TURBULENT TIMES:

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Abstract

In this paper, we put several foundational theories of public opinion to the test by examining how the public came to decide which issue was the “most important problem” facing America from the mid-1960s to the early 1970s. Using data from Gallup’s MIP series, we consider the effects of changes in political conditions by incorporating a content analysis of major news stories in the period as well as objective measures of real-world events. Our findings provide important insights into the ways patterns of issue interest and information stratification shape judgments about the public agenda. In line with the notion of “issue publics”, we find evidence that those groups with most at stake in a given issue area are more sensitive than others to developments in that area. Specifically, we find that blacks are more sensitive than whites to changes in coverage relating to race, and older Americans are more sensitive than the young to an increased focus by the media on social issues. We also find that groups at all levels of cognitive sophistication are receptive to changes in the media agenda, even when controlling for objective measures of real-world events. However, in different issue areas, different dynamics appear.
The Gallup organization’s exploration of public attitudes concerning the nation’s “most important problem” is nearly as old as national polling itself. First asked in September 1935, the question has been repeated at regular intervals ever since, allowing researchers to follow both long-term historical trends as well as reactions to more immediate social and political events. Spanning a great variety of social and political contexts, the most important problem (MIP) series captures social change from the perspective of those who were experiencing it first-hand, with each survey identifying the agenda of problems that concerned Americans most at that specific point in time.

In our study, we examine a critical period in American political history – the years from 1964 to 1971. While it might be ideal to study the entire range of the MIP series (1935 to 2005), looking at the entire span of the series would involve pooling vastly different time periods, issue categories, and media outlets (e.g. radio, newspapers, television, and the internet).¹ We choose the period from 1964 to 1971 for study because it is historically interesting and involved periods of considerable volatility on the public agenda (see Smith 1985; Mayhew 2002; Aldrich and Niemi 1996).² During this era, which ranges from the first months of the Johnson administration until just prior to the Watergate scandal, issues of racial and gender equality, the Vietnam War, and urban unrest jumped onto the public agenda, then faded to make way for other concerns. It is this volatility in the public agenda that makes these years particularly appropriate to understanding individual-level patterns of change in judgments about the nation’s most important problem.

Using all twenty-five available Gallup polls that contain the MIP question conducted between 1964 and 1971, we describe how particular groups of individuals responded to changes in

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¹ In addition, because the individual-level Gallup data is not freely available – single data sets must be purchased from the Roper Center for Public Opinion Research at great expense – to extend this study for the entire time period would cost at least $40,000 in data acquisition charges alone.

² For instance, David Mayhew (2002) calls these years “unquestionably turbulent,” and Aldrich and Niemi (1996) say it is a “critical period” that exhibited “a wide variety of changes.”
the social and political world. We explore the effects of changes in the volume of press coverage – the media agenda – on citizens’ estimation of the MIP – the public agenda – by incorporating a content analysis of major news stories in the period. We trace how developments in the political world changed the structure of individual decisions about the most important problem question over time, and we observe how those effects differed for particular groups in the population.

We find, in general, that as the percentage of news devoted to a given subject increased, the probability of an “average” person picking the corresponding topic as the nation’s most important increased as well, even accounting for changes in objective political indicators, such as economic performance, wartime casualties, and racial protests. However, the dynamics of this agenda-setting effect vary according to the personal characteristics of the citizens. First, in line with the notion of “issue publics” (Converse 1990; Almond 1950), we find evidence that those groups with most at stake in a given issue area are more sensitive than others to developments in that area. Specifically, blacks are more sensitive than whites to changes in coverage relating to race, and older Americans are more sensitive than the young to an increased focus by the media on social issues. Second, we find that groups at all levels of cognitive sophistication – measured here by education – are receptive to changes in the media agenda, even when controlling for objective measures of real-world events. However, in different issue areas, different dynamics appear. Following Converse’s (1990) metaphor of an electorate highly stratified into layers of political knowledge, we find that individuals with

3 It is possible that not only the volume, but also the tone of coverage matters for citizens’ assessments of the nation’s most important problem. Zaller’s (1992) work on Vietnam suggests, for example, that early coverage of the war was an example of a unified one-sided information flow, while later coverage involved two-sided, elite conflict about the war’s meaning and value. This difference in tone could have affected citizens’ willingness to name the war as the nation’s most important problem. We believe the tone of coverage is an important avenue for future study, but in this research, we begin by focusing on the volume of coverage.

4 In this paper, we use education as a proxy for cognitive sophistication. Ideally, we would use a measure of political information. However, such measures are not available in the Gallup datasets.
lower levels of sophistication display higher levels of baseline concern about the war in Vietnam, but respondents at all levels of sophistication are equally responsive as the media devotes more attention to the issue.\textsuperscript{5} With respect to issues of race, by contrast, there are no differences in levels of baseline attentiveness, but the least educated are far more sensitive to changes in media coverage. As a greater portion of the media agenda is devoted to race or civil rights issues, the least sophisticated become dramatically more likely than their better-educated counterparts to mention race as the nation’s most important problem. Individuals with higher levels of education, on the other hand, are comparatively more concerned about social issues. On other issues, such as the economy or government, we find respondents essentially unresponsive to changes in the media agenda once objective measures of real-world events, such as the unemployment rate, are included in the model.

\textbf{The Media and the Most Important Problem}

The study of the setting of the public’s political agenda – the process by which problems become salient as political issues – is a critical area of research in political science (see Neuman 1990; Weaver et al 1981; Erbring, Goldenberg, and Miller 1980; Iyengar and Kinder 1987; MacKuen 1981, 1984; McCombs and Shaw 1972).\textsuperscript{6} The Gallup MIP data have a long history of use in studying these questions (see, for example: Almond 1950; Behr and Iyengar 1985; Bennett and Tuchfarber 1975; Burstein 1979; Funkhouser 1973; Ladd 1978; MacKuen 1981; McAdam 1982; Nie, Verba, and Petrocik 1976; Neuman 1990; Palmgreen and Clarke 1977; Smith 1985; Williams and Larsen 1977). At the aggregate level, MIP data have been used to track the rise of issues onto the public agenda; to

\textsuperscript{5} As we explain below, we employ a technical definition for terms like “baseline concern” and “responsiveness.”

\textsuperscript{6} Among scholars of agenda setting, much attention has been focused on the media’s “stunning success,” as Cohen (1963) described it, in determining what Americans think about. The study of priming – the news media’s role in influencing the standards of political judgment by “calling attention to some matters while ignoring others” (Iyengar and Kinder 1987) – is related in a variety of important ways to agenda setting (see also Krosnick and Kinder 1990; Miller and Krosnick 1997). Changes in which problems individuals regard as most important may, of course, have important effects on political judgment, though we do not explicitly take up the issue of priming in our work.
relate public concerns to important historical events; and to explore connections between the public agenda and media coverage. But while previous work on the MIP series has effectively outlined aggregate patterns of public concern, we know less about how individuals or sub-groups might differ in their sensitivity to changes in the news flow about different issues (see Weaver et al 1981). To uncover the individual-level dynamics in patterns of public concern, it is critical to look beyond aggregate findings.

In highlighting the need for an individual-level analysis of the Gallup MIP series, we echo Neuman’s (1990) discussion of the larger agenda-setting research. A sophisticated approach to agenda-setting will, Neuman argues, explore change over time, distinguish real-world cues from media effects, attend to varying patterns of responsiveness across different demographic and behavioral groups, and allow for unique dynamics in each issue area. We consider change across nearly eight unusually eventful years and include measures of both media coverage and other real-world events in our analysis, thereby meeting each of Neuman’s tests.

Theories of Agenda Setting

At the individual level, changes in media coverage of political issues might have an effect on people’s judgment of the nation’s most important problem. But for the media agenda to have an effect on the public agenda, two conditions must be met. First, individuals must be attentive to

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7 Neuman also highlights the importance of exploring how different media may produce different effects. Though we have replicated our findings with different media sources (a weekly news magazine and a daily newspaper), we have not explored other sources, such as broadcast media, for example.

8 The focus on over-time change here is a critical part of our analysis. To understand the power of the media to affect the public’s agenda outside of a laboratory, we must consider cross-time variation rather than cross-sectional variation. As Erbring et al (1980) assert, “The process of agenda setting takes place over time, not across regions [or] states” (p. 20). Zaller (2004) adds that time series analysis in which all respondents experience the same temporal events allows us to avoid some of the measurement error problems that plague cross-sectional analyses of less informed respondents.
media flow. Second, they must incorporate information concerning changes in that flow into their judgment of issue area importance. Put another way, individuals must both receive a message about media coverage and be responsive to that message. This dual-stage model of information flow has been put to good effect in studies of attitude change (McGuire 1968; Zaller 1992). However, as Iyengar and Kinder (1987) point out, the distinction between the reception of a message and the acceptance of its conclusions can also inform studies of agenda setting. We consider such a dual-stage model in the context of stratifications in news reception and responsiveness within the public along lines of both personal interest and sophistication. While the Gallup surveys do not include direct measures of news reception, we believe the over-time design of our study highlights important differences in individual-level patterns of both baseline attentiveness and responsiveness.

In contrast to dual-stage models as applied to attitude change, we do not directly measure patterns of knowledge about issue content or changing opinions regarding the direction those issues should take. Rather, we are concerned with the individual-level judgment that an issue should be included on the public agenda of important problems. Because of their personal interests or level of education, some individuals will be more likely than others to name an issue domain as the nation’s most important problem even when the volume of news coverage is low. Others will exhibit increased sensitivity to changes in the amount of news about the issues to which they are especially attuned.

In discussing these issues, we adopt rather precise and technical definitions of terms like attentiveness and responsiveness. We use “responsiveness” and “sensitivity” to refer to changes in

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9 Note that in our approach, it is attentiveness to the volume of media messages, not the specific content of those messages, that is most important. We assume that increased volume is related to increased presence of content that might be cause for concern, but we have no direct measures of the tone, direction, or detail of media messages. See Graber 1984 for a discussion of how people process the news.

10 Again, our concern is not with tracking changes in knowledge or opinion direction, but with understanding patterns of responsiveness and concern regarding judgments about the public agenda.
the slope of the line measuring the predicted probability that a group will choose a problem or issue as the nation’s most important, given varying levels of media attention. When the slope of the line is comparatively steeper for one group, we say that group is more “responsive” or more “sensitive” than others to changes in the media’s agenda. By contrast, we refer to differences in the intercept across several groups as varying levels of “baseline attentiveness” or “baseline concern.”

Our strongest predictions concern the effects of personal interests on the determination of the nation’s most important problems. One prominent strand of public opinion research holds that certain individuals or groups may be unusually sensitive to particular issues and news topics that pertain to the interests of themselves or their politically relevant groups (Delli Carpini and Keeter 1996; Hutchings 2003; Iyengar 1990; McGraw and Pinney 1990). Converse’s (1964) notion of “issue publics” – groups of individuals that have specialized interests and patterns of attentiveness – is especially appropriate here. While domain-specificity is not fully understood, evidence for Converse’s issue public thesis has persisted.\textsuperscript{11} Drawing on their experimental work, for example, McGraw and Pinney (1990) argue that both general political and domain-specific interests can exert meaningful consequences for political cognition.\textsuperscript{12} Similarly, Iyengar (1990) finds that blacks are

\textsuperscript{11} The literature regarding the role of self-interest in shaping public opinion has a mixed history (Cohen and Uhlaner 1991; Conover, Feldman, and Knight 1986; Green and Gerken 1989; Kiewiet 1983; Kinder and Kiewiet 1981, 1979; Sears and Funk 1990; Sears et al. 1980, 1983).

\textsuperscript{12} Mutz’s (1994) work on the role of the mass media in contextualizing personal experience helps outline the mechanism by which self-interest can be translated into national-level political concern. Agenda-setting studies have shown that the media can help elevate certain issues to the status of collective problems (Becker, McCombs, and McLeod 1975; Behr and Iyengar 1985; Iyengar, Peters, and Kinder 1982; McLeod, Becker and Byrnes 1974). Through the media, problems become national in scope; individuals learn that certain concerns are not just personal and local, but also something the nation should address. Mutz finds that these effects are strongest for those who consume the most media, and she concludes that the mass media can “legitimize the translation of personal concerns to political preferences” (708). Given this mechanism, we expect that as media coverage of issues ebbs and flows over time, individuals will respond by politicizing their personal experiences accordingly. That is, they will alter their perceptions of whether their particular interest is a national political problem based on the presence or absence of media coverage.
more informed about matters pertaining to race than are whites (see also Dawson 1994). Based on this research, we expect individual and group interests to increase the likelihood that particular individuals will both attend to news relevant to their interests and incorporate information about the patterns of media coverage in their decision concerning the nation’s most important problem. Because personal interests both increase the reception and responsiveness to news coverage, we expect that those groups with the most at stake in a given issue area will have the highest levels of baseline attentiveness and also be most sensitive to changes in news concerning that issue.

Turning to the effects of information stratification, our expectations are less clear. One of the central axioms of modern public opinion research is that people vary greatly in their attention to political affairs (Bartels 1996; Delli Carpini and Keeter 1996; Neuman 1986; Zaller 1992). Thus, certain segments of the population are much more likely to receive media information than others. As Converse (1990) described it, “We can imagine that information about politics penetrates [the layers of the political information hierarchy] from the top down, as it were, and does so at different speeds and to different depths, depending on the nature of the information” (375). The audience for the news is well stratified, with the most politically informed being the most likely to learn about development and changes in current political topics, especially complex issues.

13 Again, we are not directly concerned with the details of political information transmitted by the media. We do not know whether our respondents have, in fact, learned more about the details of various political issues or become persuaded by media messages, only that they have become concerned enough to name an issue as the nation’s most important problem, while not mentioning other possible problems.

14 Some would point to important distinctions between the issue publics thesis and the idea of information stratification. That is, Zaller (1992) and Price and Zaller (1993) can be read to advocate a one-dimensional notion of political engagement, with some people more interested and engaged on all issues and some less engaged on all issues. This would seem to conflict with the idea of diverse issue publics. We do not see a significant conflict, because we are focused on issue salience, not knowledge. Individuals may come to regard an issue as salient either because their unique interests and personal characteristics lead them to think some issues are more important than others or because their increased level of political engagement and sophistication leads them to decide certain issues should be most prominent.
At the same time, those individuals who are less politically sophisticated are more likely to be swayed by changes in the news flow.\footnote{As Zaller (1992) points out, the less sophisticated have fewer resources to resist the tide of media messages. More importantly, though, only a very small portion of the total information available reaches those at the bottom strata. Converse (1990) maintains that what little information reaches those individuals may have an unusually powerful effect: “When information does succeed in penetrating to these levels it probably has an impact on thought and behavior that is very disproportionate, if perhaps admittedly transient, relative to the impact of the same information ingested ‘higher up,’ where it simply is absorbed into a much greater leaven of organized information from the past” (375).} These less engaged citizens are – to use the turn of phrase of Iyengar and Kinder (1987) – the “victims of agenda setting.” Thus, the problem, from the point of view of making empirical predictions, is that political sophistication seems to have different effects at the reception and responsiveness stages. As Iyengar and Kinder argue, “political involvement may be \textit{positively} related to reception and \textit{negatively} related to acceptance. Whereas the politically involved may be more likely to tune in and pay close attention to television news coverage, they may be less likely to be persuaded by that coverage since their views are more firmly anchored. This means that the relationship between involvement and agenda setting may be positive or negative, depending on the situation” (1987, 61).

In sum, the effects of information stratification are less predictable than those of interest stratification in determining who will be responsive to changes in political news. MacKuen (1981) has shown, for example, that the most attentive strata of the public respond most rapidly to media discussion of novel and complicated social and political problems (see also Carmines and Stimson 1980). On the other hand, other researchers find that the politically engaged are the least vulnerable to agenda setting effects (Weaver, et al. 1981).\footnote{Though we do not explicitly adopt Carmines and Stimson’s (1989) classification of issues into “easy” and “hard,” we would expect, as did Converse, that their distinction reflects the kinds of differences in information penetration across issue domains that we describe.} We bring additional data to bear by exploring patterns across several different issue domains, giving special attention to whether there are
significant interaction effects between sophistication and patterns of media messages. While we might not be able to make point predictions regarding the interaction of engagement and media coverage in determining the public agenda on specific issues, one point is clear; we expect that when making judgments about the nation’s most important problem, individuals with different levels of political sophistication should differ in their sensitivity to changes in the flow of news on particular issues. Thus, our primary theoretic expectation is that issues will vary in their ability to cause agenda change among different strata of the population.

**Hypotheses**

All told, these findings concerning stratification, knowledge, and attention yield a testable set of expectations for our analysis of public concern about political problems. In their judgments about the most important problems facing the nation, citizens with different personal characteristics should show different sensitivities to changes in the flow of media information concerning real-world events. Whether the differences in dispersion are based on sophistication or interest or both, certain segments of the population are much more likely to hear and respond to media messages than others. It is the interaction of the interests and identities of particular individuals with different patterns of news coverage that determines how citizens come to label a given issue as the “most important problem” on the nation’s agenda.

Following the work of Converse (1964), we hypothesize that the stratification of political information influences the public’s response to changes in the media environment. While we would like to measure stratification based on political information, the Gallup surveys are rather thin and do not contain appropriate variables. Thus, we measure stratification in sophistication through education and hypothesize that more educated citizens will be more responsive to changes in the news flow on less prominent issues that diffuse thinly, reaching only the best-informed respondents, while less educated citizens will respond to issues that penetrate to the lowest levels of the
information strata.\textsuperscript{17} Simply put, we expect that the responsiveness of citizens to particular issues will vary by citizens’ level of education as well as by the nature of the issue.\textsuperscript{18}

We have stronger predictions regarding the effects of issue publics. We believe that individual or group interests may spawn certain “issue publics” – groups that will be especially sensitive and receptive to changes in news about issues affecting their interests.\textsuperscript{19} Following Hutchings (2003), we use membership in a given demographic category to signify membership in an issue public. Our examination of the issue public thesis is limited by the information contained in the Gallup polls, leading us to focus on race, social control, and war. We expect to find that African-Americans will be more attentive and responsive to news about race relations than their white counterparts. We also expect the young, who were more likely to serve in Vietnam or to be involved in the anti-war movement, will be more responsive than older Americans to news about the war. Finally, we expect older Americans to be more likely to respond that social control issues are problems for the nation as the coverage of such issues increases.\textsuperscript{20}

\textsuperscript{17} Unfortunately, the Gallup data does not contain measures that would allow us to tap political sophistication directly. Other researchers, faced with a similar problem, have used education as an indicator of sophistication (for an overview of this approach, see Zaller 1992; see also Hetherington 2001; Sniderman, Brody, and Tetlock 1991). There are, of course, tradeoffs. Education picks up more than simply sophistication. But faced with the limits of our dataset, we chose to use education as a rough proxy for sophistication.

\textsuperscript{18} Unlike Zaller (1992) and McGuire (1968), our primary focus is agenda-setting, not persuasion. We do not expect that patterns of responsiveness to the media agenda will replicate the curvilinear results of Zaller and McGuire, in which the moderately informed were the most vulnerable to media messages. We are concerned with how individuals come to decide whether a given issue is a national problem, and we focus on the fact that information about some issues only reaches the most sophisticated.

\textsuperscript{19} Smith’s (1980) sub-group analysis also points to the importance of self-interest in explaining different patterns of issue salience.

\textsuperscript{20} African-Americans should be more sensitive to news about race because they are the group most directly affected by changes in race relations. By a similar logic, we expect that the young will be particularly attentive to news about Vietnam because of they would be most affected by the draft and because the anti-war effort was a particularly powerful movement among younger Americans. With respect to social issues, we expect that older Americans may be more
Data

Our MIP data were drawn from twenty-five Gallup surveys conducted between April of 1964 and October of 1971. We followed as closely as possible the Gallup coding of the response variables, diverging from Gallup only when the coding scheme was not consistent for the entire time period. For our final analysis, we collapsed the variables into eight larger issue categories, for the most part following Smith’s (1985) categorization of the MIP question responses. The issue categories were foreign affairs (other than Vietnam), Vietnam, economic concerns, government, civil rights and race relations, social control, miscellaneous, and “don’t know.” Though the Gallup polls tend to be thinner than more scholarly surveys, such as the National Election Studies, they do ask important demographic questions, such as age, gender, race, and education of each respondent. For each individual, then, we have important background information as well as the respondent’s threatened by the changing social mores of the late 1960s and early 1970s. Thus, we expect that they will be more likely to respond that social control issues are the nation’s most important problem as news coverage increases.

AIPO Study #s: 689, 694, 711, 714, 715, 717, 719, 728, 733, 735, 736, 753, 756, 765, 766, 767, 769, 773, 781, 797, 797, 807, 814, 824, 831, 840. Information concerning these polls is contained in Appendix A. We identified a total of twenty-nine surveys for which we could verify that Gallup asked the MIP question, but four (AIPO Study #s 696, 698, 708, 720) were not included in the present analysis. Discrepancies in the Roper organization’s formatting of these surveys led to difficulty in confirming the marginals. Thus, we have omitted them from the present analysis. Smith (1985) also identifies several other surveys not included in our analysis as having asked the MIP question. In correspondence with the Roper organization, however, we have not been able to confirm that these surveys did, in fact, ask the MIP question.

This happened occasionally. For example, “crime” and “juvenile delinquency” were sometimes coded separately by Gallup, but at other times, they were coded as one variable. Because it was impossible to separate them for all surveys if they were combined in any one survey, we combined these variables in our coding scheme.

Comprehensive information about how the Gallup variables correspond to our eight issue categories is available from the authors. Three categories may require special explanation, however. The “social control” category includes variables such as drug problems, riots, student demonstrations, crime, juvenile delinquency, teenage problems, moral problems, internal apathy and lack of national purpose, lack of religion, gun control, and general domestic problems. The “miscellaneous” category includes such disparate variables as elderly problems, Social Security, Medicare, slums and urban renewal, education, mass transportation, and the environment. The “government” category includes corruption in government, big government, states’ rights, too much government control, problems with national leadership, and the Supreme Court or courts.
To our MIP data, we added a content analysis of news flow and measures of real-world events. To create the news flow variables, we selected one week at random for each month during the years between 1964 and 1971 to sample the news stories. For each of these randomly selected weeks, we then undertook a content analysis of *Newsweek* magazine, counting the total number of paragraphs devoted to each issue area (the issue dates used for the coding are listed in Appendix B). To code these stories, we developed an expanded version of the Gallup MIP response categories. We then collapsed these categories into the same eight categories used for the MIP data. Each category was coded as a percentage of paragraphs devoted to a particular topic relative to the total number of coded paragraphs in the sampled issue of *Newsweek*. We then merged these data with the Gallup data. Each respondent’s measure of “news flow” for a given issue category represents the

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24 Before we continue, we must address a technical choice we made in our analyses of the data. In many of the surveys we examined, Gallup allowed multiple responses to the most important problem question. It is not immediately apparent how these multiple-responses cases should be treated. One possibility is to follow the lead of Smith (1980) who used the responses, rather than the respondents as the unit of analysis. Smith, in effect, created a new case for each response. While this strategy is logical, it does have the effect of creating dependence among the observations. Respondents who give one response to the most important problem question are included only once in the data. But respondents who offer two or more answers show up in the data set multiple times. In light of these difficulties, in the analyses that follow, we have excluded those respondents who gave more than one answer. This decision forced us to remove about 13 percent of the cases. We should note that in our dataset, giving more than one response is only weakly correlated with education ($r = .04$), a fact that is critically important given the role of education in our analyses. We did, however, perform a robustness test where we adopted Smith’s strategy and included all respondents (using the response, rather than the respondent as the unit of analysis). The one change to the results was that including the multiple responses dampened somewhat the receptiveness of the public to news concerning social issues. This result can be explained by the fact that respondents who gave only one MIP response were more likely to mention social problems than were respondents who gave multiple responses. However, the basic nature of findings – even with the change in the receptiveness to the social problems category – remained the same. These results are available from the authors upon request.

25 Robustness analysis using data from 1964 suggest that the use of the sample of issues rather than the full news flow should not change our conclusion. Specifically, for 1964 we tested all 52 weeks of news coverage and found that our sample tracked well the basic ebb and flow of media attention.
percent of news devoted to that topic in the two months prior to their interview.\textsuperscript{26} So, for example, if \textit{Newsweek} devoted 15 percent of its total paragraphs to Vietnam in the two months before a given respondent was interviewed, that respondent’s Vietnam news flow would be coded as .15. Measuring the news flow in the previous two months allows us to be sure that changes in the news flow drive changes in the MIP series rather than the reverse.

We choose \textit{Newsweek} to proxy for the general media flow because the weekly news magazine format allowed us to gauge changes in the media flow at a fairly highly aggregated level. While it would have been ideal to include other media sources in our content analysis, the labor intense nature of the coding process prohibited a more comprehensive content analysis. However, as a check on the reliability of our news content data, we re-ran our models using a systematic random sample of news content from the \textit{New York Times Index}. The results were largely the same with these data. The one exception was that we were not able to fully replicate our results concerning the media and the public agenda on Vietnam. The Times index included all defense-related stories, including Vietnam, in one large category. Thus, we were not able to isolate responses to Vietnam from other defense-related issues, and we found very different patterns of responsiveness with regard to defense news in general. We believe these different patterns are directly related to the substantial differences in coding schemes with regard to defense issues. However given that the New York Times data was collected for other purposes and is not ideal for our data, the fact that we get such similar results using this second data source indicates that it is changes in the news generally – not simply changes in \textit{Newsweek} coverage – that drive our results.\textsuperscript{27}

\textsuperscript{26} When the Gallup poll was conducted at the end of the month, we used news data from both that month and the previous month. When the poll was conducted at the beginning or middle of the month, however, we drew our news data from the previous two months.

\textsuperscript{27} These data were collected by the Policy Agendas Project at the Center for American Politics and Public Policy, directed by Frank Baumgartner and Bryan Jones. The coding categories created for the \textit{New York Times} data were very
To capture real-world events, we included three measures.\textsuperscript{28} First, to capture economic conditions, we included lagged measures of the unemployment rate, averaging unemployment in the two months prior to the Gallup survey. Second, as a measure of war events, we included the natural log of the number of casualties in Vietnam, again averaging over the two months preceding the survey administration.\textsuperscript{29} Finally, to capture change in the civil rights movement activity, we control for the number of civil rights demonstrations that occur during the year the survey was administered.\textsuperscript{30} Though monthly measures of civil rights activity would be ideal, such data is not available, and we believe our yearly measures provide a rough approximation of the intensity of the civil rights movement during the time period we are exploring.\textsuperscript{31} Including these more objective measures of social and political change allows us to understand the effect of the media agenda over and above other real-world cues (see also Erbring, Goldenberg, and Miller 1980) and avoid potential differences from the Gallup MIP categories we used as the basis for our news data collection. As a consequence, the news categories were somewhat different from those we constructed from the \textit{Newsweek} data. Despite these disparities in coding, we were able to replicate generally our findings with the \textit{New York Times} data.

\textsuperscript{28} We present the values for these measures, by Gallup poll number, in Appendix C.

\textsuperscript{29} To be precise we divide the natural log of the number of casualties by 100 to preserve the relative scale of the variables in the model. Some have argued that the important variable with regard to war casualties is the cumulative total, not the marginal number in each month. This cumulative count has been shown to be related to overall support for the war (Mueller 1973). We believe that the lagged monthly totals are appropriate for our purposes, however, because we are concerned with whether or not the war is an important problem for the public agenda, not with overall support for the war. As the number of casualties rises and falls, respondents will, we believe, change their assessments of whether the war is the nation’s most important problem. In fact, we find precisely this statistically significant relationship in our data.

\textsuperscript{30} As with the casualties data, we divide the number of civil rights protests by 100. Raw numbers are contained in Appendix C.

\textsuperscript{31} We thank Paul Burstein for generously allowing us access to the civil rights data (See Burstein 1979). Though this measure is not ideal for our purposes, we do find a statistically significant relationship between the number of civil rights demonstrations in the year and the probability of choosing race as the nation’s most important problem. For example, as the number of civil rights protests increases from its empirical mean of 60 to the maximum of 380, a respondent’s probability of choosing race as the nation’s most important problem nearly doubles, moving from .13 to .25.
confounding of real-world and media effects.\textsuperscript{32}

With controls for real-world events in place, the news data provide us with a rough approximation of change in the types of messages available to the respondents during the time period for which we have MIP data. More importantly for our purposes, the content analysis of news flows allows us to move beyond aggregate analysis to explore the interaction between personal experience and the larger stream of events during this turbulent time in the nation’s history.\textsuperscript{33}

**Results**

As we expected, there was a great deal of volatility during the late 1960s and early 1970s in both the news flow and the public’s aggregate rankings of the most important problems of the day. Given the plethora of important issues in the late 1960s and early 1970s, such a result is not surprising. Stories about foreign policy were a common theme in the news throughout the period, but issues of social control, Vietnam, economic policy, government, and race were all prominent issues at one point or another. Beyond the prominence of foreign policy, there is little consistent pattern to the data. But even this apparent prominence is more an artifact of how *Newsweek* covered foreign affairs than anything else. In every issue, *Newsweek* devoted several pages to brief news updates from countries abroad, meaning that the magazine’s format likely inflated our count of

\textsuperscript{32} We recognize, of course, that real-world events play an important role in determining media coverage. In fact, across our 25 data points, we find that the volume of news about economics is positively correlated with the unemployment rate ($r=.27$), and news about Vietnam is also correlated with the previous month’s casualties ($r=.20$). This relationship is not perfect, however, so there is room for independent media determination of the media agenda. See also Hetherington 1996 and Behr and Iyengar 1985. A great deal of political research has already addressed the relationship between real-world events and public opinion. For a larger discussion of the role of real-world events in shaping opinion about the economy, for example, see MacKuen, Erikson, and Stimson 1992; Markus 1988; Duch, Palmer, and Anderson 2000; Cohen and Uhlander 1991; Conover Feldman, and Knight 1986; Kinder and Kiewet 1979, 1981, among many others.\textsuperscript{33}

\textsuperscript{33} We use the term “news flow” to describe our content analysis of Newsweek. We believe the news flow variable functions well as a rough indicator of the media agenda during this period. The fact that the reanalysis using the New York Times data largely replicate these results is a testament to the robustness of our results.
foreign news. Because we are interested primarily in the effects of change, this high baseline does not pose problems for our analysis.\footnote{The fact that the structure of \textit{Newsweek}'s coverage inflated foreign news is an example of the distinction between the “real world” events and the mediated picture of those events presented in the press.}

Turning to the public’s ranking of these issue areas, clearer patterns emerge from the data. In 1964, civil rights were cited as the most important problem facing the nation, closely followed by foreign affairs. After 1964, the Vietnam War emerged as the most important problem, and remained dominant throughout most of the period under investigation. But even given the prominence of these two issues, we find a great deal of volatility in the most important problem series. The public, it seems, was quick to turn its attention from one set of problems to another in these years.

These shifts in attention were not random. Rather, they followed predictable patterns (a graphical overview can be found in Appendix D). Consistent with previous work (Funkhouser 1973; Neuman 1990), we find that issues rose and fell in importance on the public agenda, in large part following changes in the media agenda. Certainly, there are some issue areas within which the public turned a deaf ear to changes in the focus on the media. While the percentage of news devoted to issues of government ranged from three percent to 43 percent, at no time did more than four percent of Americans name government as the “most important” problem facing the nation. Such a pattern is, however, the exception rather than the rule. Though it almost never rode lockstep with the media, the American public was – at the very least – responsive to those changes.

This aggregate overview, while interesting, cannot answer the central questions that concern us here. After all, the aggregation of survey responses can conceal important individual-level phenomena, thus transmuting, in Converse’s (1990) memorable words, “a sow’s ear into a silk purse.”\footnote{Converse worried that all aggregate-level change was being driven by the most highly sophisticated stratum of the American public, thus concealing a disturbing lack of responsiveness among the large majority of Americans.} To fully explore the relationship between the news flow and the most important problem...
series, we needed to turn to a closer examination of the individual-level data.

We begin by examining whether individuals reacted in meaningful ways to changes in the news flow. We measured reactivity to news flow by seeing how likely respondents were to state that a given problem was “most important” as the percent of news about a given problem increased. Our analyses proceeded in several steps. We first used an unordered multinomial logit (MNL) model to derive coefficient estimates of the effect of changes in the various news flows, controlling for the real-word events described above and the sex, race, age, income, and education of the respondent.36 Because it can be difficult to interpret directly the coefficients from the MNL setup estimates, we used these estimates to predict the effect of increasing the news flow from the minimum to maximum value for the average respondent (the coefficients and standard errors for the MNL analysis are presented in Appendix E).37 The graphical presentation of these results is the best way to interpret our analyses. In this way, we can measure the receptivity by examining the slope of the line for the effect of increasing the news flow from its minimum to maximum value, holding everything else constant. Higher slopes indicate greater receptivity to the news flow. Similarly, the intercept of these lines indicates the “baselines attentiveness” to the issue, with higher values indicating higher baseline levels of concern.

36 We used the “don’t know” category as the base category for the purposes of estimation. The coefficients presented in Appendix E, therefore, represent the choice between a given response category (economic, government, foreign, miscellaneous, race, social, and Vietnam) and the “don’t know” response. The choice of the base category has no effect on the predicted probabilities presented in the figures. In addition, the use of MNL deserves some attention here. There has been a recent interest in the proper econometric specification of unordered choice models. Alvarez and Nagler (1995, 1998) argue that models that relax the IIA restrictions, such as the Multinomial Probit (MNP) model may be more appropriate than the MNL model for examining unordered choices. Because MNP is computationally difficult for outcome variables with more than three or four outcome choices and requires additional assumptions that are as problematic for our purposes as IIA, we used MNL analysis (see also Dow and Endersby (2004) for an argument to use MNL instead of MNP).

37 Here, we define the “average” respondent, as a respondent with all their qualities set as the mean (or in the case of binary variables, modal) categories. In this case, this is a 46 year-old white female with some high school education.
As expected, we found that as the percentage of the news devoted to a given subject increased, the probability of an “average” person picking the corresponding topic as the nation’s most important increased as well (see Figure 1) for three of the six categories. This result was not true for news about the government; in that case, the probability of picking that response category is infinitesimal across all levels of news flow. Similarly, for foreign news and news about the economy, changes in the media flow had no effect. For the other issue areas, the average citizen proved highly responsive to changes in the political environment, in some cases dramatically so. This result — which is consistent with previous work — is reassuring. It appears that our measure of news flow is a reasonable measure of changes in the media agenda.

While this basic question is interesting and important, it is simply the first step in our analysis. Other authors have demonstrated that the public is receptive to changes in the news stream. Our data, however, is well suited for going beyond this basic question. Because we are working with individual-level data, we can both trace how the impact of developments in the political world changed the structure of individual decisions on the most important problem question over time, and see how that effect differed for particular groups in the population. We can, in other words, heed Dearing and Roger’s (1996) call to study agenda setting using disaggregated data. In particular, as noted above, we are interested in how groups with different levels of education and interests reacted to changes in the news flow. As the next step in our analysis, therefore, we ran a more complicated model with interactive terms between the characteristics of the respondents and the eight news flow variables. This model, presented in Appendix F, allows us to determine if

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38 As expected, the real world event variables had a significant effect on the probability that a respondent would select the corresponding issue category as the nation’s most important problem.

39 A word about this analytic strategy is in order here. In order to test whether different groups are more sensitive to others we added a series of interactive terms to our initial model where we interacted the various indicators of sophistication and self-interest — namely race, education, and age — with the measures of the news flow in each of the six
different subgroups of the mass public reacted in different ways to changes in the news flow.

Given the nature of our model, a few additional words about the relationship between the coefficients shown in Appendix F and the predicted probabilities presented in the accompanying graphs are in order. As Long (1997) argues, extending the methods of interpretation beyond mere listing of coefficients and adding graphical summaries is the most illuminating way to make sense of the many parameters in even a simple multinomial logit regression. In our more complicated model with multiple interaction effects, predicted probabilities are especially helpful. For at least three reasons, it would be a mistake to attempt to interpret each individual coefficient in isolation. First, as Braumoeller (2004) notes, coefficients from any model with interactive terms cannot be interpreted in isolation. Rather, lower-order terms and higher-order interactions must be interpreted jointly. Graphical presentation of predicted probabilities allow for such interpretation. Second, the coefficients for the media interaction variables in our analyses are not directly interpretable because they are dependent upon the value of the news flows, and these news flow variables are closely interconnected. The value of each news topic is the proportion of the total news coverage, with the total summing to one across all news categories. Thus, computing predicted probabilities allows us to account for the effect of a change in the total news flow.³⁴ Third, the predicted probabilities are not categories of news. By adopting this flexible modeling strategy we greatly increase the complexity of our results, but we are able to simultaneously account for heterogeneity in the individuals’ selection of the MIP category by both the characteristics of the individuals and the characteristics of media coverage. This model also includes controls for real-world events. Because of multicollinearity in a large model with many interaction effects, however, we are not able to simultaneously control for the interaction between individual characteristics and these real-world measures. We also tested a model that included additional interactions between news flows and low income status, but this model did not produce results different from what we report here, and it only made the problems with collinearity worse.

³⁴ It is this dependence across the different news flow categories (and the dependence across the MIP categories) that leads to coefficients in the MNL results that seem on their face to be puzzling. For instance, the Black X Race News coefficient for race salience is negative and non-significant. Considering this coefficient in isolation would lead one to believe that blacks are not sensitive to changes in news about race (though when the amount of news devoted to race increases, they are less likely to name race as the most important problem). Such a conclusion is erroneous. When all the
dependent on the choice of base category. We chose “Don’t Knows” as the base category for our regression. Had we chosen a different base category, the values of the individual coefficients reported in the appendices would have been different, even though the data-generating process would remain the same. No matter what base category we might choose, however, the predicted probabilities would remain the same. For these reasons, the figures presented here are the most meaningful expression of the complex pattern of effects our model reveals.41

With this approach to interpretation in mind, we turn again to our results. First, we examine the effects of issue publics on the responsiveness to changes in media messages. To recap, we expect that those groups with most at stake in a given issue would have higher baseline levels of concern and be most sensitive to changes in news concerning that issue. Three areas stand out – blacks on race, older Americans on social control issues, and the young on Vietnam. In all cases, we find higher levels of baseline concern among the “issue public” and in two of the three cases, we find increased sensitivity to news flow. With respect to race, we find that blacks are more likely than whites to name civil rights and race relations as the nation’s most important problem, no matter what the level of news flow. At the lowest levels of news about race, for example, blacks are approximately eight percentage points more likely than whites to identify racial issues as the most important problem. Given Smith’s (1980) analysis, we expected this difference in the intercepts. But, as Figure 2 indicates, blacks are also much more sensitive than whites to changes in the flow of news about race. That is, the slope of the predicted probability curve is significantly steeper for blacks than for whites – so much so that at the highest levels of news about race, blacks are approximately

- coefficients are considered jointly and predicted probabilities are generated, correct (and more sensical) inferences can be made. As Figure 3 demonstrates, Blacks are indeed more sensitive than Whites to changes in news about race, and the difference is statistically significant.

41 In addition, we have used CLARIFY (Tomz, Wittenberg, and King 2003) to ensure that differences in responsiveness – that is, differences in predicted probabilities across groups as the news flow changes – are statistically significant.
27 percentage points more likely than whites to identify race as the nation’s most important problem.\textsuperscript{42} In other words, the difference in the probability of blacks, as compared to whites, naming race as the MIP more than triples as the percentage of news about race moves from its minimum to maximum observed value.\textsuperscript{43}

A similar story emerges with respect to social issues. As Figure 3 reveals, older Americans have a higher baseline concern and are much more sensitive to news about social issues than are their younger counterparts. When news about social issues ebbs to its lowest point, older respondents are 7 percentage points more likely than those in their twenties to name social concerns as the nation’s most important problem. As news coverage becomes a more pronounced part of the media agenda, the slope of the predicted probability curve is significantly steeper for the old than for the young. At the highest levels of coverage of social issues, older Americans are 26 percentage points more likely than Gallup’s youngest respondents to name social issues as the nation’s most important problem.

A somewhat different story emerges with respect to age and sensitivity to news about Vietnam.\textsuperscript{44} As Figure 4 demonstrates, we find disparities in the intercept but not in the slope.\textsuperscript{45} When news about the war in Indochina is at its lowest level, respondents in their twenties are approximately nineteen percentage points more likely than the oldest respondents to name Vietnam

\textsuperscript{42} These results hold when region is inserted into the model as a control variable. Regardless of whether the Gallup or U.S. Census definitions of “Southern states” are used, our primary finding is unchanged. Blacks are still much more sensitive than whites to changes in the flow of news about race.

\textsuperscript{43} Using likelihood ratio tests and CLARIFY (Tomz, Wittenberg, and King 2003), we determined that the differences between blacks and Whites in their predicted choices of MIP categories were statistically significant at the .05 level. The same result holds for interactions between the news flow variables and age and for the interactions between news flow and education for which we claim differences in responsiveness or baseline attentiveness (see discussion below).

\textsuperscript{44} We note that these differences only emerged after inserting real-world controls. In models that do not control for real-world cues, the Vietnam story is quite similar to the effects we described with respect to race. The young are far more sensitive than older Americans to changes in the flow of news about Vietnam.

\textsuperscript{45} Age here is a continuous variable measuring the respondent’s age, in years.
as the MIP. We interpret this to mean that younger Americans have higher levels of baseline concern about the war. As news about Vietnam increases, however, all age cohorts increase in the probability of choosing Vietnam as the MIP at approximately the same rate. When news about Vietnam is at its empirical height, then, respondents in their twenties are approximately 17 percentage points more likely than those in their eighties to identify Vietnam as the nation’s most important problem – a very slight narrowing that does not represent a statistically meaningful difference in responsiveness.

The second question we asked was whether individuals with differing levels of education reacted to changes in the political world in different ways, as we expected. We first ran a statistical test to see whether the education interaction terms could be distinguished from zero. A likelihood ratio test demonstrated that this was indeed the case ($\chi^2(42) = 170.40, p < .0001$). It appears, therefore, that reaction to changes in the media agenda differs by education level. We next determined exactly how these changes were manifest. As Figure 5 demonstrates, for one of the six cases – race – we find strong evidence that individuals with lower levels of education are more sensitive to changes in news flow. At the lowest levels of media attention, respondents of all

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46 This is an especially important test because some of the coefficients on the individual interaction terms in the model are not statistically distinguishable from zero.

47 This test was performed in the context of a larger model that also included interactive terms between the news flows and race as well as age (see Appendix F for full model results). In addition we used CLARIFY to determine whether the interaction between education and the news flow variables led to statistically significant effects on the probability of choosing a given MIP category. In the cases for which we claim response effects, we found that the highest educated respondents were predicted to behave differently than the lowest educated respondents (statistically significant at the 0.05 level). The error bars are not included in our graphs because – with five education categories – the graphs became confusing. These results are, however, available from the authors upon request.

48 As noted above, we found using the CLARIFY software that the respondents with the highest and lowest education levels are predicted to exhibit (statistically significantly) distinct MIP choices. There is some overlap in the 95 percent confidence intervals of the predicted behaviors of the intermediate education categories. However, the differential responsiveness of the extremes of the education categories, along with the rejection of the null hypothesis of “no
education levels are approximately equally likely to choose racial issues as the nation’s most important problem. As news about race becomes more prominent, however, the least-educated individuals are far more sensitive than their more-educated counterparts.

These trends are especially pronounced among whites. If we look at blacks only (see Figure 6), we find that these respondents have higher levels of baseline concern about race than whites, but move together as a group, with blacks at all levels of education showing similar sensitivity to changes in the news flow. By contrast, whites, as a group, show lower levels of baseline concern and are somewhat less sensitive to the issue. Still, less-educated whites are comparatively far more responsive than their better-educated counterparts. At high levels of news flow about race, the gap between the most and least educated whites is more than 14 percentage points.

Turning back to Figure 5, however, we see that the pattern of results is dependent upon the issue area. With respect to Vietnam, we find differences in baseline attentiveness, with less-educated Americans more likely to name the war as the nation’s most important problem when media attention wanes. This difference in intercepts is statistically significant. At the highest levels of news about Vietnam, though, the standard errors of the point estimates are sufficiently large that we can no longer say with confidence that the less educated are more likely to name the war as the nation’s most important problem. In other words, while better educated respondents are less concerned about the war at low levels of coverage, we cannot be certain that they remain so as the war takes up a greater portion of the media agenda. We note that these patterns of response to media coverage of the war only became evident when we included controls for real-world cues, such as the number of casualties in the month prior to the Gallup poll. In models that do not control for such real-world cues, the young appear more sensitive to media coverage of events in Vietnam than

difference” on the likelihood ratio test of the education interaction terms provides strong evidence that the differential responsiveness by education is a real effect.

49 The difference is statistically significant at the .05 level, using the CLARIFY tests described above.
older respondents.

The pattern regarding foreign affairs is muddier, though these results may be a function of our measure of news coverage. While highly educated respondents seem to be quite responsive to news about foreign affairs, the least educated appear to demonstrate a kind of negative sensitivity, becoming less likely to name foreign affairs as the nation’s most important problem as the volume of foreign news increases. This pattern could be a result of the unique format Newsweek employed for its foreign affairs news. In addition, given the constraints on the news flow variables – recall that the news flow is reported as a percentage of the total news coverage – and the constraints on the MIP question – respondents are asked to list the “most important” problem—these results could occur because the less educated look to other issues as foreign news increases. In any case, this result is somewhat puzzling.

Finally, in two issue areas, media coverage of government or economic issues, the public seems to be responding to something other than media cues. No matter how the media coverage varies with respect to these issues, we find very little relationship between the media agenda and the public’s assessment of the nation’s most important problem. With respect to economic issues, we again note that including real-world measures substantially changes our results. When real-world cues about the unemployment rate are not included in the model, better-educated Americans seem somewhat more responsive to media stories about the economy. Once the unemployment rate of the previous two months is controlled, however, this apparent responsiveness vanishes.

Conclusion

The analyses presented here grant us new insight into foundational issues in the study of public opinion. Our findings show, first, that the move from aggregate to individual-level analysis

50 Graphical representations of the essentially flat patterns for news about government and foreign affairs news are available from the authors.
uncovers important additional perspectives on the patterns of public concern. We find that the public is generally quite receptive to the flow of media messages and current events. This receptivity differs across issue areas, however, with both sophistication and membership in issue publics emerging as important explanations of the pattern of responsiveness.

From a normative perspective, our results reveal a generally optimistic story. Pessimism about a highly stratified electorate may be somewhat overstated: not all of the aggregate-level change is driven by the most sophisticated respondents. In fact, even the least educated of our respondents generally exhibit some level of sensitivity to the changes in flow of current events.

At the same time, Converse is correct in arguing that aggregation can obscure important differences in the public response to information, and Zaller and others are right to emphasize the power of political sophistication. We find that the interaction between education and patterns of media coverage is an important determinant of patterns of public responsiveness. Even though respondents at all education levels showed some signs of receptivity to changes in the news flow, there were still important differences across education levels and issue areas. The most educated respondents were generally somewhat sensitive to changes in news about social issues. In contrast, the least educated respondents were the most sensitive to changes in news about race relations and showed the highest levels of baseline concern, though no differences in sensitivity, to news about Vietnam.

But attending to sophistication alone does not tell the whole story. Converse’s notion of the existence of “issue publics” with special levels of concern for certain problems proved to be significant. With respect to both race and social issues, we found that groups with an important stake in the issue were also the most sensitive to changes in the news flow. As the flow of news increased, certain groups were more responsive to the change in media attention, becoming increasingly more likely to name the problem as the nation’s most important. Here our exploration
of the interaction between media coverage and individual characteristics makes a valuable contribution to public opinion research. We find persuasive evidence that issue publics matter, at least at the agenda-setting stage, when individuals choose which problem is the nation’s most important. This meaningful finding introduces several important questions for further research. Our analysis has not yet, for example, explored overlapping issue group memberships, with individuals belonging to more than one relevant group. In addition, our work has focused on only the most basic group and personal interests; more can be done to understand the effects of subjectively defined issue publics.

In sum, this work reminds us of the importance of using individual-level data to understand the ever-changing public agenda. Out of the jumble of media messages and the tumult of political issues, we are able to find sensible patterns of receptivity across very diverse groups of individuals. These patterns, while complex, give us new insights into long-standing scholarly debates about public opinion and media communications. By attending to the interaction between individual characteristics and the changing pattern of media coverage, we shed new light on the dynamics through which individuals come to select a problem as the nation’s “most important.”
Figure 1:
Responsiveness to News Flows: An Overview
Figure 2: 
Reactions to Race News among Whites and Blacks
Figure 3:
Responsiveness to Social Issues by Age
Figure 4:
Reactions to Vietnam News by Age

![Graph showing predicted probability of news about Vietnam by age]

- Predicted Probability
- % of News about Vietnam

Legend:
- Age 20
- Age 40
- Age 60
- Age 80
Figure 5:
Responsiveness by Education Level

- **Foreign Affairs**
- **Vietnam**
- **Social Issues**
- **Race**

Graphs showing the predicted probability of news mentions across different education levels (edu) for each category (Foreign Affairs, Vietnam, Social Issues, Race). The x-axis represents the percentage of news about the respective topic, and the y-axis represents the predicted probability.
Figure 6:
Responsiveness to Race News by Education Level

Race: Whites Only

Race: Blacks Only
WORKS CITED


University Press.


APPENDIX A: GALLUP POLL

Question Wording: What do you think is the most important problem facing this country today?

<table>
<thead>
<tr>
<th>Date</th>
<th>A IPO #</th>
</tr>
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<tbody>
<tr>
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<tr>
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<td>Sept. 30-Oct. 6, 1966</td>
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<tr>
<td>October 21-26, 1966</td>
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<tr>
<td>Oct. 27-Nov. 1, 1967</td>
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<tr>
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APPENDIX B: NEWSWEEK CONTENT ANALYSIS

Newsweek Issues used for Content Analysis:

1/6/1964, 1/13/1964, 1/20/1964, 1/27/1964, 2/3/1964, 2/10/1964, 2/17/1964,
7/20/1964, 7/27/1964, 8/3/1964, 8/10/1964, 8/17/1964, 8/24/1964, 8/31/1964,
9/7/1964, 9/14/1964, 9/21/1964, 9/28/1964, 10/5/1964, 10/12/1964, 10/19/1964,
### APPENDIX C: REAL-WORLD MEASURES BY GALLUP POLL

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<th>Average Lagged Casualties</th>
<th>Civil Rights Protests</th>
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<tr>
<td>781</td>
<td>3.4%</td>
<td>1287.5</td>
<td>81</td>
</tr>
<tr>
<td>797</td>
<td>3.5%</td>
<td>582.5</td>
<td>77</td>
</tr>
<tr>
<td>807</td>
<td>4.5%</td>
<td>677.5</td>
<td>77</td>
</tr>
<tr>
<td>814</td>
<td>5.1%</td>
<td>474.5</td>
<td>77</td>
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<tr>
<td>824</td>
<td>6.0%</td>
<td>265</td>
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<td>831</td>
<td>5.9%</td>
<td>245.5</td>
<td>67</td>
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<tr>
<td>840</td>
<td>5.9%</td>
<td>128</td>
<td>67</td>
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APPENDIX D:
NEWS FLOW AND MOST IMPORTANT PROBLEM OVER TIME

[Graphs showing news flow and most important problem over time for various categories such as News and Economics, News and Foreign Affairs, News and Social Control, News and Vietnam, News and Race, and News and Government. Each graph includes a timeline from 1964 to 1971 and percentage data points.]

[Legend: % News and Most Important Problem]
## APPENDIX E: MNL WITHOUT INTERACTIVE TERMS

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>Constant</td>
<td>-4.36 (0.77)**</td>
<td>1.25 (0.69)**</td>
<td>-1.43 (0.74)**</td>
<td>-7.13 (1.08)**</td>
<td>-4.14 (0.73)**</td>
<td>-7.83 (0.76)**</td>
<td>-10.16 (0.94)**</td>
</tr>
<tr>
<td>Black</td>
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<td>-0.73 (0.07)**</td>
<td>-0.47 (0.08)**</td>
<td>-1.33 (0.21)**</td>
<td>0.08 (0.07)</td>
<td>-0.76 (0.09)**</td>
<td>-0.56 (0.10)**</td>
</tr>
<tr>
<td>Male</td>
<td>0.27 (0.05)**</td>
<td>0.03 (0.05)</td>
<td>0.59 (0.05)**</td>
<td>0.68 (0.09)**</td>
<td>0.07 (0.05)</td>
<td>0.10 (0.06)*</td>
<td>0.33 (0.07)**</td>
</tr>
<tr>
<td>Education</td>
<td>2.31 (0.11)**</td>
<td>1.78 (0.10)**</td>
<td>2.08 (0.11)**</td>
<td>3.30 (0.15)**</td>
<td>1.88 (0.11)**</td>
<td>2.29 (0.11)**</td>
<td>2.57 (0.12)**</td>
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<tr>
<td>Age</td>
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<td>0.35 (0.18)*</td>
<td>0.69 (0.29)**</td>
<td>-0.33 (0.18)**</td>
<td>1.63 (0.19)**</td>
<td>0.66 (0.22)**</td>
</tr>
<tr>
<td>Low income</td>
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<td>-0.80 (0.07)**</td>
<td>-0.45 (0.08)**</td>
<td>-0.56 (0.18)**</td>
<td>-0.70 (0.08)**</td>
<td>-0.79 (0.09)**</td>
<td>-0.27 (0.10)**</td>
</tr>
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<td>2.06 (1.08)*</td>
<td>3.74 (1.52)**</td>
<td>1.58 (1.06)</td>
<td>7.58 (1.09)**</td>
<td>8.80 (1.30)**</td>
</tr>
<tr>
<td>Govt News</td>
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<td>0.26 (0.80)</td>
<td>2.12 (1.14)*</td>
<td>3.12 (0.80)</td>
<td>6.40 (0.83)**</td>
<td>7.69 (0.98)**</td>
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<td>1.03 (0.72)</td>
<td>6.30 (1.17)**</td>
<td>-2.24 (0.69)**</td>
<td>10.23 (0.77)**</td>
<td>3.30 (0.90)**</td>
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<tr>
<td>Race News</td>
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<td>-2.29 (0.89)**</td>
<td>0.22 (0.95)</td>
<td>0.21 (1.53)</td>
<td>6.50 (0.91)**</td>
<td>8.07 (0.99)**</td>
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<td>Social News</td>
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<td>6.79 (1.39)**</td>
<td>4.91 (1.89)**</td>
<td>10.64 (1.40)**</td>
<td>15.17 (1.41)**</td>
<td>0.55 (1.74)</td>
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<td>Vietnam News</td>
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<td>2.51 (0.78)**</td>
<td>4.02 (0.83)**</td>
<td>1.63 (1.23)</td>
<td>5.86 (0.80)**</td>
<td>5.17 (0.84)**</td>
<td>4.16 (1.01)**</td>
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<td>-0.18 (0.23)</td>
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<td>0.75 (0.22)**</td>
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<td>0.67 (0.29)**</td>
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<td>Unemployment</td>
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<td>0.12 (0.06)**</td>
<td>-0.61 (0.06)**</td>
<td>-0.25 (0.08)**</td>
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N=47,281
LL-78540.382
* = p < .10; ** = p < .05
## APPENDIX F: MNL WITH INTERACTIVE TERMS

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<th>Economics</th>
<th>Government</th>
<th>Race</th>
<th>Social</th>
<th>Misc</th>
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<td>Coefficient (SE)</td>
<td>Coefficient (SE)</td>
<td>Coefficient (SE)</td>
<td>Coefficient (SE)</td>
<td>Coefficient (SE)</td>
<td>Coefficient (SE)</td>
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<td>0.68 (0.09)**</td>
<td>0.07 (0.05)</td>
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<td>-0.31 (0.10)</td>
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<td>10.74 (6.40)*</td>
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<td>-0.80 (0.07)</td>
<td>-0.47 (0.08)**</td>
<td>-0.55 (0.18)</td>
<td>-0.72 (0.08)**</td>
<td>-0.83 (0.09)**</td>
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<td>0.63 (0.29)**</td>
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<td>-0.77 (2.93)</td>
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<td>-4.16 (4.54)</td>
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<td>3.74 (2.45)</td>
<td>-0.26 (2.77)</td>
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<td>0.33 (2.09)</td>
<td>6.14 (3.07)**</td>
<td>0.90 (2.01)</td>
<td>-2.28 (2.17)</td>
<td>3.93 (2.40)</td>
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<tr>
<td>Edu x Race</td>
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<td>5.51 (4.19)</td>
<td>2.14 (2.85)</td>
<td>7.80 (3.00)**</td>
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<td>-2.53 (5.96)</td>
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<tr>
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<td>-6.84 (3.06)**</td>
<td>0.94 (3.91)</td>
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<td>-6.57 (3.09)**</td>
<td>-6.15 (3.53)*</td>
</tr>
<tr>
<td>Age x Foreign</td>
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<td>0.80 (6.01)</td>
<td>10.59 (4.60)*</td>
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<td>10.59 (6.18)*</td>
<td>14.11 (6.48)*</td>
<td>11.30 (7.80)</td>
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<tr>
<td>Age x Govt</td>
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<td>14.73 (3.91)**</td>
<td>2.18 (5.81)</td>
<td>12.60 (3.80)**</td>
<td>19.46 (4.02)**</td>
<td>18.19 (4.78)**</td>
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<tr>
<td>Age x Misc</td>
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<td>1.27 (3.24)</td>
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<td>5.88 (5.79)</td>
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N=47,281  
LL = -78199.482

* = p < .10; ** = p < .05