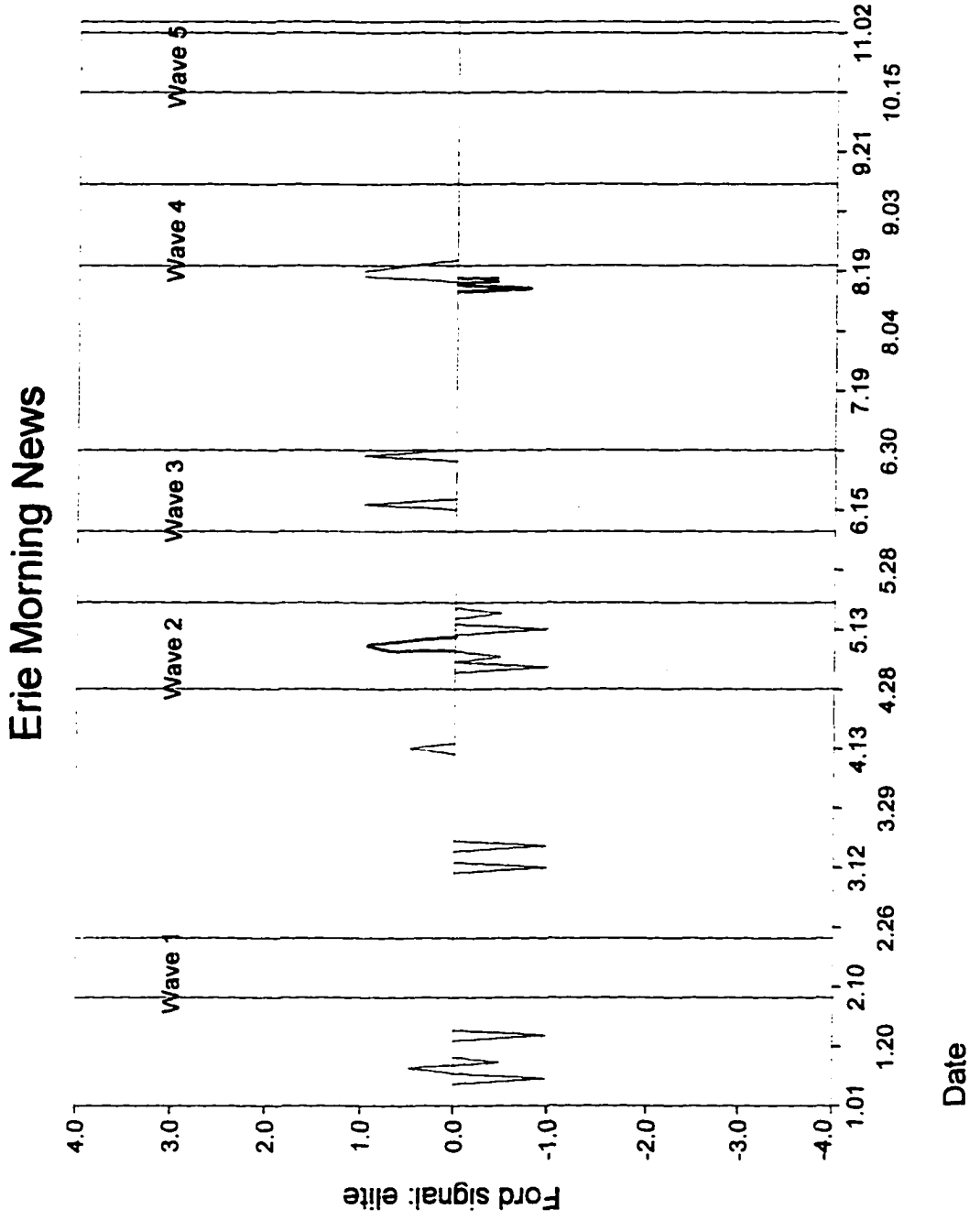


Figure 5.3b: Ford newspaper signal -- mass aspect

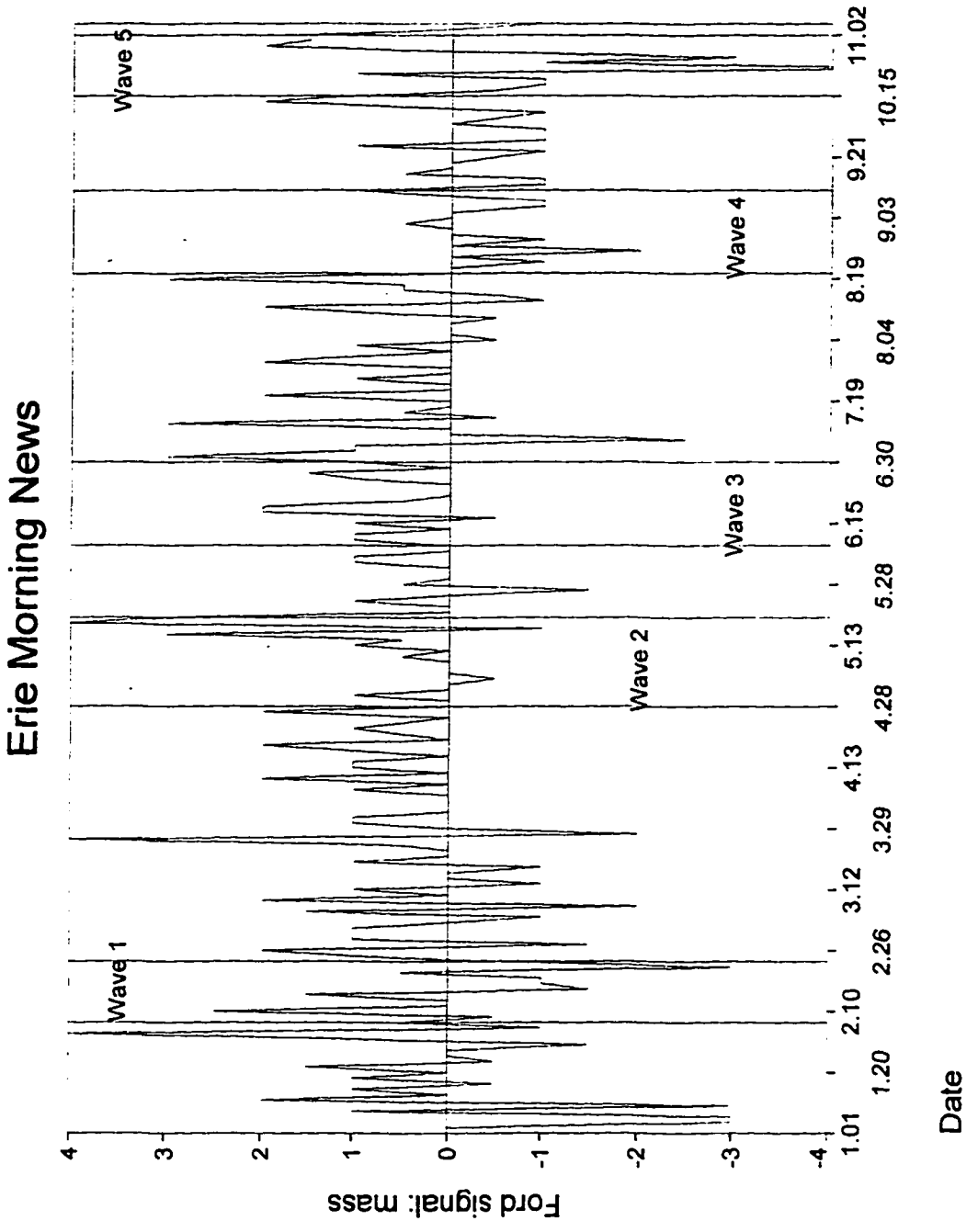


Figure 5.4a: Ford newspaper signal – elite aspect

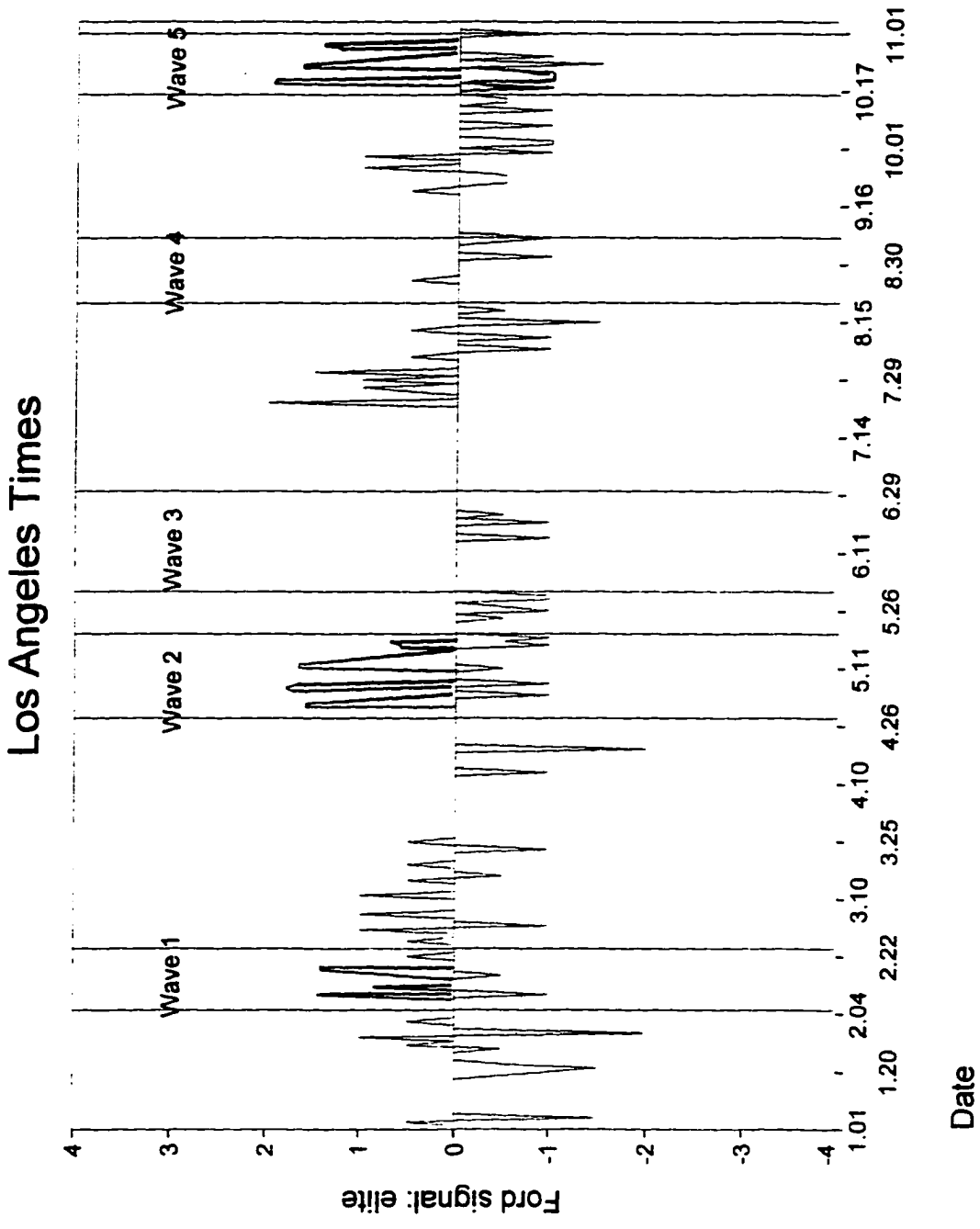
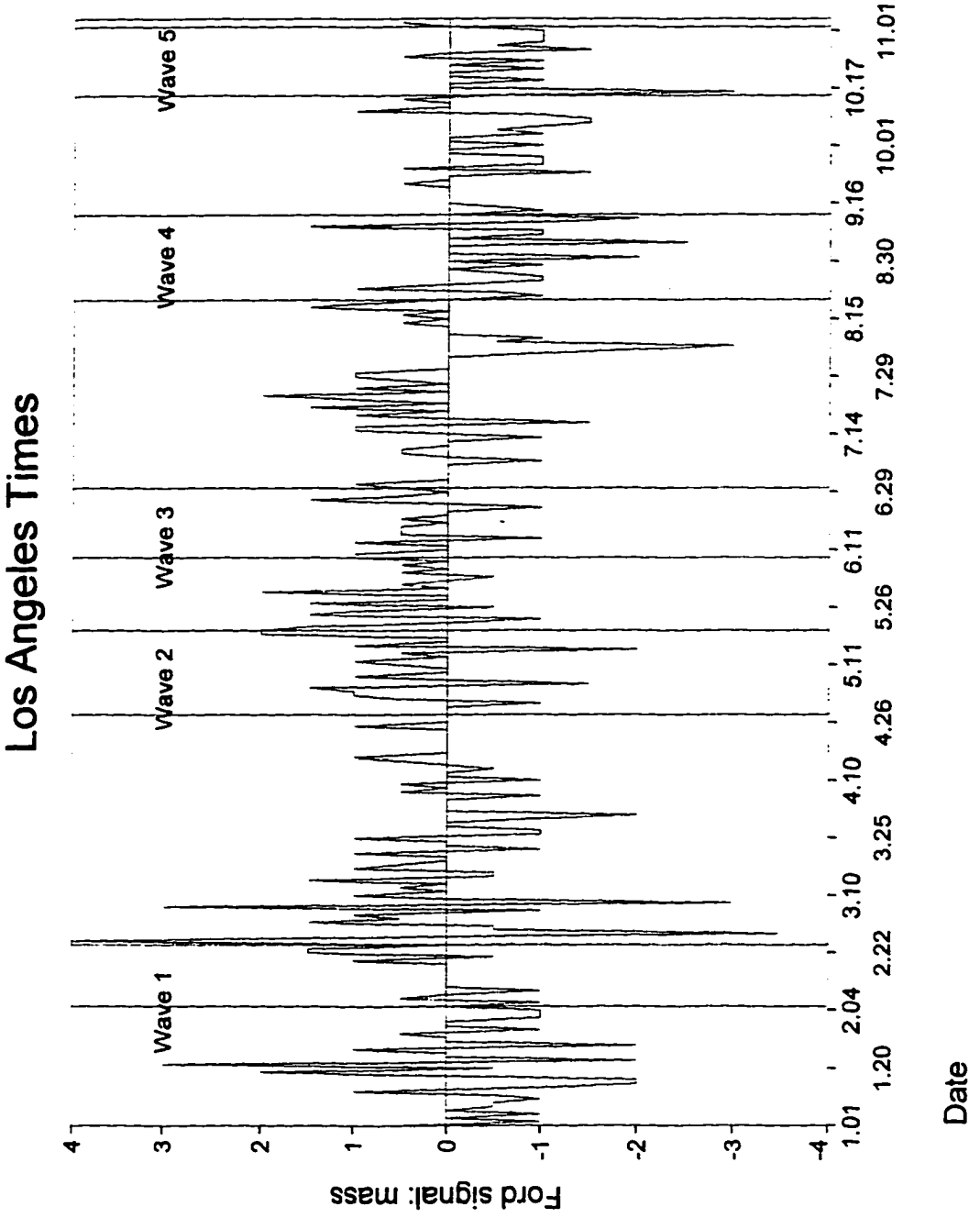


Figure 5.4b: Ford newspaper signal -- mass aspect



The most remarkable aspect of Ford newspaper signals, and their relationship to the exposure coefficients in Chapter 3, is their consistency in the face of similar responsiveness patterns. As I note below, the newspaper signals accompanying the responsiveness patterns in the Ford models behave almost exactly like the signals accompanying the same responsiveness patterns in the Carter models. The behavior of the Ford newspaper signal synchronous with the Ford model estimations bolsters our interpretations of the responsiveness patterns presented earlier.

The Wellesian model: Ford

The Wellesian response pattern appears three times among the newspaper exposure coefficients in Chapter 3 Ford model estimations, in waves two, three and four in the Erie subsample. An examination of the first page of Figure 5.3 bolsters the comments made about this responsiveness pattern earlier in this chapter, because a similar set of circumstances exist in the elite and mass aspects of the newspaper evaluative signal balances in each case. The elite evaluative signal balances in the *Erie Morning News* during panel waves two, three and four equal -0.5, zero and zero, respectively. The contemporaneous mass evaluative signal balances are -12, -10.5 and -10. In each instance, the sign on the mass

evaluative signal balance matches the sign on the significant newspaper exposure coefficients in the appropriate model estimations. In other words, the newspaper signals associated with the Wellesian patterns that appear in the Ford models exhibit almost exactly the same evaluative signal balance patterns which accompany the occurrences of the Wellesian response pattern in the Carter models.

The rotisserie league model: Ford

The rotisserie league response pattern occurs twice in the Ford model estimations in Chapter 3, at waves two and three in the Los Angeles subsample. The evaluative signal balances associated with these occurences show the following patterns: At wave two, the *Los Angeles Times* elite evaluative signal balance for Ford is +2, matching the positive newspaper exposure coefficient (β_2 = .339) in the highest awareness group in the Los Angeles subsample, while the mass evaluative signal balance is zero. At wave three, the elite evaluative signal balance is -2.5, while the parallel mass evaluative signal balance is again zero. The negative evaluative signal balance matches the negative newspaper exposure coefficient ($\beta 2 = -.272$) in the highest awareness stratum in the Los Angeles subsample in the Ford model estimation.

Once again, the behavior of the newspaper signal coefficients is consistent in the face of similar response patterns. As in the Carter models, a period of relatively "quiet" but measurable elite signal, accompanied by an evaluatively balanced mass signal, engenders change among the members of the highest awareness stratum. None of the other awareness strata exhibit any newspaper exposure effects.

Newspaper signal responsiveness: Reagan

The elite and mass aspects of newspaper signal concerning Reagan are presented in Figures 5.5 and 5.6. Note that the shaded areas denoting the time frames of the panel interviews cease after wave three, because no further measures concerning Reagan were taken after he failed to gain the Republican party nomination in August. The most interesting aspect of the Reagan models is the lone appearance among the newspaper coefficients of the "U-shaped" responsiveness pattern.

Figure 5.5a: Reagan newspaper signal -- elite aspect

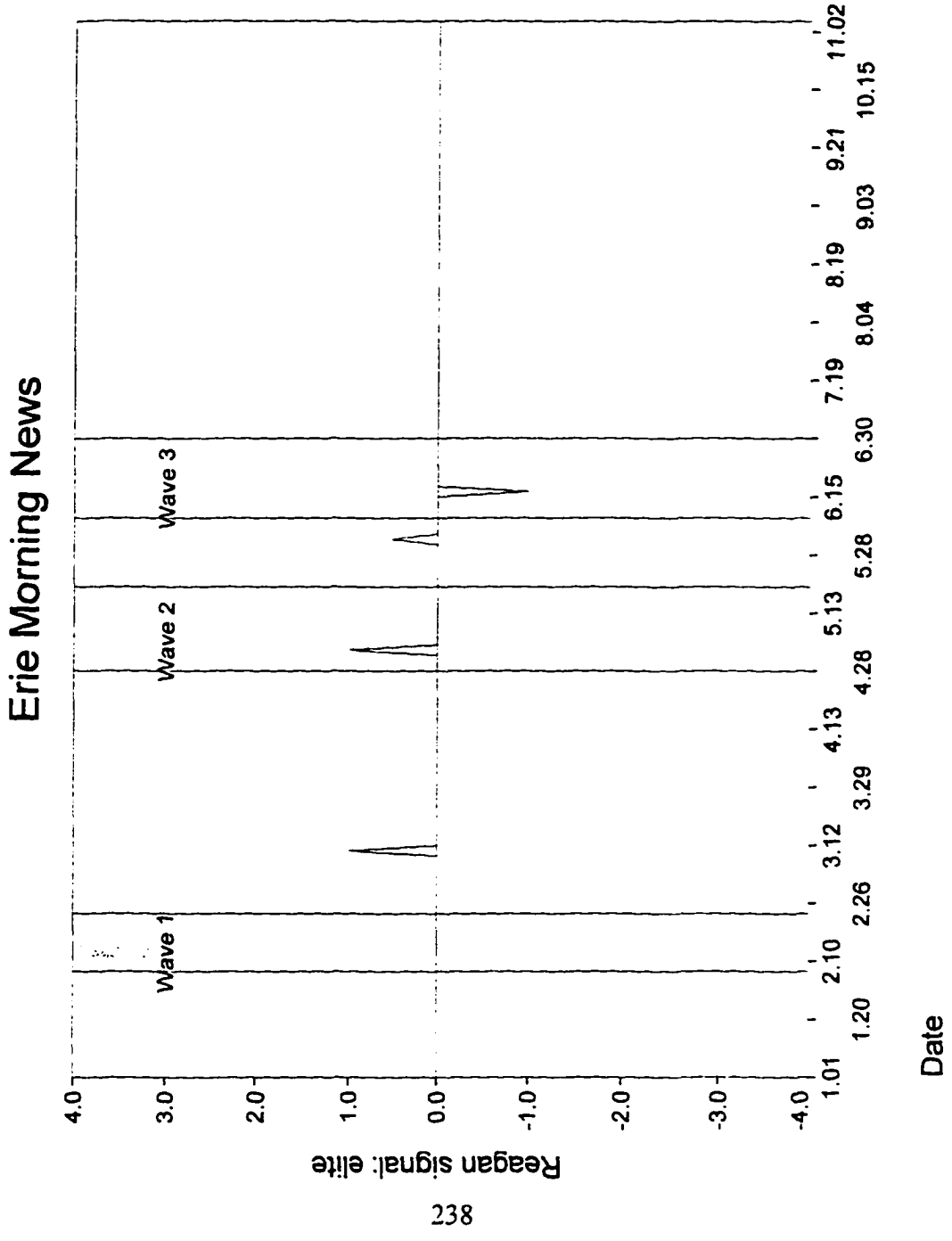


Figure 5.5b: Reagan newspaper signal -- mass aspect

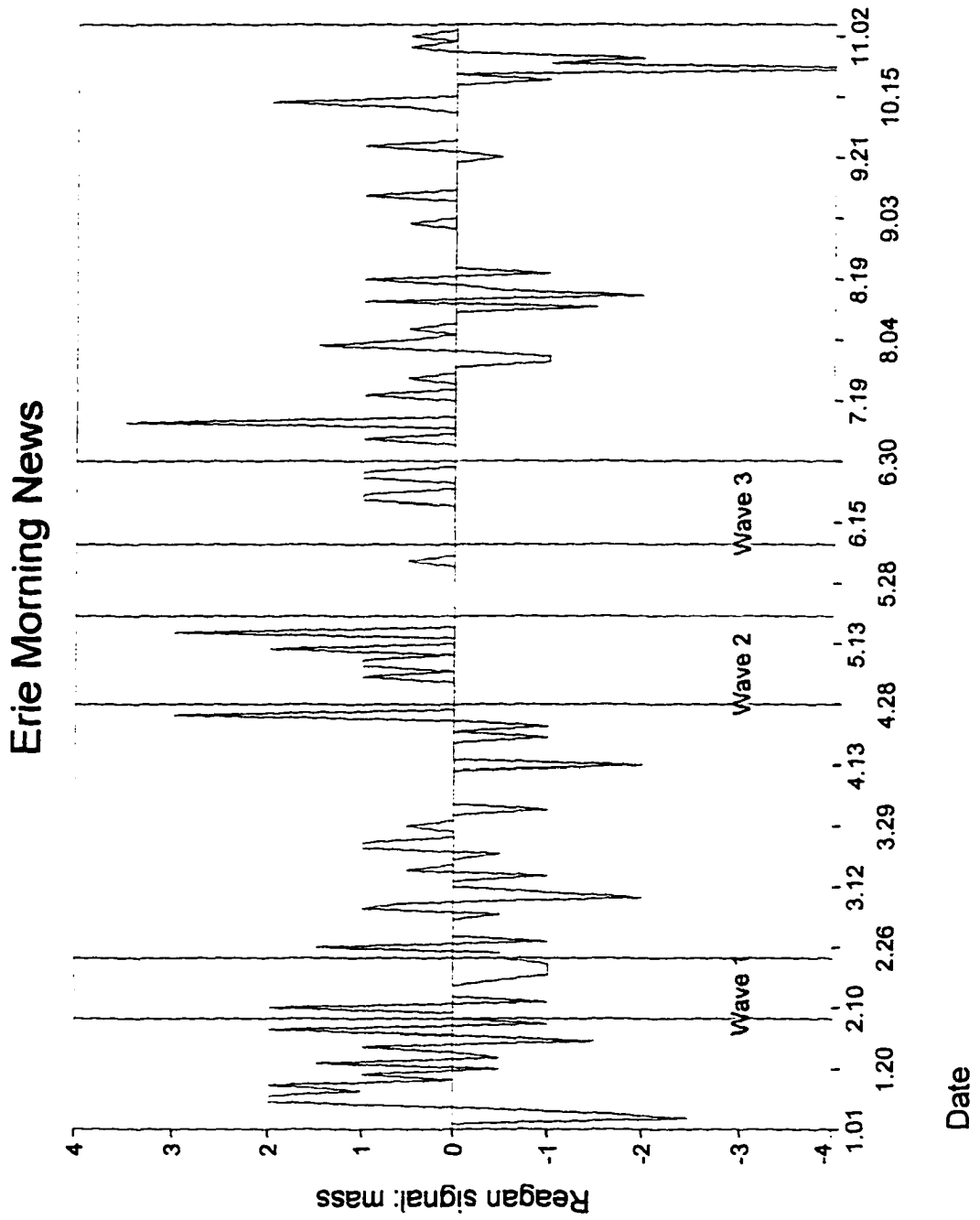


Figure 5.6a: Reagan newspaper signal -- elite aspect

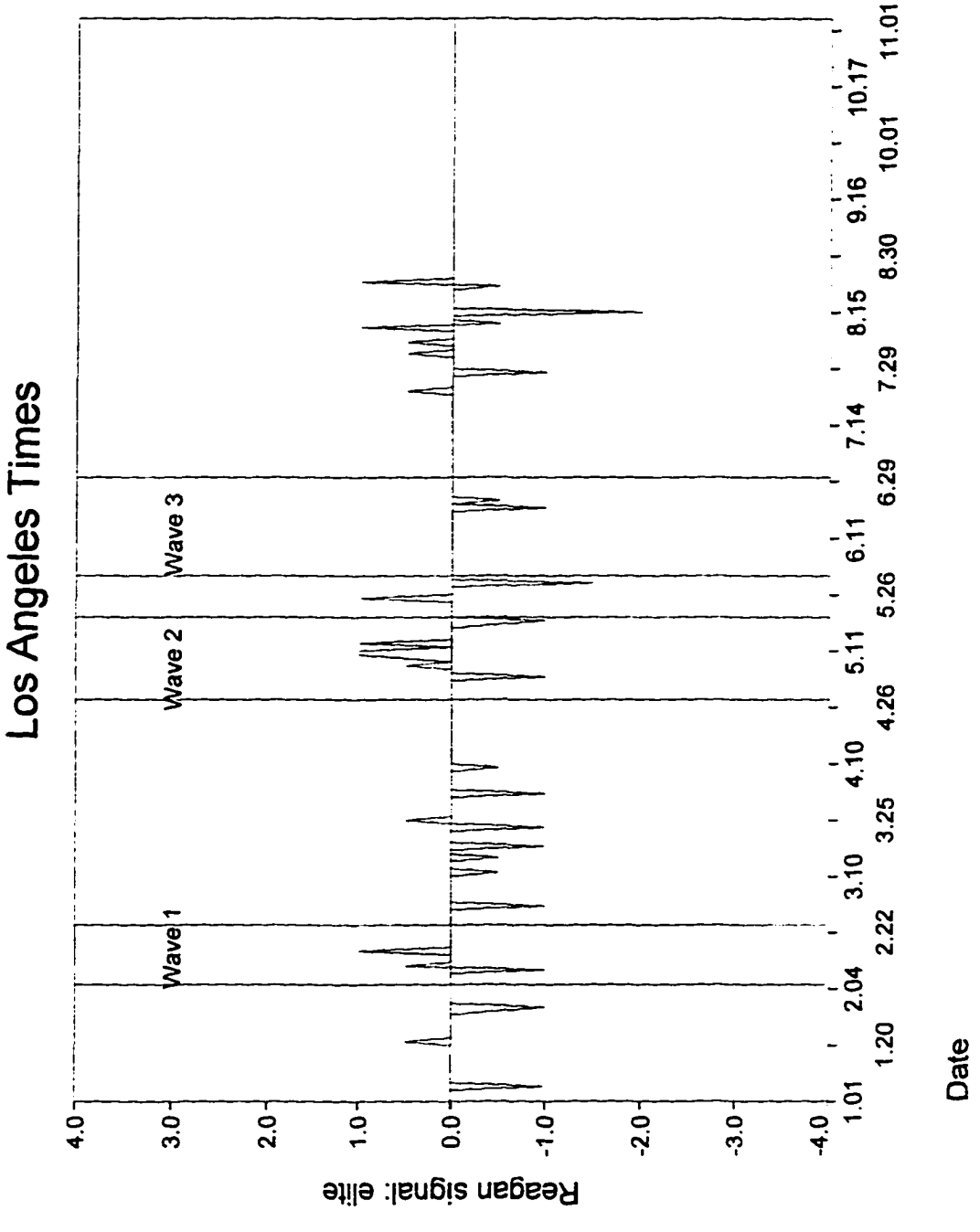
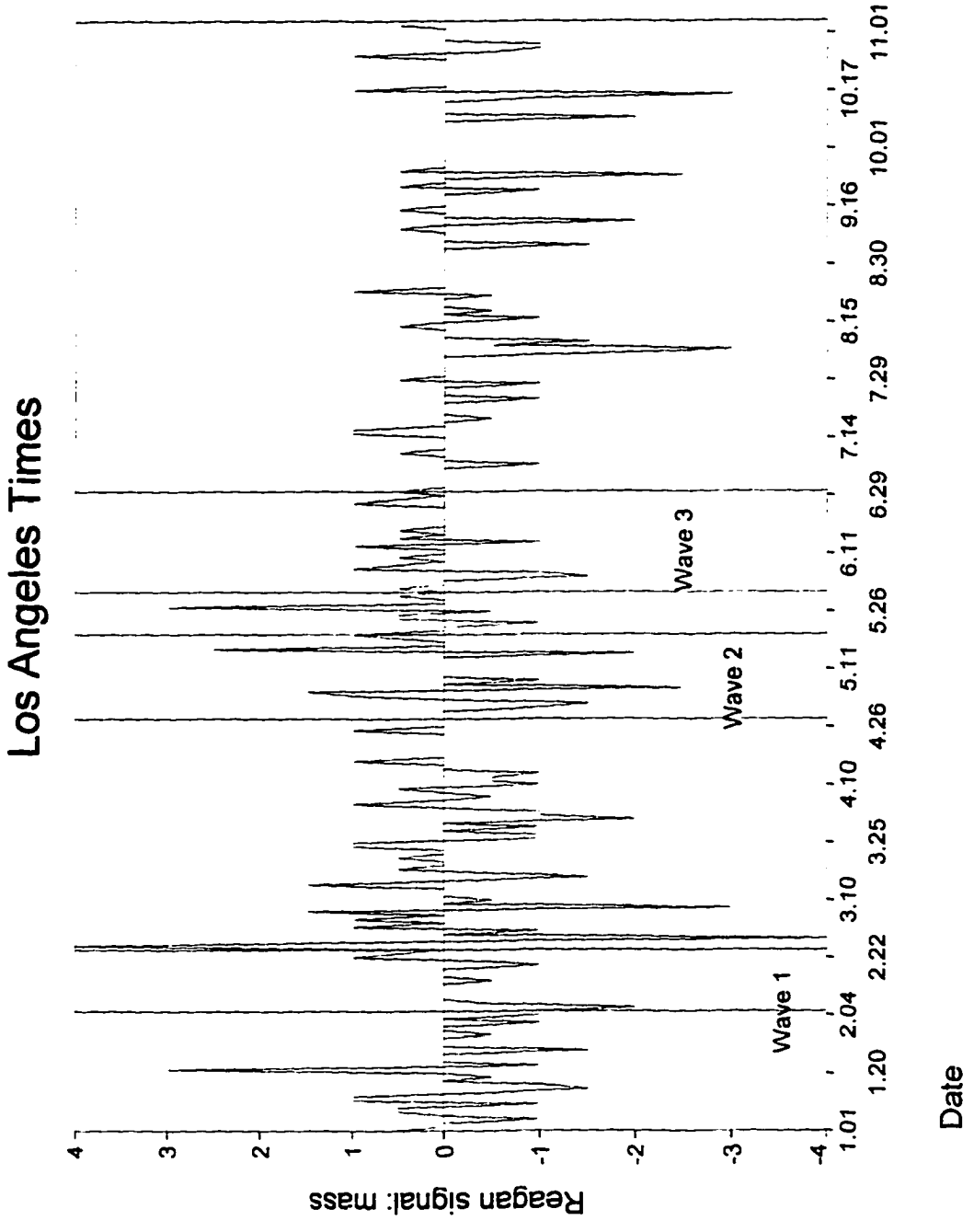


Figure 5.6b: Reagan newspaper signal -- mass aspect



The Wellesian and rotisserie league models: Reagan

These two responsiveness patterns each appear once amid the Reagan coefficients, the Wellesian at wave two in the Erie subsample and the rotisserie league at wave three in the Los Angeles subsample. The Wellesian model is accompanied by the now-familiar newspaper signal pattern in the *Erie Morning News*: A near-zero elite evaluative signal balance (+0.5 in this case) and a powerful mass evaluative signal balance (+10.5). The behavior of the signal concerning Reagan put forth by the *Los Angeles Times* during this appearance of the rotisserie league response pattern is also consistent with prior appearances: A relatively small, yet significant, elite evaluative balance (-1.5 here), coupled with a mass evaluative signal balance of zero. The direction of the significant exposure coeffients once again matches the direction of the evaluative signal balances.

The "U-shaped" model: Reagan

Discussing this response pattern is a risky business at best, because generalizing from a single example is never particularly wise. However, we can extend the logic of our line of reasoning about evaluative signal balance to cover this single empirical emergence of the "U-shaped" response pattern among the

newspaper exposure coefficients (the pattern occurs one other time in the Chapter 3 analyses, amid the television exposure coefficients). In this single instance, the "U-shaped" response pattern emerges in the Reagan model estimation in the Erie subsample at wave 3. The only two statistically significant newspaper exposure coefficients in this case occur in the lowest (β_2 = -.375) and highest (β_2 = -.312) political awareness groups. The *Erie Morning News* signal pattern that accompanies this unusual response pattern consists of a strong mass evaluative signal balance (-11) and a relatively weak elite signal balance (-1).

What appears to be happening is that the high and low awareness groups are responding independently to their respective media signals -- the high-awareness group evinces some attitude change as a result of the elite evaluative signal balance, while the low-awareness group is responding to the intensely one-sided mass signal balance, which represents a convincing peripheral cue to which the political nonsophisticates are responding. In other words, the Wellesian and rotisserie league response patterns are occuring simultaneously, behaving as they normally do -- the strong arguments of the elite signal balance are persuading the highly aware, while the peripheral cues surrounding the one-sided mass signal balance are changing the attitudes of the politically unaware. If this logic is correct, then perhaps the most unusual aspect of this "U-shaped" response pattern

is its rarity. The circumstances required to produce this responsiveness pattern are not nearly so idiosyncratic as those needed to produce the Converse-McGuire pattern, and yet the Converse-McGuire pattern is more common in the Chapter 3 model estimations. The only way to properly address this mystery is with another sample.

Summary discussion: What we know about the responsiveness patterns

Our examination of the newspaper exposure coefficients from Chapter 3 in light of the media signal measure developed in Chapter 4 has led us to a better understanding of patterns of responiveness to media signal. First, not only are individual-level political attitudes sometimes responsive to media messages, but this responsiveness occurs in predictable ways based upon the nature of the messages. The key to understanding the four responsiveness patterns is a viable measure of media signal, one that is sensitive enough to distinguish between the elite and mass aspects of the signal. The candidate images held by individuals at different levels of political awareness respond to different aspects of the signal -- the highly aware respond to the central, evidentiary aspects of the elite signal, while the unaware respond to the peripheral aspects of the mass signal.

Second, the specific instances of the responsiveness patterns can be

coherently discussed in terms of our signal measures. The situation is not perfect, of course, because we have only 14 occurences of the various patterns to discuss, including only two of the Converse-McGuire pattern and one occurrence of the "U-shaped" model pattern. However, the remarkable consistency exhibited by the newspaper exposure coefficients in response to the occurrence of distinct situations in the newspaper signal measures allows us to draw some tenative conclusions concerning the conditions under which the different response pattern models appear. As pointed out in the discussions of the individual candidates, the key to understanding when the patterns emerge lies in the evaluative balance of the signal during each wave of interviews. Table 5.2 summarizes this information in a way that may be helpful. Each column provides the occurrence of a particular response pattern (location, panel wave in which it appears, and candidate model estimation in which it appears), and the elite evaluative signal balance and mass evaluative signal balance that accompanies each appearance of each response pattern. The table makes it easier to view the consistency with which different patterns of elite and mass evaluative signal balances occur, and the consistency with which they are accompanied by a particular response pattern. The numerous blank cells in the table are the result of the limited number of appearances of each particular response pattern.

Table 5.2: Relationship between evaluative signal balance and responsiveness pattern

	Wellesian	rotisserie league	Converse-McG.	"U-shaped"
occurence	Erie, W2, Ford	LA, W2, Ford	Erie, W3, Carter	Erie, W3, Reagan
elite signal bal.	-0.5	+2	+4.5	-1
mass signal bal.	-12	0	+8	-11
occurence	Erie,W2,Reagan	LA, W3, Ford	Erie, W5,Carter	
elite signal bal.	+0.5	-2.5	-4	
mass signal bal.	+10.5	0	-6.5	
occurence	Erie, W3, Ford	LA,W3,Reagan		
elite signal bal.	0	-1.5		
mass signal bal.	-10.5	0		
occurence	LA, W3, Carter	Erie,W4,Carter		
elite signal bal.	0	-1		
mass signal bal.	+12	-0.5		
occurence	Erie, W4, Ford	LA,W5, Carter		
elite signal bal.	0	-2.5		
mass signal bal.	-10	0		
occurence	LA, W4, Carter			
elite signal bal.	0			
mass signal bal.	+13			

The summary information presented in Table 5.2 makes the picture clearer. Although I am somewhat hesitant to discuss rigorous "rules" for the conditions under which each responsiveness pattern occurs (because of the relatively few numbers of cases, and the lack of a statistical test, parametric or otherwise), the consistent behavior of the coefficients under differing newspaper signal conditions is readily codified.[6] The best way to see this is to trace each column of Figure 5.2 from top to bottom.

Doing so reveals that the Wellesian model, under which only those individuals at the lower end of the awareness spectrum evince media-induced attitude change, tends to dominate during periods of strong (absolute value of 10 or greater) mass evaluative signal balance, coupled with zero-level elite evaluative signal balance. The rotisserie league model, which is the conceptual opposite of the Wellesian model, appears to be ascendent under near-opposite signal conditions. The rotisserie league model shows up in the data when a small-but-measureable (magnitude between one and 2.5) elite evaluative signal is

---

[6] Of course, I am making an assumption here -- that these newspaper signal patterns *cause* the response patterns to occur. What I have shown empirically is that they occur simultaneously, rather than prove causation beyond a reasonable doubt. However, the consistency of the signal pattern relationships to the responsiveness patterns seems too regular to be coincidental. The causation certainly doesn't flow in the opposite direction, and if the relationship is spurious because of the influence of a third variable, I have no idea what it could be.

accompanied by a nearly-balanced or nonexistent mass evaluative signal balance.

The other two models emerge empirically under conditions which are essentially combinations of the circumstances that produce the first two response patterns. The appearance of the Converse-McGuire pattern of responsiveness seems to require a relatively complex nexus of circumstances. Although generalizing from two observations is dangerous, the newspaper signal circumstances are a medium-strong mass evaluative balance coupled with a relatively powerful elite signal, which must consist of a balance of positive and negative information (as opposed to a completely one-sided elite evaluative balance). Only under these circumstances does the logic of the signal-based explanation for this model hold.

The "U-shaped" model is the most tenous one to discuss in this context, because it occurs only once among the newspaper exposure coefficients (and only one other time in the the television exposure coefficients, at the wave five Carter impression model in the Erie subsample). The logic of the model is valid on its surface, however: A combination of the circumstances which produce a Wellesian response (very powerful mass evaluative signal balance) and those which produce a rotisserie league response (weak but measureable elite signal balance) work in concert to produce a "U-shaped" response pattern across the

political awareness spectrum. Presumably, the central persuasive evidence contained in the messages making up the elite signal, which is causing change at the high end of the spectrum, is undetectable to those at the middle and low ends of the spectrum. Those at the middle and high ends of the spectrum are immune or at least resistant to the peripheral cues contained in the mass signal causing change at the low end, because these relative political sophisticates are more likely to consider messages based upon their merits. The reader should note that there is no theoretical reason why the direction of the media-induced attitude change among those at the low end of the political awareness spectrum should match the change at the high end, because there is no established reason to expect elite evaluative signal balance to match mass evaluative signal balance. Although the high-end and low-end exposure coefficients do match in both empirical instances of the "U-shaped" model in the analyses presented in Chapter 3, there are several instances in Figures 5.1 through 5.6 where the direction of the elite and mass signal balances do not agree.

Another aspect of the relationship between the Patterson survey data and our measure of media signal strengthens the interpretations presented in this chapter: *In every instance the direction of the statistically significant newspaper exposure coefficients matches the evaluative signal balance of the appropriate*

aspect of newspaper signal. When the lower political awareness groups evince positive changes in candidate impression associated with newspaper exposure, the newspaper mass evaluative signal balance is positive (or vice versa), in every case. When the upper awareness groups evince negative attitude change associated with newspaper exposure, the newspaper elite evaluative signal balance is negative (or vice versa), in every case. I take this as evidence that the *only* way to reasonably formulate expectations about the direction of newspaper-induced (and, by extension, other media-induced) attitude change is to actually measure the evaluative balance of the media signal around the time of attitude measurement, or at the very least have strong suspicions concerning the evaluative balance during the appropriate time frame (see the discussion of Zaller's work below).

Perhaps the most significant aspect of Table 5.2 is what does *not* appear in the table: The four instances in which no responsiveness pattern emerges because none of the newspaper exposure coefficients are statistically significant for any of the political awareness groups. This occurs in the Los Angeles subsample at waves four and five for the Ford models and wave two for the Reagan model, and in the Erie subsample at wave five for the Ford model. In all four of these cases, *the evaluative balance of both the elite and mass aspects of the newspaper signal*

is precisely zero. This result suggests two reasons for a lack of newspaper exposure effects. First, there may simply be no evaluative information concerning a candidate available, and so no reason for any exposed individual to change her attitude. In the current context, this scenario is more likely in the Erie subsample because of the relative paucity of candidate information available in the *Erie Morning News* (as seen in most of the "elite signal" graphs for the Erie paper).

In the second possible scenario, no exposure effects emerge because the (relatively abundant) evaluative information concerning a given candidate balances out to zero. This situation is more likely in the Los Angeles subsample, because the *Los Angeles Times* provides a large amount of both positive and negative pieces of evaluative information that tend to cancel each other out across discrete periods of time. Individuals are free to pick and choose their information, which tends to bolster their existing attitudes rather than causing change in one direction or another.

Another way to put this is that the signal concerning a particular candidate must be consistently positive or consistently negative, as well as having sufficient volume or intensity, to engender attitude change. Zaller (1992) discusses this phenomenon in terms of elite transmission of political messages -- most of the

time, the bipartisan nature of American politics prevents a consistently unidirectional ideological message from emerging. Ocassionally, however, elite messages become one-sided enough to cause the balance to tip in one direction of the other. As mentioned earlier, Zaller *assumes* this to be case, and tends to explain elite signal anecdotally, without actually measuring the message balance.[7] One thing we have accomplished in this chapter is to show that the notion of balance in the directional valence of media signal -- newspaper signal during a presidential campaign, in this case -- can actually be measured, and then applied to individual-level survey data to explain the patterns of change that occur among respondents inhabiting different strata of political awareness.

In the next chapter I briefly discuss the next question that logically arises in this analysis of newspaper signal and its effects on the audience: What moves newspaper signal? Since all of our discussion has been based in a presidential campaign situation, one obvious answer to this question is, the campaigns

---

[7] Zaller's anecdotal examples of unidirectional messages tend to be convincing, however. For example, in a 1993 *Political Communication* article he uses a collection of CBS-*New York Times* polls conducted during the Persian Gulf War to demonstrate how audiences react to a high-intensity, essentially unidirectional (pro-war) message. That elite messages concerning the conflict were almost uniformly positive has been discussed in a number of different contexts; see Mueller (1994) or Hellinger and Judd (1994) for discussions, as well as numerous journalistic accounts.

themselves. I explore this possibility in an anecdotal fashion in Chapter 6.

Chapter 6: Managing Media Signal in Campaign '76[1]

"Mr. President, as a campaigner, you're no fucking good."

– Stuart Spencer, Ford political strategist, on the 1976 general election campaign (quoted in Witcover 1977, p.530)

Media exposure sometimes causes individuals to change their impressions of candidates. These changes occur in different ways for people at different levels of political awareness, as demonstrated in Chapter 3. The differential response patterns that manifest themselves are the result of differences in the volume and evaluative tone of media signal concerning the candidates, as shown in Chapter 5. The next obvious question to ask is, *what causes differences in media signal?*

A formidable amount of research has shown that the economy, the

---

[1] Support for the archival research reported in this chapter was provided by a generous research grant from the Gerald R. Ford Foundation Grant Committee, Gerald R. Ford Library, 1000 Beal Avenue, Ann Arbor, MI 48109. The author wishes to thank Grants Coordinator William McNitt and Supervisory Archivist David Horrocks for their able assistance and Job-like patience in helping the author locate research materials.

unemployment rate, civil unrest and other conditions external or exogenous to the campaign process affect election outcomes.[2] The influence of exogenous conditions occurs directly (see the abundant literature on economic voting, summarized neatly by Lewis-Beck 1992) or indirectly, through their impact on candidates' decision-making processes, strategic campaign contributions, and other mechanisms (Jacobson and Kernell 1983). Some recent work has suggested that mass media play an intervening role in the impact of these external factors (Mutz 1992, 1995; Sanders, Marsh and Ward 1993; Iyengar 1991).

There is, of course, an internal or endogenous force at work as well: the campaign itself. A political campaign, at least at the presidential level, can be defined in the current context as *an attempt to influence voters' attitudes by influencing media signal concerning the candidates*. Campaign advertising is the most straightforward implementation of this definition. A corollary to the above definition is that campaigns also seek to influence the way media report on, or frame, the aforementioned external conditions, also in an attempt to (indirectly) influence voters' attitudes. Large amounts of political communication research

---

[2] However, see Hellinger and Judd (1994) for accusations that the state of the economy, the nation's involvement in foreign wars, the unemployment rate and other seemingly external factors may not be endogenous to the presidential campaign process after all. See also the writings of any number of conspiracy theorists.

support this definition (see, e.g., Jamieson 1992; Graber 1993).

In this chapter I outline the endeavors of President Ford's campaign strategists to influence media signal during the 1976 campaign. Their efforts are directed toward controlling the signal concerning Ford himself, his opponents, and exogenous factors which could be linked to the president in the eyes of the public. Is media signal responsive to strategists' efforts? Or is 'spin control' an exercise in futility, because campaign media signal is driven solely by apparently uncontrollable external factors like the state of the economy? Before we address these questions, I present a brief review of the context of Campaign '76.

The context of the 1976 presidential election

Before proceeding with a discussion of the Ford campaign's efforts to influence the mass media during the campaign, a few words about the general campaign situation in 1976 are in order.[3] On the Republican side, incumbent President Gerald R. Ford was in the unprecedented position of never having been elected to either the presidency or the vice-presidency. In addition, Ford carried the stigma of being Nixon's pardoner, an act that proved to be unpopular with

[3] The secondary sources I draw upon in this historical section are Barber (1978), Bitzer & Rueter (1980), Pomper (1977) and Witcover (1977).

large segments of the American electorate.

Ford's weak claim to office, coupled with his relative unpopularity, encouraged a fearsome challenger, Ronald Reagan, to emerge from the Republican ranks. Reagan was seen as a popular, talented campaigner and media whiz even in those days, before he became the "Teflon President." These circumstances -- a weak claim to office and a strong challenger -- conspired to bring Ford closer to failing to gain his party's nomination than any incumbent president since Chester A. Arthur failed to gain the Republican nomination in 1884. In terms of delegate votes, the Ford (1,187) -Reagan (1,070) nomination race was the closest ever.

On the Democratic side, the situation before the New Hampshire primary was unstructured, without a clear prospective nominee, a situation that was (and has for the most part remained) par for the course for the Democrats. From a field of fourteen candidates with no clear front runner, Georgia Governor Jimmy Carter won 11 of 14 primaries between January and May 1976. A potentially dangerous undecided opponent, Hubert Humphrey, eventually declined to enter the race. Carter, a Deep South native with support from both black and white voters, staved off later challenges from Morris Udall and Frank Church to win the nomination with about 75 percent of the delegate votes.

As mentioned earlier, Carter gained his party's nomination and began the campaign with a substantial (up to 30 points, depending on the poll) lead over Ford after the July Democratic convention at Madison Square Garden. Carter's lead narrowed to about 12 points after Ford (barely) received the nomination at the Republican convention in Kansas City in August. Carter's strategy was to hit the campaign trail hard, while Ford's consultants advised him to stick to the White House and "act presidential," implementing the so-called "rose-garden strategy." Ford attempted to focus the campaign on Carter's issue positions, which were fairly nebulous to most voters. The unprecedented three televised debates also helped Ford's cause, because they put him on an equal footing with his leading opponent. Ford continued to close with Carter up until the final weeks of the campaign, which were marked by a sort of equilibrium between the two candidates.

Pomper (1977) characterizes the campaign as a sporting event: "Until [October 7, the occasion of the second televised debate], the Ford effort had the appearance of a football team marching relentlessly toward a winning touchdown. After, the game was transformed into a successful goal-line stand by the Democrats, who held on to win" (p.70). According to the polling organizations, about a fifth of the electorate remained undecided by the last week before the

election. Late deciders tended to favor Carter, however, who " won 53 percent of those deciding in the campaign's final week, and 61 percent of those deciding on the day of the balloting" (Pomper 1977, p.72). Carter won the election with a total of 297 electoral votes to Ford's 241; Carter carried the two-party popular vote by 51.05 to 48.95 percent. While inflation, unemployment and perhaps a general distrust of Republicans resulting from Watergate conspired to hurt Ford, the media played a substantial role during the campaign, particularly in Carter's rise to prominence during the primaries and in Ford's rush to narrow the poll gap during the general election. I now turn to some excerpts from the behind-the-scenes mass media strategy involved in creating the Ford rush. Three anecdotes detailing specific efforts to influence mass media signal,two from the Ford camp and one involving a mass media mishap in the Carter campaign, take up the remainder of the chapter.

Ford's media strategy

The President Ford Committee, as Ford's campaign staff chose to name itself, was in a difficult position. As subtly hinted in the quote at the start of this chapter, conventional wisdom painted the President as an "okay guy," but hardly a dynamic campaign presence. Consider the words of Frank A. Ursomarso, a

President Ford Committee advanceman specializing in media appearances, from an undated internal memo:

> We have generally agreed that the President is a good perceptual President, but a rather mediocre campaigner. The President as a campaigner suffered from a continual lack of the ability of the speechwriters to come up with speeches that fit the events. Given the high expectations that our advance operation builds up in the crowds, the President's appearance in the flesh was welcomed, but as soon as he began to speak the event deteriorated in quick fashion until at some stops we actually began to lose the crowd from the site. The President even given good speech material is a rather dull speaker. He is dull because of his delivery, which is dominated by a nasal monotone. His personality comes into the equation to the extent that when he reads a speech, his basic personality is submerged into the material and he never 'comes off for the crowd.' ...The President reading a speech should be limited to certain controlled situations. For example the audience should not be standing. ...We cannot change the President's personality nor alter in large measure his projection capability. We can change the situations in which he speaks and the content of what he says so as to maximize the opportunities we have. (Ursomarso n.d., p.1).

The situation was exacerbated by the competition during both the primary and general election seasons. Ronald Reagan and Jimmy Carter were both widely perceived as excellent speakers and strong media personalities (Reagan's abilities in this vein, of course, eventually achieved legendary status when he became the "Teflon President"). The President Ford Committee, on the other hand, were trying to construct a positive public image for a candidate who delivered his

words in a "nasal monotone" and who was already saddled with the unpopular image of Richard Nixon's apologist.

Paid advertising is, of course, the simplest, most direct way for a political candidate to influence mass media signal, because the candidate's strategists are directly producing the signal, without the filtering mechanism of journalists getting in the way. Both broadcast and print advertising were heavily emphasized by President Ford's campaign. Consider the following excerpt from one of several strategy plans produced by various members of the President Ford Committee:

> To accomplish our objectives, we are going to need as many as 50 separate television commercials. They include packages of network commercials as well as regional and local commercials. Our most immediate need is for an edited version of the President's [Republican National Convention] acceptance speech to be aired as soon as possible, especially in the Eastern Time Zone where we missed a good part of our audience because of the hour in which the talk was aired. We would close this commercial with an appeal for volunteers to join and work for the campaign. It would be accompanied by tune-in spots and newspaper ads telling people who missed the President's speech to tune-in tonight. Getting people to watch the special show could also be part of a grass-roots Republican Party effort. Our crews filmed the entire speech and the color around it, so editing could proceed immediately. The following pages outline the other commercials that will be needed. Production on all these commercials must begin immediately ("Preliminary Media Plan," August 21, 1976,

p.17).[4]

In an effort to consolidate and codify their efforts to construct the desired positive public image of the president, several prominent members of the President Ford Committee, notably Stuart Spencer, Dwight Teeter and John Deardourff, put together a lengthy memo, really a book, entitled "Campaign Strategy for President Ford 1976."[5] The plan, constructed during and immediately after the Republican National Convention, is concerned with Ford's general election strategy against Jimmy Carter. The plan is a perfect exemplar of the heavily media-oriented thinking of the President Ford Committee:

> President Ford's perception must change and Carter's perception must change. In order to win, we must persuade over 15% (or about 10 million people) to change their opinions. This will require very aggressive media-oriented efforts. We must pull together and wage a very active and determined fight. If the President sits back as Richard Nixon did in '68 and '72, he will certainly lose. As demonstrated in the following pages, the President can run hard without relying on the traditional campaign "hoopla." Thus, he can be an active candidate and yet be

---

[4] Given this memo's heavy emphasis upon disseminating the president's acceptance speech to as wide an audience as possible, we can assume that Mr. Ford managed to avoid his usual "nasal monotone" in its delivery -- or that video editing technology could take care of the problem.

[5] A full copy of the plan resides in the Dorothy Downton Files, Box 1, Gerald R. Ford Library, or is available from the author (of this dissertation, not of the strategy book). Dorothy Downton was President Ford's personal secretary.

> perceived as a working president ("Campaign Strategy" n.d., p. 11, original emphasis).

The concept of running without "hoopla," of being "perceived as a working president," later became known as the "Rose Garden Strategy." The idea was to let Carter run around the country, hopefully making a fool of himself as his Southern Baptist roots began to show, while the president went about the daily business of running the country. The strategy didn't work in the end, of course, but Ford came very closing to closing the 20-plus-point post-Democratic convention poll gap between Carter and Ford.

The media orientation of this nearly successful strategy did not stop with a few references to running "aggressive media-oriented efforts." Elements of careful thinking about the impact of mass media, and of the campaign's ability to affect mass media signal, are scattered throughout the campaign strategy handbook:

> Any campaign strategy, to be successful, must deal with perceptions. Voters do not make up their minds on an understanding of the actual strengths and weaknesses of candidates; rather, their choice is make on the basis of their perception of the candidates.
>
> Personal perception is several times more important to voting than the perceived position on issues. But, particularly for an incumbent, the determinants of perception are (1) the candidate's agenda of issues -- which issues he chooses to talk about, and (2)

> how he handles them. The selection of issues may well be of greater importance than his position on the issues. ("Campaign Strategy" n.d., p. 12, original emphasis).

The members of the President Ford Committee who authored the above excerpt show a remarkably clear grasp of the mass media agenda-setting concept, less than four years after McCombs and Shaw's (1972) seminal *Public Opinion Quarterly* article on the topic. The authors also cite Patterson and McClure's *The Unseeing Eye*, which was a piece of cutting-edge political science at the time.[6] Clearly, Ford's strategists took the mass media aspect of the campaign in deadly earnest, as evidenced by the following:

> In the following "perception" analysis, we have tried to capture the current perception of the President and Carter, using descriptions commonly used by those polled or interviewed by the press. ...These perceptions do not necessarily reflect your true character or style as president. They are a reflection of how the TV viewer and newspaper reader "sees" you. We have presented this problem with the "bark" off because we must solve this perception problem in order to successfully communicate your leadership qualities. This obstacle must be overcome or there is no chance for victory ("Campaign Strategy" n.d., pp. 12-13, original emphasis).

---

[6] "...we disagree with much of its analysis and conclusions" was the verdict, from p.101 of "Campaign Strategy."

What follows this paragraph is a painfully honest account of the Ford's shortcomings in terms of the mass media audience's perceptions of him. "Is he competent or intelligent enough to be President?" "He is not thought of as being bright" and "He is weak -- not decisive or in control" are some of the kinder phrases that greeted the president's eyes in the report. Again, the members of the President Ford Committee were serious enough about the media-strategy aspects of the campaign to risk offending the president of the United States with a frank appraisal of his mass media image problems.

One last quotation from the strategy book highlights the strategists' understanding of and concern with mass mediated campaigning:

> It is true that some of the President's primary campaigning did result in an increase in his local popularity in the area campaigned in (and this shows up on election day), but these examples would be very misleading if applied to the general election. There is no question that people who actually see the President are influenced by that event, and local press has its beneficial impact. However, for the general election, Presidential campaign events are not significant in terms of their impact on the people who attend. These people are mainly important as backdrops for the television viewer. During the general election, all Presidential travel must be planned for its impact on those who learn about it through the media ("Campaign Strategy" n.d., p.32-33, original emphasis).

These telling quotations from the campaign strategy book, and my

physical inspection of many other materials pertaining to President Ford's campaign strategy, bring to light one overriding fact: The mass media, both television and newspapers, were an ever-present concern for everyone involved. While this conclusion may seem breathtakingly obvious, the extent of the concern with mass media exhibited by the members of the President Ford Committee borders on the level of obsession. At least five separate and independently produced campaign media strategy summaries exist within the President Ford Committee's files. One of the media strategy overviews directed to the President himself contains details on line advertising rates and circulation figures for newspapers in strategic target states, market sizes for various local television network affiliates, and Nielsen ratings and schedules for prime-time television programs.[7] The President Ford Committee created an independent corporation, Campaign '76 Media Communications, Inc., for the sole purpose of acting as a liaison between the campaign offices and the television networks, specifically creating and implementing Ford's national advertising campaign.[8]

---

[7] For absolutely no other purpose beyond the reader's nostalgic amusement, I have included a copy of the 1976 fall season prime time network schedule as Appendix 6-A. The copy comes from the President Ford Committee Campaign Records, Box G13, Gerald R. Ford Library.

[8] It is worth noting, at least for coincidence's sake, that both California (home of our Los Angeles subsample) and Pennsylvania (home of our Erie subsample) are

(continued...)

In short, the efforts of the President Ford Committee and other Ford advisors were overwhelmingly concentrated on the President's media image. To switch back to the terminology used throughout this dissertation, Ford and his handlers were deeply engaged in attempting to influence media signal concerning the President and his electoral opponents. Below I briefly touch on two instances from the Ford campaign, and one from the Carter campaign, of the intersection between campaigning and mass media signal.

Influencing media signal: Three anecdotes

A campaign, by our earlier definition, is devoted to influencing media signal concerning the candidate and his opponent. The above discussion of Ford's campaign, and the excerpts from his media strategy playbook provide considerable evidence for this assertion. I now turn to outlining two instances of the Ford campaign's attempts to directly influence media signal, and the results of these efforts in terms of signal volume and tone, using the measures developed in Chapters Four and Five. For completeness' sake I also include an instance of the

---

(...continued)
designated as "target states" in the strategy book, earmarked as "large swing states -- maximum resources" in terms of campaign resource allocation. This is presumably the result of either foresight or good luck on Patterson's part during the planning stages of the panel survey.

Carter campaign's failure to control media signal, and its resulting electoral consequences.

The pre-convention panic: Ford drums up grassroots support

During June and July, the Ford campaign was being haunted by the terrifying specter of Ronald Reagan. Reagan was in the midst of his strong run to strip the Republican nomination away from the incumbent president, and the President Ford Committee was aghast. Enough uncommitted convention delegates were left over from the primary season to allow Reagan to prevail at the Republican National Convention. The members of the Committee decided that they could use as much help as possible at the grassroots level, and so began to target local Republican Party organizations as potential sources of ammunition against Reagan's attack.

The President Ford Committee expended a great deal of effort to convince state- and local-level Republican Party leaders to endorse Ford as the party's nominee. The president himself got in on the act, and spent many hours manning the telephone, talking to high-ranking state and local partisans. The efforts paid off. In the week surrounding July 20, four state party committees -- Michigan, Ohio, New York and, most importantly for our current purposes, Pennsylvania --

responded with strong publicly announced endorsements of President Ford.

The reflection of this successful strategic campaign effort in Pennsylvania is visible in the Ford signal being put out by the *Erie Morning News* (see Figure 5.3). Ford's mass evaluative signal balance for the week of July 20 is +6, a resoundingly positive period for Ford. This positivity, surprisingly, does not appear in Ford's elite evaluative signal balance. A re-examination of the raw data (the actual newspaper editorials from that time period) reveals why: Although the endorsement was greeted with a positive editorial from the *Erie Morning News*, on the same day the paper published a negative column by local columnist concerning Ford's performance as president, resulting in a net elite evaluative signal balance of zero. Clearly the efforts of the president's campaign staff in wooing these endorsements were not aimed directly at voters, but at media coverage which would, they assumed, in turn affect voter attitudes. According to our content analytic measures, the first step of the process was successful; Ford's newspaper signal was affected in a positive direction.

Preconvention week: Ford's little problem

As the week of the Republican National Convention drew closer, sweat began to bead on the brows of the members of the President Ford Committee.

Reagan's appeal among the uncommitted delegates simply refused to go away. Despite backing from most of the state Republican Party organizations, Ford was still having serious problems locking up the nomination, and it was very apparent that the decision would actually be made in the convention hotel in Kansas City.

The Ford camp pulled out all the stops in its attempts to put a positive spin on the situation. The president held several press conferences in the days leading up to the convention, stressing his role as a leader and as the "restorer of the nation's damaged honor," a reference to his scandal-free tenure following Nixon's disgraceful resignation. The press were apparently having none of it, however.

An examination of the second page of Figure 5.3, the *Los Angeles Times* signal, reveals that the president's elite and mass evaluative signal balances both suffered during the third week of August.[9] Ford's elite evaluative signal balance for the week of August 8 is -3, and his mass evaluative signal balance for the same period is -6, a poor showing for an incumbent president actively trying to improve his image. It seems as if Ford's apparent helplessness in the face of the Reagan juggernaut led to a substantial number of negative news reports and

---

[9] The picture is more rosy in the *Erie Morning News*, but the week's mass evaluative signal balance turns out to be a mere +0.5, and the elite evaluative signal balance is zero -- hardly a successful public relations blitz on Ford's part.

editorials. The president's evaluative signal balance in the *Los Angeles Times* does not substantially improve until the following week, when he actually gained the nomination after an excruciatingly intense period of last-minute lobbying.

Carter's Benedict Arnold: Robert Schrum on the Today Show

The Carter campaign was not immune from the vagaries of mass media signal either. During primary season, the Carter campaign recruited a professional speechwriter named Robert Schrum. Two weeks later Schrum, a committed liberal, left a letter of resignation and departed the Carter camp (coincidentally on the day of the Pennsylvania Democratic primary). The letter cited Schrum's perception of Carter as insincere, as uncommitted on a number of issues of concern, as a "flip-flopping" political pragmatist:

> You may wish to keep your options open. Within reason that is understandable. But an election is the only option the people have. After carefully reflecting on what I have seen and heard here, I do not know what you would do as President. I share the perception that simple measures will not answer our problems; but it seems to me that your issues strategy is not a response to that complexity, but an attempt to conceal your true positions. I have examined my reactions closely. I have attempted to justify a different conclusion. But I cannot rationalize one. Therefore, I must resign (quoted in Witcover 1977, p.320).

Schrum's April departure came as a surprise to Carter and to most journalists, but had little if any immediate impact on Carter's campaign. The fallout came five weeks later, however. On the morning of June 2, 1976, Schrum appeared as a guest on NBC's *Today* show. On the show, he essentially repeated the allegations he wrote about in his resignation letter, suggesting that Carter was manipulative and deceptive[10]. This is clearly an instance of a strong, negative television evaluative signal being produced concerning Carter on that particular day.

Interestingly, this assumed negativity in the television signal is directly reflected by Carter's mass evaluative signal for June 2 in the *Erie Morning News*. The elite evaluative signal balance on that day is zero, but the mass evaluative signal balance is -3.5, which is quite strong for a single day (see the first page of Figure 5.1). This negativity is not matched in the *Los Angeles Times*, however. The *Erie Morning News* actually contains a few stories (but no editorials, and hence no elite evaluative signal) concerning Schrum's television appearance, but the more highly professionalized *Los Angeles Times* makes no mention of its rival medium.

The television exposure coefficients for Carter at wave three in both Erie

---

[10] Information on Schrum's *Today* appearance is gleaned from the President Ford Committee Campaign Records: Mark Rosenker file, box G13, Gerald R. Ford Library.

and Los Angeles also reflect the negative television signal (see Table 3.3). This may or may not be a function of the *Today* show appearance. Wave three interviewing began on June 1 in the Los Angeles subsample (which shows a very strong Wellesian response pattern in the television coefficients), but did not begin until June 9 in the Erie subsample, a full week after Schrum's appearance. Regardless of whether the *Today* incident resulted in significant changes in attitudes about Carter, the episode points out that campaign events beyond the control of the campaigners can have an impact on mass media signal.

Summary discussion: Influencing media signal

The campaign events outlined above discuss two specific instances in which the Ford campaign strategists attempted to influence media signal concerning their candidate. One of the attempts can be considered a qualified success, and the second has no detectable impact, at least in terms of our available measures of media signal. In addition, at least one event in the Carter campaign -- the "defection" of Robert Schrum on the *Today Show* -- has an immediate, measurable impact in terms of media signal and, circumstantially, upon citizens' impressions of Carter.

These anecdotes point out an unsurprising conclusion: Campaigning is a

mixed bag. Some efforts to manipulate or control campaign media signal succeed, while others fail. It is beyond the scope of this dissertation to determine what elements make for a successful attempt and what elements conspire to bring failure. However, if we are willing to extrapolate from the small observations presented here concerning the 1976 campaign, we can make the following two general propositions: First, *presidential campaign strategists are tremendously focused on the mass media*. Second, *campaign media signal is responsive, in some measure, to strategists' attempts at manipulation*.

These conclusions, when combined with our earlier inferences about the complex patterns of voter responsiveness to media signal, suggests that *campaigns matter*, at least some of the time. Furthermore, the principal mechanisms through which campaigns have an impact are the mass media signals concerning the candidates and the campaign. Electoral outcomes are not driven solely by exogenous forces such as the economy or the unemployment rate. Candidates may not be the sole masters of their own destinies, but they certainly have a part to play in the contest for the presidency.

Appendix 6-A

PRIME TIME NETWORK SCHEDULE

FALL 1976

	ABC	CBS	NBC
Monday			
8-8:30	Captain and	Rhoda	Gemini
8:30-9	Tennille*	Phyllis	Man*
9-9:30	Football	Maude	Movie
9:30-10		All's Fair*	
10-10:30		Executive	
10:30-11		Suite*	
Tuesday			
8-8:30	Happy Days	Tony Orlando	Baa Baa
8:30-9	Laverne/Shirley	and Dawn	Black Sheep*
9-9:30	Nancy Walker*	Mash	Police
9:30-10	Tony Randall*	One Day/Time	Woman
10-10:30	Family	Switch	Police
10:30-11			Story
Wednesday			
8-8:30	Bionic	Good Times	Little House on
8:30-9	Woman	Ball Four*	the Prairie
9-9:30	Baretta	All in Family	Quest*
9:30-10		Alice*	
10-10:30	Charlie's	Blue	
10:30-11	Angels*	Knight	Gibbsville*
Thursday			
8-8:30	Kotter	The Waltons	Dick Van Dyke*
8:30-9	Barney Miller		
9-9:30	Streets of	Hawaii 5-0	The Practice
9:30-10	San Francisco		Snip*
10-10:30	Most	Barnaby	Best
10:30-11	Wanted*	Jones	Sellers*
Friday			
8-8:30	Donny	Spencer's	Sanford & Son
8:30-9	& Marie	Pilots*	Chico & the Man
9-9:30	Movie	Movie	Rockford
9:30-10			Files
10-10:30			Serpico*
10:30-11			
Saturday			
8-8:30	Holmes/Yo Yo*	Jeffersons	Emergency
8:30-9	Mr. T & Tina*	Doc	
9-9:30	Starsky	M.T. Moore	Movie
9:30-10	& Hutch	Bob Newhart	
10-10:30	Rich Man	Carol	
10:30-11	Poor Man	Burnett	
Sunday			
7:30-8	Bill Cosby*	60 Minutes	Disney
8-8:30	Six Million	Sonny	Sunday
8:30-9	Dollar Man	& Cher	Mystery
9-9:30	Movie	Kojak	Movie
9:30-10			Big
10-10:30		Delvecchio*	Events*
10:30-11			

* New Programs

Chapter 7: Conclusion -- Campaign Strategy, Media Signal and Individual Responsiveness

"Mass communication *ordinarily* does not serve as a necessary and sufficient cause of audience effects, but rather functions among and through a nexus of mediating factors and influences."

--Joseph T. Klapper, *The Effects of Mass Communication* (1960)

Campaign strategists live and die by the words following the comma in the above quotation. As noted in Chapter 1 and documented in Chapter 5, presidential hopefuls invest prodigious amounts of time, money and energy in trying to create what Klapper calls "audience effects" among voters and potential voters. A literal interpretation of the "minimal effects" doctrine would lead us to believe that such investments are squandered. In this dissertation, I have attempted to show that political awareness is paramount among the "nexus of mediating factors and influences." If we accept the evidence provided in the earlier chapters, it becomes apparent that political media strategists are not squandering their efforts; they are instead making investments on a small-but-

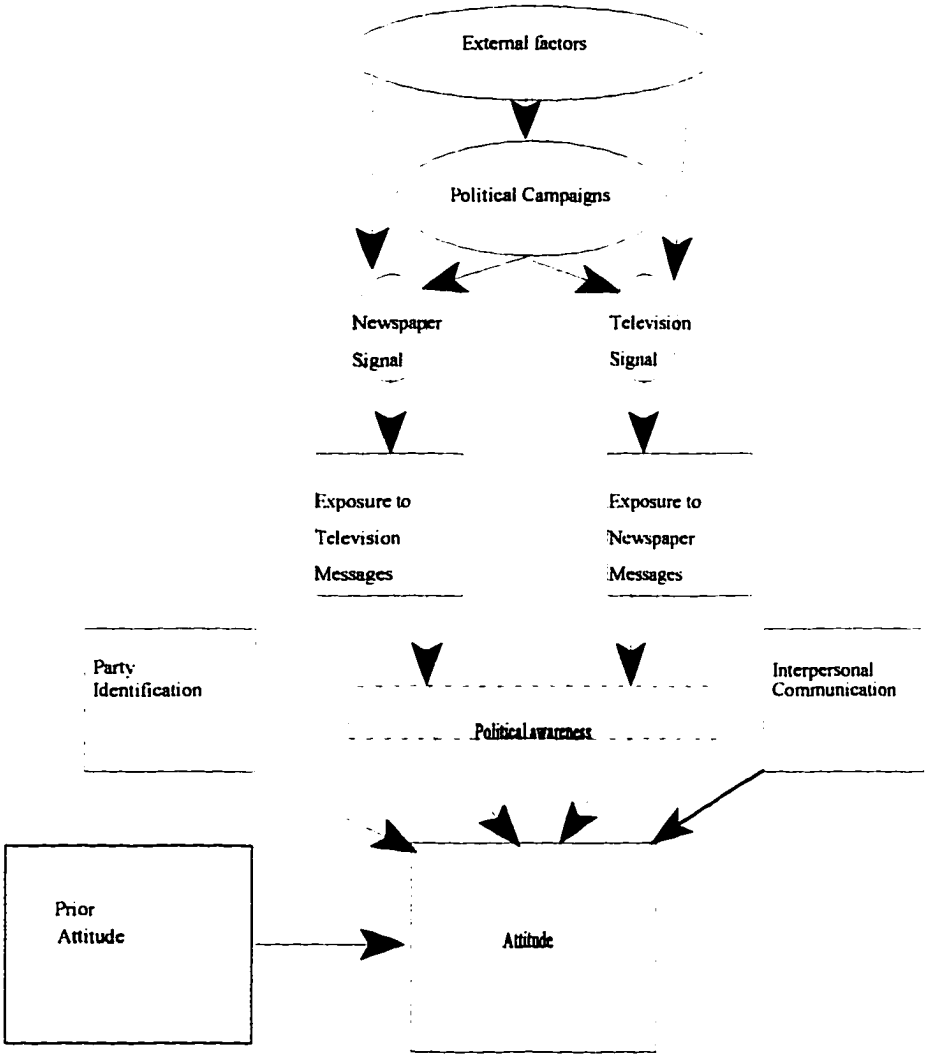
steady return in terms of changing attitudes toward political candidates. Furthermore, social critics, media pundits and academics who spend their time decrying the potentially damaging effects (or, rarely, praising the potentially beneficial effects) of mass media on American democracy are not simply wasting their time.[1] Mass media messages do have measurable effects on individual's attitudes concerning politics.

The three anecdotes in Chapter 6 outlined the partially successful efforts of campaign strategists to influence mass media signal during the 1976 presidential campaign, in hopes of indirectly influencing the attitudes of potential voters. This evidence suggests a revision of the conceptual model of the political effects of mass media originally presented in Chapter 2:

---

[1] Ironically enough, Thomas Patterson has become a major figure among academic media critics -- he was named the first Benjamin C. Bradlee Professor of Government and the Press at Harvard's Kennedy School of Government immediately prior to this writing.

Figure 7.1: A conceptual model of campaign media effects, revisited



The various elements of this figure represent the "nexus of mediating factors and influences" suggested by Klapper (1960). Phrased in the terms used throughout this dissertation, a political campaign consists of a concerted effort, or series of efforts, to influence mass media signal concerning the candidates. Campaigners are at best partially successful in their efforts, since the media organizations which produce the signal are under a multitude of conflicting pressures, including journalistic norms, external events, and other campaigns. Good campaigners, of course, are aware of these conflicting pressures, and of the newsgathering and reporting routines of journalists, and attempt to exploit this knowledge to the fullest extent in their efforts to influence campaign media signal (see Jamieson 1992 for an in-depth account of the 1988 Bush campaign's efforts in this domain).

Mass media signal is "broadcast" for public consumption on a regular basis. Individuals in society are exposed, or expose themselves, to the signal in varying degrees. Once absorbed, the signal is filtered through the mechanism of political awareness within each individual. The information contained in the media signal is sometimes used to change the individual's evaluation of the candidate(s) affected by the information, depending upon a number of factors. The individual's prior attitude, partisanship, ability to counterargue, the strength

of the evaluative material in the message, the availability of countervailing evaluative information, and other factors intertwine to form an obstacle course through which the new information must penetrate in order to affect the individual's attitude.

Media messages do successfully negotiate this obstacle course, however, and the sheer volume of available mass mediated information ensures that media-induced attitude change occurs regularly.[2] The campaign milieu results in a sharp increase in available information concerning the candidates, which makes it a ripe area in which to observe such attitude change. Decades of research produced decidedly mixed and even negative results on the topic, however. Slowly but steadily, though, scholars in the fields of political science, communication studies and social psychology, often working in ignorance of each other, have been accumulating evidence, building a case for the existence of understandable, systematic and even predictable contingent conditions under which political attitudes change as a result of media exposure. I've presented a few more pieces of such evidence in these pages.

---

[2] I'm sorely tempted to use a human fertilization metaphor here, but I'll allow my wiser self to prevail for once.

Media signal and individual responsiveness: What we've learned...

This project has been concerned with identifying and explaining the patterns of attitudinal responsiveness to mass mediated campaign information that occur within the electorate.[3] These patterns manifest themselves as a function of the range of political awareness that exists among individuals in the audience. Particular elements of the mass media signal containing the campaign information, arranged in coherent configurations, are what actuate the occurrences of the audience responsiveness patterns. This dissertation's contributions toward understanding these phenomena are summarized below.

1. *Prior research has underestimated media-induced political attitude change effects*

Previous work, up to and including the minimal-effects-era research drought, consistently underestimated individual level attitude change effects for at least two reasons. First, as shown in Chapter 3 using Patterson's 1976

---

[3] My use of this word rather nicely sums up the dissimilarity of the various disciplines' approaches to the study of mass media effects. To a political scientist, the group under consideration is an "electorate," or perhaps a group of "voters." To a communications scholar, it is an "audience," while a psychologist is concerned with a group of "subjects." The approaches and the contexts are different, but the underlying research questions are the same.

presidential campaign panel survey, geographical dispersion among survey respondents can mask significant effects. This masking or canceling-out effect occurs because individuals in different geographical locales are being exposed to distinct, and potentially radically different, versions of the mass media signal being investigated. Surprisingly, the vast bulk of past research has been concerned with media *exposure* unencumbered by a concern with the material to which the audience is being exposed.

Second, the nature of the way in which various elements of the audience respond to mass media messages can cause of masking or canceling-out of significant media-induced attitude change effects. As also pointed out in Chapter 3, straightforwardly looking for media exposure effects in the general population (or, more precisely, in the full sample) will lead to a null result, while sizable media effects do in fact exist within different subpopulations (see Table 3.12). The subpopulations in question in this context, of course, are the different political awareness strata that exist within the overall audience.

These differential responses to mass media messages may account for the (relative) failure of the classic general mass-attitude change studies (typified by the Columbia school), and of the editorial-endorsement studies, to detect any significant media effects. In the former case, the Columbia scholars, with their

focus on radio messages, should have been searching for media effects only among the least informed; in the latter case, editorial endorsement effects may have been occurring only among the most politically aware. In any event, a major point of the current study is this: Some awareness subgroups evince exposure-driven attitude change at any given time, while others do not. This fact leads us to our next point.

2. *Identifiable, repetitive patterns of effects occur across the political awareness scale*

Four consistent patterns of media exposure coefficients emerged from the analyses in Chapter 3. The pattern I choose to call the Wellesian model occurs when only the lowest one or two political awareness strata exhibit statistically significant media exposure effects. The rotisserie league model exhibits the opposite pattern, when only those at the high end of the awareness spectrum exhibit significant effects. The classic Converse-McGuire pattern, in which only those in the midrange of the political awareness scale exhibit significant attitude change, also occurs in the Chapter 3 regression estimations. Finally, an unexpected "U-shaped" pattern appears, in which both the highest and lowest awareness strata exhibit significant exposure effects, while those in the middle

strata do not. These four patterns account for all of the statistically significant exposure coefficients that appear in Tables 3.2 through 3.11. In the absence of one of these four responsiveness patterns, no statistically significant effects emerge at all in a given model estimation. The first three of these four patterns -- the Wellesian, the rotisserie league and the Converse-McGuire -- are predictable in terms of theoretical expectations about the mechanics of political awareness and attitude change, as presented in Chapter 2. The fourth, "U-shaped" pattern appears unexpectedly. Explaining the reason for the emergence of these four patterns leads to the next summary point.

3. *Media signal measures can be used to explain the responsiveness patterns*

The key to understanding the appearances of the four responsiveness patterns lies in the creation and implementation of a viable measure of mass media signal, an element lacking in most prior political media effects research. In Chapter 4 I introduce and report on a content-analytic measure of the newspaper signal to which the respondents in the Patterson panel survey were being exposed at the time of their interviews. Using the content analysis results, I construct a measure that includes the volume and evaluative tone of newspaper

signal concerning the candidates, for each of the two newspapers in the sample.

In Chapter 5 I decompose the newspaper signal measure into two constituent parts: The elite signal consists of editorials and syndicated political columns, and the mass signal consists of standard news reports. I then use these two measures to create a numerical measure of the "evaluative signal balance" for each candidate during each survey interview period. The pattern of relationships between the elite and mass evaluative signal balances show remarkably consistent associations with the four responsiveness patterns that appear in the survey data, a result summarized in Table 5.2.

Specifically, all survey-data appearances of the Wellesian responsiveness pattern are accompanied by a large mass evaluative signal balance and a zero or near-zero elite evaluative signal balance. All appearances of the rotisserie league model occur hand-in-hand with a zero or near-zero mass signal balance and a small elite signal balance. The Converse-McGuire model, which shows up only twice among the survey data model estimations, is accompanied both times by a medium-level mass evaluative signal balance and a relatively strong elite evaluative signal balance. Finally, the lone occurrence of the "U-shaped" pattern coexists with a large mass evaluative signal balance and a small elite evaluative signal balance.

In every single model estimation which evinces statistically significant newspaper exposure effects, the direction of the newspaper exposure coefficients matches the evaluative direction of the newspaper signal hypothesized to be driving the effect. Finally, in the four sets of survey model estimations in which no significant newspaper exposure effects exist, both the elite and mass evaluative signal balances are zero. I present this collection of circumstances as evidence that the observed patterns of exposure effects in the survey data are precipitated by the contemporaneous arrangement of the elite and mass evaluative signal balances. An inquiry into what drives the evaluative signal balance brings up the final summary point.

4. *Political campaigns are an attempt to influence media signal*

In Chapter 6 I speculate on the various potential influences on campaign media signal. Evaluative signal balance in a campaign can be affected by a number of factors, including the economy, the status of the nation in relation to foreign crises, past presidential performance, and many other factors. I provide some anecdotal evidence for the proposition that campaign strategists are one of these influencing factors. Many elements of President Ford's campaign strategy can be interpreted as attempts to indirectly influence voter attitudes by attempting

to control the mass media evaluative signal balance during the election period. In addition, I provide an anecdote from the Carter campaign showing that uncontrollable campaign events can also have an impact on voters' attitudes, presumably through the mediating mechanism of evaluative signal balance.

The four points outlined above sum up the contributions made by this project to our understanding of media influence on attitudes during a campaign. In the end, as is the case with most social science research projects, more questions are raised than answered. To conclude, I discuss a few of the potential areas of inquiry brought to the fore by the process and conclusions of the current enterprise.

...and where we're going: Future directions for research

This dissertation represents the tip of a rather large iceberg in terms of additional research. Despite recent advancements in the field of political attitudes, many of them provided by Zaller (1992), large gaps in our understanding of the political communication and attitude change process remain. Enough unanswered questions are raised in this dissertation alone to provide plenty of research fodder to fill an ambitious scholar's five-year docket. Four

areas in particular flow logically from the analyses undertaken in these pages.

1. *A confirmatory approach using different data in a different campaign setting*

This is the most immediate direction that suggests itself. The analyses undertaken in this dissertation were by necessity of an exploratory nature. We have narrowed down a number of possibilities for the functional form of the media-exposure-by-political-awareness interaction into four, and have also made some headway in understanding the different media signal conditions which give rise to the different responsiveness patterns. A researcher could predictively test the hypotheses outlined in Chapter 5 by locating or creating a suitable set of campaign panel data and conducting a content analysis on the appropriate newspapers and/or other political information sources. The evaluative signal balances calculated from the content analysis could then be used to generate predictions concerning the responsiveness patterns that should exist in the survey data.

These predictions could be tested directly by modeling the expected interactions between newspaper exposure and political awareness and estimating the models (one method of doing this, using an exponential transformation to

approximate a Converse-McGuire-type curve, is presented in Equations 2.2 and 2.3). These models would, of course, be interactive, which means that they would be estimated using the entire sample, rather than by engaging in a repeated estimation of the same model across different political awareness strata, as was done in Chapter 3.[4] The potential result of this line of research is that it may be possible to predict responsiveness patterns -- that is, the amount of attitude change that will occur for individuals at different levels of political awareness -- using measures of media signal. Some work in this area, concentrating on aggregate shifts rather than individual-level change, has been produced by Fan (1988), but has not received a wide readership in either the political science or communications fields.

---

[4] So why not simply go back and do this with the Patterson data? Any conclusions drawn from doing so would be meaningless, because the data would be subject to overfitting. That is, we can't legitimately run an exploratory analysis on a set of data, use the exploratory results to generate hypotheses, then confirm those hypotheses with the same data. This is why a researcher would need to perform a content analysis first and use those results to generate hypotheses concerning the functional forms of the exposure-by-awareness interactions in the survey data, rather than first observing the exposure-by-awareness relationships and then attempt to explain them by performing a content analysis, as was done in this dissertation.

2. *What about television?*

One of the most obvious limitations of the research presented here is that it is focused on explaining the effects of newspaper exposure on political attitudes, rather than the effects of mass media more generally, or television particularly. Television exposure is relegated to the status of a background variable after Chapter 3 in this dissertation. As noted much earlier, the television news abstracts assembled by the Vanderbilt Archives are a potential starting point for engaging in a similar analysis involving television exposure. The *Television News Index and Abstracts* may or may not contain enough detail to pursue this line of inquiry. The niceties of the abstracts are only part of the problem, however.

Explaining responsiveness to television signal may be an entirely different ball game than explaining responsiveness to newspaper signal. Conventional wisdom, bolstered by marketing research, would have us believe that television is an inherently more "mass-oriented" medium than newspapers. The "elite-mass" distinction within newspaper signal discussed here may not be a viable approach to television exposure patterns, because the elite half of the equation may not even exist.

On the other hand, plenty of highly specialized political information is

available on television, in the form of programs like *Crossfire* and *The McLaughlin Group*. The proliferation of specialized cable networks, notably CNN and C-SPAN, could provide further support for extending to television the domain-expertise argument applied to newspaper signal in the preceeding chapters. Of course, if the elite-mass approach is viable for examining television signal, then the Vanderbilt abstracts would be an inadequate source of content analytic material, because they summarize only network television newscasts. The only way around this problem would be to perform an ongoing content analysis of many available broadcast sources of political information. The Center for Media and Public Affairs in Washington, D.C. is in the process of attempting this task, and may prove to be an invaluable research tool in the future.

3. *The role of campaign strategy and organization*

This topic is reckoned with only in informal terms in Chapter 6 of this dissertation. A systematic quantitative examination, or rigorous qualitative case study approach to this issue is certainly warranted. Exactly how much influence do campaign organizations have over media signal during an election? An interesting body of work (e.g. West 1993; Jamieson 1992; Westlye 1991) has sprung up around this topic, using different approaches and terminology from that

presented here. Although the answer is inconclusive, most campaign scholars would agree that "quite a bit" would be a reasonable response to the question.

In terms of the ideas introduced in this dissertation, an interesting avenue of inquiry would be to examine whether campaign strategists expend more energy trying to influence the elite versus the mass aspects of media signal. All campaigns do both, of course -- David Broder and George Will are invited to fly on Air Force One just as surely as money is spent on prime-time television commercials. But which approach is the most cost-effective? Is an attempt to gain an editorial endorsement (an attempt to influence the elite aspect of media signal) worth as many potential votes as holding a cheerleading press conference for a group of AP reporters (an attempt to influence the mass aspect of media signal)? Should candidates aim their barrages at opinion leaders or at the masses? Which type of campaign is most effective? All of these questions are worthy of further study.

4. *Look more deeply at the cognitive aspects of media-induced political attitude change*

Numerous questions about the role of political and social cognition are raised or implied by this dissertation. For example, exactly how do individuals in

the high end of the political awareness spectrum respond differently to persuasive messages, compared to those at the low end? Do processing strategies change as a result of changes in evaluative signal balance? How is new evaluative information integrated into existing attitudes? How is the integration process different for unknown candidates (an impression-formation situation) than for familiar figures and incumbents (an attitude-change situation)? Do different processing strategies predominate at different stages of the campaign? Media messages may have greater impact under one type of processing strategy than under another.

Another psychological undercurrent in this work is the question of the impact of prior attitude upon susceptibility to media-signal-induced attitude change. The focus in this project is on political awareness as a cognitive mediator between media signal reception and attitude change, specifically political awareness in its role as a magazine of cognitive ammunition brought to bear in the political arena (see Chapter 2). Political awareness, or political domain expertise, is a powerful, utilitarian and theoretically appealing independent variable in this context.

In terms of social-psychological attitude theory, however, the level of specificity of political domain expertise as a cognitive mediator may not be

adequate. Instead, attitude theorists may be more comfortable with *prior attitude strength* as a mediator between media signal concerning an attitude object and change in attitude toward that object.[5] It should be apparent from the discussion in Chapter 2 that the crystallization of political attitudes among the politically aware -- in other words, the strength of prior attitudes -- is a major part of my theoretical justification for the use of political awareness as the primary moderating variable in this project. The question of political awareness versus prior attitude as cognitive mediator in the attitude change process is one of level of specificity rather than theoretical correctness. Political awareness is a very general and therefore theoretically parsimonious and useful variable, one that remains (operationally as well as conceptually) independent of the specific attitude object in question. Prior attitude strength as a moderating influence in the attitude change process is just as operationally effective,[6] but less

---

[5] Attitude theorists as general in their concerns as Rokeach (1968) and as specific as Petty and Cacioppo (1986) agree with the importance of prior attitude strength as a mediator or at least a cofactor in the attitude change process.

[6] In fact, replicating several of the analyses presented in Chapter 3 but stratifying by prior attitude strength toward the candidate in question (rather than by level of political awareness) leads to a proliferation of instances of the Wellesian response pattern. In other words, individuals with strong or extreme prior attitudes toward a candidate are resistant to changing those attitudes (and therefore exhibit relatively small or nonexistent media signal effects), while individuals with weakly held prior attitudes tend to be more open to change.

(continued...)

theoretically appealing because it lacks the generality of political awareness, not to mention its political relevance.

Prior attitude *direction*, rather than strength, is another area for future inquiry. Zaller (1992; 1996) discusses this aspect of the political attitude change process in great detail. Essentially, the direction of prior attitude is yet another moderating factor in the attitude change process: Individuals are more likely to respond to (and be exposed to in the first place) information that confirms a previously held attitude's direction, and less likely to respond to contra-attitudinal information. One direction for future research, then, is to explore the possibility of creating a political attitude-change model which incorporates prior attitude strength and direction as well as the more generalized influence of political awareness.

Another matter tangentially brought up in this dissertation is the question of on-line versus memory-based processing of evaluative information. Although the cognitive mechanics of candidate impression formation and evaluation are not addressed directly, the results of the analyses presented here coincidentally provide strong circumstantial support for the on-line model of candidate

---

(...continued)
Unfortunately, sample size limitations once again prevent concurrent exploration of these two variables in the same estimation procedure.

evaluation (Lodge, McGraw and Stroh 1989; McGraw, Lodge and Stroh 1990). The construction of the evaluative signal balance measure introduced in Chapter 5, in fact, implicitly assumes an on-line judgment procedure. On-line processing is considered to occur when freshly-encountered bits of evaluative information are integrated into a "judgment operator" concerning a particular object, in this case a presidential candidate. One of the hallmarks of an on-line evaluation procedure is that evaluative information concerning a candidate has an immediate marginal impact on an individual's attitude toward that candidate.

The evaluative signal balance measures are constructed contemporaneous to the interview dates in the Patterson panel survey. This means that evaluative information in the newspapers is assumed to have an immediate impact on candidate impressions, on a day-to-day basis. Given that the evaluative signal balance measures appear to have a strong relationship to the responsiveness patterns that occur in the survey data, the implicit on-line evaluation model receives support in the analyses. A more explicit approach to this issue is warranted, of course, and is in fact currently under way (Hubbard 1996 represents an early, flawed attempt to address this notion).

The four areas of future inquiry outlined above are only some of the

research possibilities inherent in the political communication and attitude change realm. One inescapable conclusion resulting from this discussion is that the relationship between mass media and political attitude change is fantastically complicated, almost Gordian in its contingencies. Complexity does not equal invalidation, however, and while it may lead to disenchantment and frustration, a multifaceted problem is no excuse for social scientists to throw up their hands and surrender. De Tocqueville's characterization of the American press as "a singular power" in the political realm applies to its effects as well as its character. The complex nature of the process through which media messages eventually affect (or fail to affect) individual attitudes has led to countless instances of the underestimation of media exposure's political impact. Further, the lack of information flow among political scientists, social psychologists and communication studies scholars has exacerbated the problem. The apotheosis of the underestimation of the political effects of mass media is the minimal effects doctrine, which has been eroding steadily for the past 10 or 15 years. I hope that this dissertation has contributed something to the erosion process.

References

Achen, Christopher H. 1975. "Mass Political Attitudes and the Survey Response." *American Political Science Review* 69:1218-1231.

Aldrich, John R. and Forrest D. Nelson. 1984. *Linear Probability, Logit and Probit Models.* Newbury Park, CA: Sage Publications.

Alexander, Herbert E. 1984. *Financing Politics: Money, Elections and Politcial Reform.* Washington: CQ Press.

Allison, Paul D. 1990. "Change Scores as Dependent Variables in Regression Analysis." In *Sociological Methodology 1990*, ed. Clifford C. Clogg. Oxford: Basil Blackwell.

Alwin, Duane F., Ronald L. Cohen and Theodore M. Newcomb. 1991. *Political Attitudes over the Life Span: The Bennington Women after Fifty Years.* Madison, WI: University of Wisconsin Press.

Andreoli, Virginia and Stephen Worchel. 1978. "Effects of Media, Communicator, and Message Position on Attitude Change." *Public Opinion Quarterly* 42:59-70.

Ansolabehere, Stephen, Roy Behr and Shanto Iyengar. 1991. "Mass Media and Elections: An Overview." *American Politics Quarterly* 19:109-139.

Arterton, F. Christopher. 1978. "Campaign Organizations Confront the Media-Political Environment." In *Race for the Presidency: The Media and the Nominating Process*, Ed. James David Barber. Englewood Cliffs, NJ: Prentice-Hall.

Bagdikian, Ben H. 1992. *The Media Monopoly.* Boston: Beacon Press.

Barber, James David (Ed.). 1978. *Race for the Presidency: The Media and the Nominating Process.* Englewood Cliffs, NJ: Prentice-Hall.

Barbour, William (Ed.). 1994. *Mass Media: Opposing Viewpoints.* San Diego, CA: Greenhaven.

Baron, Reuben M. and David A. Kenny. 1986. "The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations." *Journal of Personality and Social Psychology* 51:1173-1182.

Bartels, Larry M. 1993. "Messages Received: The Political Impact of Media Exposure." *American Political Science Review* 79:804-815.

Bennett, W. Lance. 1992. *The Governing Crisis: Media, Money, and Marketing in American Elections*. New York: St. Martin's Press.

-------. 1996. *News: The Politics of Illusion*, 3rd ed. New York: Longman.

Bentler, Peter M. 1989. *EQS: Structural Equations Program Manual, Version 3.0*. Los Angeles: BMDP Statisitical Software.

Berelson, Bernard F. 1952. *Content Analysis in Communication Research*. Glencoe, IL: Free Press.

Berelson, Bernard R., Paul F. Lazarsfeld and William N. McPhee. 1954. *Voting*. Chicago: University of Chicago Press.

Bitzer, Lloyd and Theodore Reuter. 1980. *Carter vs. Ford: The Great Debates*. Madison, WI: University of Wisconsin Press.

Bollen, Kenneth A. 1989. *Structural Equations with Latent Variables*. New York: Wiley.

Bollen, Kenneth A. 1996. "An Alternative Two Stage Least Squares (2SLS) Estimator for Latent Variable Equations." *Psychometrika* 61:109-121.

Brians, Craig Leonard and Martin P. Wattenberg. 1996. "Campaign Issue Knowledge and Salience: Comparing Reception from TV Commericals, TV News, and Newspapers." *American Journal of Political Science* 40:172-193.

Bryant, Barbara Everitt. 1981. "Marketing Newspapers with Lifestyle Research." *American Demographics* 3:21-25.

Bybee, Carl R., Jack M. McCleod, William D. Luetscher and Gina Garramone. 1981. "Mass Communication and Voter Volatility." *Public Opinion Quarterly* 45:69-90.

"Campaign Strategy for President Ford 1976." n.d. Dorothy Downton Files, Box 1, Gerald R. Ford Library.

Campbell, Angus, Philip E. Converse, Warren E. Miller and Donald E. Stokes. 1960. *The American Voter.* New York: John Wiley and Sons.

Cantril, Hadley, Hazel Gaudet and Herter Herzog. 1940. *The Invasion from Mars: The Psychology of Panic.* Princeton, NJ: Princeton University Press.

Chaffee, Steven H. and Sun Yuel Cho. 1980. "Time of Decision and Media Use during the Ford-Carter Campaign." *Public Opinion Quarterly* 44:53-69.

Chaffee, Steven H., Xinshu Ziao and Glenn Leshner. 1994. "Political Knowledge and the Campaign Media of 1992." *Communication Research* 21:305-324.

Chaiken, Shelly. 1980. "Heuristic versus Systematic Information Processing and the Use of Source versus Message Cues in Persuasion." *Journal of Personality and Social Psychology* 39:752-766.

Chaiken, Shelly, Akiva Liberman and Alice H. Eagly. 1989. "Heuristic and Systematic Information Processing within and beyond the Persuasion Context." In *Unintended Thought.* Eds. James S. Uleman and John A. Bargh. New York: The Guilford Press.

Clarke, Peter and Eric Fredkin. 1978. "Newspapers, Television and Political Reasoning." *Public Opinion Quarterly* 42:143-160.

Coleman, James S. 1964. *Models of Change and Response Uncertainty.* Englewood Cliffs, NJ: Prentice-Hall.

-------. 1968. "The Mathematical Study of Change." In *Methodology in Social Research.* Eds. Hubert M. Blalock and Ann B. Blalock. New York: McGraw-Hill.

Conover, Pamela Johnston and Stanley Feldman. 1989. "Candidate Perception in an Ambiguous World: Campaigns, Cues and Inference Processes." *American Journal of Political Science* 33:912-940.

Converse, Philip E. 1962. "Information Flow and the Stability of Partisan Attitudes." *Public Opinion Quarterly* 26:578-599.

------. 1964. "The Nature of Belief Systems in Mass Publics." In *Ideology and Discontent*. Ed. David Apter. New York: Free Press.

Coombs, Steven L. 1981. "Editorial Endorsements and Electoral Outcomes." In *More than News: Media Power in Public Affairs*. Jointly authored by Michael B. MacKuen and Steven L. Coombs. Beverly Hills, CA: Sage Publications.

Crone, Martha Ellis. 1993. "The Nature of Political Sophistication in Mass Publics." Presented at the Annual Meeting of the American Politcial Science Association, Washington, D.C.

Daudt, H. 1961. *Floating Voters and the Floating Vote: A Critical Analysis of American and English Election Studies*. Leiden, Netherlands: H.E. Stenfert Kroese N.V.

DeFleur, Melvin L., Lucinda Davenport, Mary Cronin and Margaret DeFleur. 1992. "Audience Recall of News Stories Presented by Newspaper, Computer, Television and Radio." *Journalism Quarterly* 69:443-456.

Delli Carpini, Michael X. and Scott Keeter. 1991. "Stability and Change in the U.S. Public's Knowledge of Politics." *Public Opinion Quarterly* 55:583-612.

------. 1993. "Measuring Political Knowledge: Putting First Things First." *American Journal of Political Science* 37:1179-1206.

Delli Carpini, Michael X., Scott Keeter and J. David Kennamer. 1994. "Effects of the News Media Environment on Citizen Knowledge of State Politics and Government." *Journalism Quarterly* 71:443-456.

Dobson, Douglas and Douglas St. Angelo. 1975. "Party Identification and the Floating Vote: Some Dynamics." *American Political Science Review* 69:481-490.

Dreyer, Edward C. 1971. "Media Use and Electoral Choices: Some Political Consequences of Information Exposure." *Public Opinion Quarterly* 35:544-553.

Entman, Robert M. 1989. "How the Media Affect What People Think: An Information-Processing Approach." *Journal of Politics* 51:347-370.

Erikson, Robert S. 1976. "The Influence of Newspaper Endorsements in Presidential Elections: The Case of 1964." *American Journal of Political Science* 20:207-233.

Fan, David P. 1988. *Predictions of Public Opinion from the Mass Media.* New York:Greenwood.

Feldman, Stanley. 1989. "Reliability and Stability of Policy Positions: Evidence from a Five-Wave Panel." *Political Analysis* 1:25-60.

Feldman, Stanley and Lee Sigelman. 1985. "The Political Impact of Prime-Time Television: The Day After." *Journal of Politics* 47:556-578.

Feldman, Stanley and John R. Zaller. 1992. "The Political Culture of Ambivalence: Ideological Responses to the Welfare State." *American Journal of Political Science* 36:268-307.

Fink, Conrad C. 1988. *Media Ethics: In the Newsroom and Beyond.* New York: McGraw-Hill.

Finkel, Steven E. and Peter R. Schrott. 1993. "Campaign Effect on Voter Choice in the German Election of 1990." Presented at the Annual Meeting of the American Politcial Science Association, Washington, D.C.

Fiorina, Morris P. 1981. *Retrospective Voting in American National Elections.* New Haven, CT: Yale University Press.

-------. 1990. "Information and Rationality in Elections." In *Information and Democratic Processes*. Eds. John A. Ferejohn and James H. Kuklinski. Urbana, IL: University of Illinois Press.

Fiske, Susan T., Richard R. Lau and Richard A. Smith. 1990. "On the Varieties and Utilities of Political Expertise." *Social Cognition* 8:31-48.

Fiske, Susan T. and Shelley E. Taylor. 1991. *Social Cognition*, 2nd ed. New York: McGraw-Hill.

Folkerts, Jean and Dwight L. Teeter, Jr. 1989. *Voices of a Nation: A History of Media in the United States*. New York:Macmillan.

Gosnell, Harold F. 1937. *Machine Politics: Chicago Model*. Chicago: University of Chicago Press.

Gosnell, Harold F. and Margaret J. Schmidt. 1936. "Relation of the Press to Voting in Chicago." *Journalism Quarterly* 13:129-147.

Graber, Doris A. 1984. *Processing the News: How People Tame the Information Tide*. White Plains, NY: Longman.

-------. 1993. "Media and Politics." In *Poltical Science: Looking to the Future*, Vol. 3. Evanston, IL: Northwestern University Press.

-------. 1993. *Mass Media and American Politics*. Washington, DC: CQ Press.

Gregg, James E. 1965. "Newspaper Editorial Endorsements and California Elections, 1948-62." *Journalism Quarterly* 42: 532-538.

Hacker, Kenneth L. 1995. "Interpersonal Communication and the Construction of Candidate Images." In *Candidate Images in Presidential Elections*, ed. Kenneth L. Hacker. Westport, CT: Praeger.

Hamill, Ruth and Milton Lodge. 1986. "Cognitive Consequences of Political Sophistication." In *Political Cognition*, Eds. Richard R. Lau and David O. Sears. Hillsdale, NJ: Lawrence Erlbaum Associates.

Hanushek, Eric A. and John E. Jackson. 1977. *Statistical Methods for Social Scientists*. New York: Academic Press.

Hellinger, Daniel and Dennis R. Judd. 1994. *The Democratic Facade*, 2nd Ed. Belmont, CA: Wadsworth Publishing.

Hess, Stephen. 1981. *The Washington Reporters*. Washington, DC: Brookings.

Holsti, Ole R. 1969. *Content Analysis for the Social Sciences and Humanities*. Reading, MA: Addison-Wesley.

Hovland, Carl I., Irving L. Janis and Harold H. Kelley. 1953. *Communication and Persuasion*. New Haven, CT: Yale University Press.

Hovland, Carl I., Arthur A. Lumsdaine and Fred D. Sheffield. 1949. *Experiments on Mass Communication*. Princeton, NJ: Princeton University Press.

Hsiao, Cheng. 1986. *Analysis of Panel Data*. Cambridge: Cambridge University Press.

Hsu, Mei-Ling and Vincent Price. 1993. "Political Expertise and Affect: Effects on News Processing." *Communication Research* 20:671-695.

Hubbard, Clark. 1996. "On-Line versus Memory-Based Processing: A Campaign Field Test." Paper presented at the annual meeting of the Midwest Political Science Association, Chicago, IL.

Huckfeldt, Robert, Paul Allen Beck, Russell J. Dalton and Jeffrey Levine (1995). "Political Environments, Cohesive Social Groups, and the Communication of Public Opinion." *American Journal of Political Science* 39:1025-1054.

Huckfeldt, Robert, C.W. Kohfeld and Thomas W. Likens. 1982. *Dynamic Modeling: An Introduction*. Newbury Park, CA: Sage Publications.

Huckfeldt, Robert, and John Sprague. 1987. "Networks in Context: The Social Flow of Political Information." *American Political Science Review* 81:1197-1216.

Iyengar, Shanto. 1991. *Is Anyone Responsible? How Television Frames Political Issues*. Chicago: University of Chicago Press.

Iyengar, Shanto and Donald R. Kinder. 1987. *News That Matters*. Chicago: University of Chicago Press.

Jacobson, Gary C., and Samuel Kernell. 1983. *Strategy and Choice in Congressional Elections*, 2nd Ed. New Haven, CT: Yale University Press.

Jamieson, Kathleen Hall. 1992. *Dirty Politics: Deception, Distraction, and Democracy*. New York: Oxford University Press.

Jennings, M. Kent and Richard G. Niemi. 1981. *Generations and Politics: A Panel Study of Young Adults and Their Parents*. Princeton, NJ: Princeton University Press.

Joslyn, Richard. 1984. *Mass Media and Elections*. Reading, MA: Addison-Wesley.

Katz, Elihu. 1987. "Communications Research since Lazarsfeld." *Public Opinion Quarterly* 51:S25-S45.

Kazee, Thomas A. 1981. "Television Exposure and Attitude Change: The Impact of Political Interest." *Public Opinion Quarterly* 45:507-518.

Kernell, Samuel. 1993. *Going Public: New Strategies of Presidential Leadership.* 2nd ed. Washington: CQ Press.

Kinder, Donald R. and David O. Sears. 1985. "Public Opinion and Political Action." In *Handbook of Social Psychology*, 3rd ed. Eds. Gardner Lindzey and Eliot Aronson. New York: Random House.

Kingdon, John W. 1970. "Opinion Leaders in the Electorate." *Public Opinion Quarterly* 34:256-261.

Klapper, Joseph T. 1960. *The Effects of Mass Communication*. New York: The Free Press.

Krippendorff, Klaus. 1980. *Content Analysis: An Introduction to Its Methodology*. Beverly Hills, CA: Sage Publications.

Krosnick, Jon A. 1990. "Expertise and Political Psychology." *Social Cognition* 8:1-8.

Krosnick, Jon A. and Laura A. Brannon. 1993. "The Media and the Foundations of Presidential Support: George Bush and the Persian Gulf Conflict." *Journal of Social Issues* 49:167-182.

Krosnick, Jon A. and Donald R. Kinder. 1990. "Altering the Foundations of Popular Support for the President through Priming." *American Political Science Review* 84:497-512.

Kuklinski, James H. and Gary M. Segura. 1995. "Endogeneity, Exogeneity, Time and Space in Political Representation." *Legislative Studies Quarterly* 20:3-21.

Lane, Robert E. 1962. *Political Ideology: Why the American Common Man Believes What He Does*. New York: Free Press.

Lazarsfeld, Paul F., Bernard Berelson and Hazel Gaudet. 1948. *The People's Choice*, 2nd ed. New York: Columbia University Press.

Lemert, James B. 1981. *Does Mass Communication Change Public Opinion After All?* Chicago: Nelson-Hall.

Lenart, Silvo. 1994. *Shaping Political Attitudes: The Impact of Interpersonal Communication and Mass Media*. Thousand Oaks, CA: Sage Publications.

Lenart, Silvo and Kathleen M. McGraw. 1989. "America Watches 'Amerika:' Television Docudrama and Political Attitudes." *Journal of Politics* 51:697-712.

Lewis-Beck, Michael S. 1992. *Forecasting Elections*. Washington, DC: CQ Press.

Lodge, Milton, Kathleen M. McGraw and Patrick Stroh. 1989. "An Impression-Driven Model of Candidate Evaluation." *American Political Science*

Review 83:399-419.

Lundberg, George A. 1926. "The Newspaper and Public Opinion." *Social Forces* 4:709-715.

Luskin, Robert C. 1987. "Measuring Political Sophistication." *American Journal of Political Science* 31:856-899.

Macaluso, Theodore F. 1977. "Political Information, Party Identification and Voting Defection." *Public Opinion Quarterly* 41:255-260.

MacKuen, Michael. 1981. "Social Communication and the Mass Policy Agenda." In *More than News: Media Power in Public Affairs.* Jointly authored by Michael B. MacKuen and Steven L. Coombs. Beverly Hills, CA: Sage Publications.

———. 1984. "Exposure to Information, Belief Integration, and Individual Responsiveness to Agenda Change." *American Political Science Review* 78:372-391.

———. 1990. "Speaking of Politics: Individual Conversational Choice, Public Opinion, and the Prospects for Deliberative Democracy." In *Information and Democratic Processes*, Eds. John A. Ferejohn and James H. Kuklinski. Urbana, IL: University of Illinois Press.

Markus, Gregory. 1979. *Analyzing Panel Data.* Beverly Hills, CA: Sage Publications.

McCombs, Maxwell E. 1967. "Editorial Endorsements: A Study of Influence." *Journalism Quarterly* 44:545-548.

McCombs, Maxwell E. and Donald L. Shaw. 1972. "The Agenda-Setting Function of Mass Media." *Public Opinion Quarterly* 36:176-187.

McDowell, James L. 1965. "The Role of Newspapers in Illinois' At-Large Election." *Journalism Quarterly* 42:281-284.

McGraw, Kathleen M., Milton Lodge and Patrick Stroh. 1990. "On-Line

Processing in Candidate Evaluation: The Effects of Issue Order, Issue Importance and Sophistication." *Political Behavior* 12:41-58.

McGuire, William J. 1983. "A Contextualist Theory of Knowledge: Its Implications for Innovation and Reform in Psychological Research." In *Advances in Experimental Social Psychology*, V. 16. Ed. Leonard Berkowitz. New York: Academic Press.

------. 1985. "Attitudes and Attitude Change." In *Handbook of Social Psychology*, 3rd ed. Eds. Gardner Lindzey and Eliot Aronson. New York: Random House.

McQuail, Denis. 1977. *Analysis of Newspaper Content*. London: Her Majesty's Stationery Office.

Miller, Arthur H., Edie N. Goldenberg and Lutz Erbring. 1979. "Type-Set Politics: Impact of Newspapers on Public Confidence." *American Political Science Review* 73:67-84.

Mueller, John E. 1970. "Choosing among 133 Candidates." *Public Opinion Quarterly* 34:395-402.

Mutz, Diana C. 1992. "Mass Media and the Depoliticization of Personal Experience." *American Journal of Political Science* 36:483-508.

------. 1995. "Effects of Horse-Race Coverage on Campaign Coffers: Strategic Contributing in Presidential Primaries." *Journal of Politics* 57:1015-1042.

Myers, R. Kelly and Clark Hubbard. 1996. "Learning and Stability: Political Attentiveness and Candidate Selection." Paper presented at the annual meeting of the American Association for Public Opinion Research, Salt Lake City, UT.

Neuman, W. Russell. 1976. "Patterns of Recall among Television News Viewers." *Public Opinion Quarterly* 40:115-123.

------. 1990. "The Threshold of Public Attention." *Public Opinion Quarterly*

54:159-176.

Neuman, W. Russell, Marion R. Just and Ann N. Crigler. 1992. *Common Knowledge: News and the Construction of Political Meaning.* Chicago: University of Chicago Press.

Neuman, W. Russell and Ithiel de Sola Pool. 1986. "The Flow of Communications into the Home." In *Media, Audience and Social Structure.* Eds. Sandra J. Ball-Rokeach and Muriel Cantor. Beverly Hills: Sage.

Nisbett, Richard and Lee Ross. 1980. *Human Inference: Strategies and Shortcomings of Social Judgment.* Englewood Cliffs, NJ: Prentice-Hall.

Norpoth, Helmut and Kendall L. Baker. 1980. "Mass Media Use and Electoral Choice in West Germany." *Comparative Politics* 12:1-14.

Ottati, Victor C., Nayda Terkildsen and Clark Hubbard. 1996. "Happy Faces Elicit Heuristic Processing in a Candidate Evaluation Task: A Cognitive Tuning Account." Paper presented (*ad infinitum*) at the annual meeting of the Midwest Political Science Association, Chicago, IL.

Page, Benjamin I. and Robert Y. Shapiro. 1992. *The Rational Public: Fifty Years of Trends in Americans' Policy Preferences.* Chicago: University of Chicago Press.

Page, Benjamin I., Robert Y. Shapiro and Glenn R. Dempsey. 1987. "What Moves Public Opinion?" *American Political Science Review* 81:23-41.

Patterson, Thomas E. 1980. *The Mass Media Election: How Americans Choose Their President.* New York: Praeger.

------. 1993. *Out of Order.* New York: Knopf.

Patterson, Thomas E. and Robert D. McClure. 1976. *The Unseeing Eye: The Myth of Television Power in National Elections.* New York: G.P. Putnam's Sons.

Pedersen, Johannes T. 1978. "Political Involvement and Partisan Change in Presidential Elections." *American Journal of Political Science* 22:18-30.

Petty, Richard E. and John T. Cacioppo. 1979. "Issue-Involvement Can Increase or Decrease Persuasion by Enhancing Message-Relevant Cognitive Responses." *Journal of Personality and Social Psychology* 37:1915-1926.

------. 1981. *Attitudes and Persuasion: Classic and Contemporary Approaches.* Dubuque, IA: Wm. C. Brown and Co.

------. 1986. *Communication and Persuasion: Central and Peripheral Routes to Attitude Change.* New York: Springer-Verlag.

Plewis, Ian. 1985. *Analysing Change.* Chichester, England: John Wiley & Sons.

Pomper, Gerald M. *et al.* 1977. *The Election of 1976.* New York: David McKay Company.

Popkin, Samuel L. 1991. *The Reasoning Voter: Communication and Persuasion in Presidential Campaigns.* Chicago: University of Chicago Press.

Postman, Neil. 1985. *Amusing Ourselves to Death: Public Discourse in the Age of Show Business.* New York: Penguin.

"Preliminary Media Plan for President Ford Campaign." August 21, 1976. Dorothy Downton Files, Box 1, Gerald R. Ford Library.

Price, Vincent and Edward J. Czilli. 1993. "Who Learns Which Kinds of News: Modelling Aggregate Patterns of Recognition and Recall." Presented at the Annual Meeting of the International Communication Association, Washington, D.C.

Price, Vincent and John R. Zaller. 1993. "Who Gets the News: Alternative Measures of News Reception and Their Implications for Research." *Public Opinion Quarterly* 57:133-164.

Rahn, Wendy M., John H. Aldrich and Eugene Borgida. 1994. "Individual and Contextual Variations in Political Candidate Appraisal." *American Political Science Review* 88:193-199.

Robinson, John P. 1972. "Perceived Media Bias and the 1968 Vote: Can the Media Affect Behavior after All?" *Journalism Quarterly* 49:239-246.

------. 1974. "The Press as King-Maker: What Surveys from the Last Five Campaigns Show." *Journalism Quarterly* 51: 587-594.

Robinson, Michael J. 1976. "Public Affairs Television and the Growth of Political Malaise: The Case of 'The Selling of the Pentagon.'" *American Political Science Review* 70:409-432.

Robinson, Michael J. and S. Robert Lichter. 1991. "'The More Things Change...': Network News Coverage of the 1988 Presidential Nomination Races." In *Nominating the President*. Eds. E. H. Buell, Jr. and L. Sigelman. Knoxville, TN: University of Tennessee Press.

Rokeach, Milton. 1968. *Beliefs, Attitudes and Values*. San Francisco: Jossey-Bass.

Sanders, David, David Marsh and Hugh Ward. 1993. "The Electoral Impact of Press Coverage of the British Economy, 1979 - 87." *British Journal of Political Science* 23:175-210.

Shapiro, Robert Y., John T. Young, Kelly D. Patterson, Jill E. Blumenfeld, Douglas A. Cifu, Sara M. Offenhartz and Ted E. Tsekerides. 1991. "Media Influence on Support for Presidential Candidates in Primary Elections: Theory, Method and Evidence." *International Journal of Public Opinion Research* 3:340-365.

Smith, Charles P., Sheila C. Feld and Carol E. Franz. 1992. "Methodological Considerations: Steps in Research Employing Content Analysis Systems." In *Motivation and Personality: Handbook of Thematic Content Analysis*. Ed. C.P. Smith. Cambridge: Cambridge University Press.

Smith, Ted and S. Robert Lichter. 1996. "Major Media Coverage of the 1996 Presidential Election Campaign." Paper presented at the annual meeting of the American Association for Public Opinion Research, Salt Lake City, UT.

Sniderman, Paul M., Richard A. Brody and Philip E. Tetlock. 1991. *Reasoning and Choice: Explorations in Political Psychology*. New York: Cambridge

University Press.

Stanley, Harold W. and Richard G. Niemi. 1994. *Vital Statistics on American Politics*, 4th Ed. Washington: CQ Press.

Sullivan, Denis G. and Roger D. Masters. 1988. "Happy Warriors: Emotional Responses to Leaders' Facial Displays." *American Journal of Political Science* 32:345-368.

Tichenor, P.J., G.A. Donohoe and C.N. Olien. 1970. "Mass Media Flow and Differential Growth in Knowledge." *Public Opinion Quarterly* 34:159-170.

de Tocqueville, Alexis. [1835]1945. *Democracy in America.* New York: Vintage Books.

Ursomarso, Frank A. n.d. "Advanceman's Comments on Effectiveness of Ford Campaign Speeches and Appearances." Composite General Accessions File, Box 2, Gerald R. Ford Library.

Veblen, Eric P. 1975. *The Manchester Union-Leader in New Hampshire Elections.* Hanover, NH: The University Press of New England.

Wagner, Joseph. 1983. "Media Do Make a Difference: The Differential Impact of Mass Media in the 1976 Presidential Race." *American Journal of Political Science* 27:407-430.

Weber, Robert Philip. 1990. *Basic Content Analysis, 2nd Ed.* Newbury Park, CA: Sage Publications.

West, Darrell M. 1993. *Air Wars: Television Advertising in Election Campaigns, 1952 - 1992.* Washington, DC: CQ Press.

Westlye, Mark C. 1991. *Senate Elections and Campaign Intensity.* Baltimore, MD: The Johns Hopkins University Press.

Wicks, Robert H. and Dan G. Drew. 1991. "Learning from News: Effects of Message Consistency and Medium on Recall and Inference Making." *Journalism Quarterly* 68:1155-1164.

Winter, James. 1980. "Contingent Conditions in the Agenda-Setting Process." In *Mass Communication Review Yearbook*, vol. 2. Ed. W. de Bock. Beverly Hills, CA: Sage.

Witcover, Jules. 1977. *Marathon: The Pursuit of the Presidency 1972-1976*. New York: Viking Press.

Zaller, John R. 1987. "Diffusion of Political Attitudes." *Journal of Personality and Social Psychology* 53:821-833.

------. 1989. "Bringing Converse Back In: Modeling Information Flow in Political Campaigns." *Political Analysis* 1:181-234.

------. 1991. "Information, Values, and Opinion." *American Political Science Review* 85:1215-1237.

-------. 1992. *The Nature and Origins of Mass Opinion*. Cambridge, England: Cambridge University Press.

------. 1993. "The Converse-McGuire Model of Attitude Change and the Gulf War Opinion Rally." *Political Communication* 10:369-388.

------. 1996. "The Myth of Massive Media Impact Revived." In *Political Persuasion and Attitude Change*. Eds. Diana C. Mutz, Paul M. Sniderman and Richard A. Brody. Ann Arbor, MI: University of Michigan Press.

Zaller, John R. and Stanley Feldman. 1992. "A Simple Model of the Survey Response: Answering Questions versus Revealing Preferences" *American Journal of Political Science* 36:579-616.

Zaller, John R. and Vincent Price. 1990. "A Study of Everyday Memory: Learning and Forgetting the News." Revised Version of a Paper Presented at the Annual Meeting of the Midwest Political Science Association, Chicago.

Zillman, Dolf and Jennings Bryant, eds. 1985. *Selective Exposure to Communication*. Hillsdale, NJ: Lawrence Erlbaum Associates.

Zukin, Cliff. 1977. "A Reconsideration of the Effects of Information on Partisan Stability." *Public Opinion Quarterly* 41:244-254.