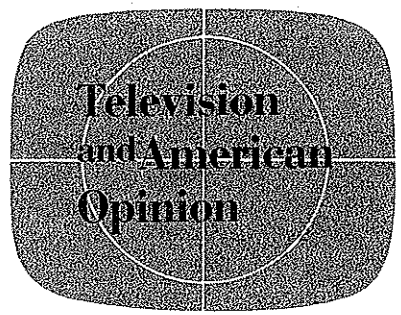
AMERICAN POLITICS AND POLITICAL ECONOMY
Benjamin I. Page, Series Editor

NEWS THAT MATTERS



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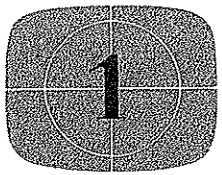
THE UNIVERSITY OF CHICAGO PRESS
CHICAGO AND LONDON

Nancy Brennan at the Center for Political Studies at Michigan and Estelle Krieger at the department of political science at Stony Brook for preparing the manuscript—again and again, with great cheer and competence.

Over the years, our research was funded by grants from the political science program at the National Science Foundation (Grants SES 80-12581, 81-21306, and 82-08714). We thank program directors Gerald Wright and Frank Scioli for ably shepherding our proposals through the Foundation. Additional support came from the National Institutes of Health (in the form of a postdoctoral fellowship to Iyengar) and the Block Fund of Yale University. Most of the national survey data we report were made available by the Inter-University Consortium for Political and Social Research. They were originally collected by the Center for Political Studies (CPS) of the Institute for Social Research, the University of Michigan, for the National Election Studies. Neither CPS nor the Consortium bears any responsibility for the analyses or interpretations we offer here. Nor does anybody else. In the spirit of true collaboration, we have only each other to blame.

Last, but hardly least, we wish to express our gratitude to our spouses and our children. Were it not for Ellen and Nikhil, and Janet and Benjamin, we would no doubt have completed this project sooner, but would have been unimaginably poorer for it.



A Primordial Power?

On a typical weekday evening, some fifty million Americans gather around their television sets, tuned into the national newscasts of the three major networks. By a wide margin, they believe that television—not magazines, not radio, not newspapers—provides the most intelligent, complete, and impartial coverage of public affairs, and goes furthest in clarifying the candidacies and issues at stake in national elections (Bower 1985). We Americans trust television news; we see it as authoritative (perhaps in part because we *see* it); we have welcomed Huntley, Cronkite, Brokaw, and the others into our living rooms gladly.

Because of its wide reach and high credibility, television news obviously possesses the potential to shape American public opinion profoundly. Whether television news realizes this potential, however, is the subject of considerable and occasionally acrimonious debate. In fact, research has more often than not concluded that mass media in general and television news in particular merely strengthen or reinforce the public's existing beliefs and opinions.[1] Indeed, Patterson and McClure (1976) concluded that television news coverage of presidential campaigns had virtually no political impact. According to their analysis, network news failed even to *inform* voters regarding the choices they confronted. Why? Patterson and McClure put it this way: "Since the nightly news is too brief to treat fully the complexity of modern politics, too visual to present effectively most events, and too entertainment-minded to tell viewers much worth knowing, most network newscasts are neither very educational nor very powerful communicators" (1976, 90).

We subscribe to much of this indictment. Television news is brief; it does drastically simplify the complexity of modern politics; it is undeniably visual; and it does borrow unabashedly from the world of entertainment television. We know, moreover, that viewers typically pay rather casual and intermittent attention to the parade of stories that make up the news each night (Kinder and Sears 1985, 660–64).

Nevertheless, we believe that Patterson and McClure's conclusion—that "network newscasts are neither very educational nor very powerful communicators"—is quite thoroughly mistaken. Our purpose here

is to establish that television news is in fact an educator virtually without peer, that it shapes the American public's conception of political life in pervasive ways; that television news is news that matters.

Our argument begins with the observation that Americans develop opinions toward an astonishing variety of issues that lie far outside their own experience. To be sure, they are preoccupied first and foremost with the immediate concerns of private life: with earning a living, supporting a family, making and keeping friends. But at the same time, they also manage to decide whether huge federal deficits threaten the economy and whether fighting in Latin America threatens national security. They reach such judgments without benefit of direct experience: without undertaking their own economic analysis, without traveling behind the lines in Nicaragua. Because they take part in the grand events of politics so rarely, ordinary Americans must depend upon information and analysis provided by others—in modern times, upon information and analysis provided by mass media.

This dependence gives the media an enormous capacity to shape public thinking. Cohen has put this point well, and although he was writing with newspapers in mind, his argument applies with at least equal force to television news:

> The press is significantly more than a purveyor of information and opinion. It may not be successful much of the time in telling people what to think, but it is stunningly successful in telling its readers what to think *about*. And it follows from this that the world looks different to different people, depending not only on their personal interests, but also on the map that is drawn for them by the writers, editors, and publishers of the papers they read. Perhaps the notion of a map is too confining, for it does not suggest the full range of the political phenomena that are conveyed by the press. It is, more properly, an atlas of places, personages, situations, and events; and to the extent that the press even discusses the ideas that men have for coping with the day's ration of problems, it is an atlas of policy possibilities, alternatives, choices. The editor may believe he is only printing the things that people want to read, but he is thereby putting a claim on their attention, powerfully determining what they will be thinking about, and talking about, until the next wave laps their shore (1963, 13).

While agenda-setting—to adopt the social science parlance—has been the subject of thoughtful essays over the last half century,[2] empirical work on the subject has a briefer and less distinguished history. Lippmann's (1920, 1922, 1925) original warning that news organizations possess the power to determine what the public takes to be important had little immediate impact on research. Even forty years later, Klapper's encyclopedic summary of findings on the effects of mass communication could devote just two pages to agenda-setting; moreover, that discussion was dotted with such disheartening phrases as "it is a matter of common observation" or "some writers believe" (1960, 104–5). Although research on agenda-setting has proliferated over the last decade, so far, unfortunately, the results add up to rather little.[3] Even exponents of the agenda-setting idea acknowledge the literature's fragmented and haphazard condition (e.g., McCombs 1981). Agenda-setting may be an apt metaphor, but it is no theory.

The lack of a theory of media effects has significantly impeded our understanding of how democracy works. The health and vitality of any democratic government depend in part on the wisdom of ordinary citizens. And indeed, commentaries on the current state of the American polity, in scholarly journals and on the editorial page, are laced with normative claims that the public is or is not rational, that the American citizen is shrewd or foolish. Such claims typically pay no attention whatsoever to the dissemination of political information throughout society, to the no-doubt intricate relationship that has grown up between the institutions of mass communication, on the one hand, and the political wisdom of ordinary citizens, on the other. Lippmann was not exaggerating the political significance of this relationship when he wrote that citizens "who have lost their grip upon the relevant facts of their environment are the inevitable victims of agitation and propaganda. The quack, the charlatan, the jingo, and the terrorist can flourish only where the audience is deprived of independent access to information" (1920, 54–55). If we are to understand and assess how well the American political system works, surely we need a theory of how information about public affairs percolates through American society.

We begin to develop such a theory here, as part of our effort to understand the ways in which television news shapes the political thinking of ordinary Americans. We test and refine our understanding mainly—though not exclusively—with experiments, a powerful method of investigation that media researchers have largely ignored. Our fourteen experiments introduce systematic and unobtrusive alterations into the television news broadcasts that ordinary citizens watch. As a consequence, citizens assigned to different experimental conditions are furnished with slightly different glimpses of the political world—and as we will see, such differences matter greatly. Because our procedures are unusual, we explain them fully in chapter 2. There we define exactly what we mean by an experiment, argue that experimentation possesses distinctive strengths for the study of television news, and then describe the particular experimental designs we deployed in our research.

Chapter 3 presents results from a series of experiments on agenda-setting, supplemented at key junctures with complementary evidence drawn from our analysis of national surveys. Taken together, the results vindicate Lippmann's original suspicion that news media provide compelling accounts of a political world that is otherwise out of reach. Our studies show specifically that *television news powerfully influences which problems viewers regard as the nation's most serious.* Rising prices, unemployment, energy shortages, arms control—all these (and more) become high priority political issues for the public only if they first become high priority news items for the networks.

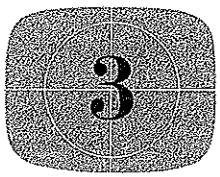
In chapter 4 we examine characteristics of coverage that might accentuate the agenda-setting effect. We compare stories that lead off the evening news with those that appear later in the broadcast, on the hypothesis that lead stories might be more influential merely because of their position. (They are.) We also assess whether the dramatic personal vignettes that the networks commonly use to illustrate national problems, which are surely riveting, are also particularly influential. (They are not.)

In chapter 5 we examine how television's portrayal of national problems interacts with viewers' personal circumstances. Racial discrimination, job loss, and the threatened collapse of the social security system (among others) are national problems and, for some Americans, overwhelming personal ones as well. Do such direct experiences override the vicarious experiences provided by television news? (They do not.) In chapter 6 we investigate several characteristics of viewers that might make them more or less vulnerable to agenda-setting. We compare the reactions of the well-educated and the poorly-educated, partisans and independents, the politically involved and the politically withdrawn, thereby hoping to identify more precisely just who is affected by agenda-setting.

Chapters 7 through 11 take up what we call "priming," a manifestation of television power that is more insidious and perhaps more consequential than agenda-setting. Priming presumes that when evaluating complex political objects—the performance of an incumbent president, or the promises of a presidential contender—citizens do not take into account all that they know. They cannot, even if they were motivated to do so. What they do consider is what comes to mind, those bits and pieces of political memory that are accessible. And television news, we argue, is a most powerful force determining what springs to the citizen's mind and what does not. *By priming certain aspects of national life while ignoring others, television news sets the terms by which political judgments are rendered and political choices made.*

Chapter 7 discusses the impact of priming on citizens' evaluations of the president's performance. When primed by television news stories that focus on national defense, citizens judge the president largely by how well he has provided, as they see it, for the nation's defense; when primed by stories about inflation, citizens evaluate the president by how well he has managed, in their view, to keep prices down; and so on. In chapter 8, we explore whether priming also influences the judgments the public renders regarding the president's *character.* (It does, in complex and interesting ways.) In chapter 9, we investigate whether the magnitude of the priming effect depends on how deeply the news implicates government, and especially on what we term the level of presidential responsibility implicit in television news coverage. (It does.) Chapter 10 then does for priming what chapter 6 did for agenda-setting: there we identify who is especially vulnerable to priming and discover to our surprise that the victims of priming are not the same people who are the victims of agenda-setting. In chapter 11, to complete the empirical work, we describe two experiments that concentrate on the electoral consequence of priming. There we show that the priorities that are uppermost in voters' minds when they go to the polls are powerfully shaped by the last-minute preoccupations of television news.

In chapter 12, we tie the various results together, conclude that, like it or not, television news has become a serious and relentless player in the American political process, and, finally, take up the claim that television news conveys unusual and distinctive views of American politics, under the assumption, handsomely supported by our research, that such views eventually become our own.



The Agenda-Setting Effect

In *The Phantom Public*, Walter Lippmann characterized the political sensibilities of the ordinary American this way:

> The private citizen today has come to feel rather like a deaf spectator in the back row, who ought to keep his mind on the mystery off there, but cannot quite manage to keep awake. He knows he is somehow affected by what is going on. Rules and regulations continually, taxes annually and wars occasionally remind him that he is being swept along by great drifts of circumstance.
>
> Yet these public affairs are in no convincing way his affairs. They are for the most part invisible. They are managed, if they are managed at all, at distant centers, from behind the scenes, by unnamed powers. As a private person he does not know for certain what is going on, or who is doing it, or where he is being carried (1925, 13).

From this perspective, that ordinary citizens achieve any understanding of public affairs seems rather remarkable. Moreover, the "swarming confusion of problems" that, according to Lippmann, constituted political life more than a half century ago, has grown only more confusing today. Surely the democratic predicament of the ordinary citizen has deepened.

Television news may provide citizens with a convenient escape from this predicament. In this chapter we being to investigate how, if at all, television news influences Americans' conceptions of political reality—their sense of "the mystery off there." Our point of departure is the *agenda-setting hypothesis: those problems that receive prominent attention on the national news become the problems the viewing public regards as the nation's most important.* We pursue this hypothesis with sequential experiments, assemblage experiments, and a longitudinal analysis of national surveys.

Experimental Tests of Agenda-Setting

Sequential Experiments

Four sequential experiments provide evidence relevant to the agenda-setting hypothesis. Each systematically varied the amount of coverage

that the evening news devoted to various national problems. Experiment 1 is the prototype; we will therefore describe it in detail and then move expeditiously through the rest. (Detailed summaries of all fourteen experiments are presented in Appendix A.)

Experiment 1 was conducted in New Haven, Connecticut during six consecutive days in November of 1980, shortly after the presidential election. Participants watched recordings of the previous evening's network newscasts that had been edited in advance, as described in chapter 2. The thirteen participants randomly assigned to the *treatment condition* in experiment 1 were shown stories that described inadequacies in American defense preparedness. The first edited broadcast included a report on the increase in defense spending to be proposed by the incoming Reagan administration. The next day's newscast featured a "special assignment" report on the declining role of the U.S. as the arsenal of democracy. Spliced into the third day's broadcast was a pessimistic analysis of U.S. military options in the event of Soviet aggression in the Persian Gulf. And the fourth day's broadcast included a story that set out the considerable difficulty the U.S. Army was encountering in finding recruits qualified to operate its increasingly sophisticated equipment. Over the four days, then, participants in the treatment condition saw four stories on defense, totaling seventeen minutes of news coverage. The fifteen participants randomly assigned to the *control condition*, in contrast, watched broadcasts containing no defense-related stories at all.[1]

In experiment 1, as in all those that follow, participants were, of course, *randomly* assigned to conditions. According to information gathered on the first day of experiment 1, this procedure had the intended result: that is, participants assigned to the defense condition did not differ from their counterparts assigned to the control condition. On demographic characteristics, partisanship, and political engagement, the two groups were indistinguishable.[2] This means that whatever postexperimental differences between groups we detect can confidently be attributed to differences in the newscasts they watched.

In order to test the agenda-setting hypothesis, we measured participants' beliefs about the importance of national problems both before and after the experimental sessions. The preexperimental questionnaire was administered immediately before the first newscast and the postexperimental questionnaire was completed one full day after the last newscast. On both occasions, participants judged the importance of each of eight national problems, indicated their personal concern for each, the extent to which each was deserving of additional government action, and the frequency with which they talked about each in every-

day conversation.[3] Because these four ratings were strongly intercorrelated, they were averaged together to form a composite index of problem importance. A score of zero on the index means that the participant thought the problem not important at all; cared not at all about it; felt that people in government should worry about it not at all; and that the problem never served as a topic of conversation. A score of one hundred means, in contrast, that the participant thought the problem extremely important; cared about it very much; felt that the government should worry about it a lot; and talked about it almost incessantly. Of course, virtually all participants rated the problems somewhere between these two extremes.[4]

The critical test of agenda-setting simply entails observation of change over the experiment in the importance participants accord the problems emphasized by the edited newscasts. In experiment 1, participants who viewed newscasts that described glaring inadequacies in U.S. defense capabilities should become more concerned about defense than control condition participants whose newscasts were purged of such stories.

This is exactly what happened. Participants in the defense condition became more concerned about defense over the experiment's six days, while participants in the control condition showed no change in the importance they attached to defense. This difference is significant both statistically and politically.[5] Consider the evidence in detail: on the first day of experiment 1, *before* seeing any newscasts, participants who were randomly assigned to the defense treatment condition ranked defense sixth in relative importance, behind inflation, pollution, unemployment, energy, and civil rights. *After* exposure to the newscasts, the same participants now believed that defense was the country's second most important problem, trailing only inflation. Among viewers in the control condition, meanwhile, the relative position of defense as a national problem did not change.

Such a dramatic shift in priorities, induced by such a modest and unobtrusive alteration in television news coverage, constitutes powerful confirmation of the agenda-setting hypothesis. Moreover, what we found in experiment 1 we found again and again in three additional sequential experiments.

Experiment 2 took place in late February 1981 and focused on three problems. Depending on condition, participants viewed newscasts that emphasized either inadequacies in U.S. defense preparedness, pollution of the environment, or soaring inflation. Experiment 8, administered in July 1982, featured newscasts that concentrated either on unemployment, nuclear arms control, or civil rights. And in experiment 9, which took place in August 1982, participants either viewed a sequence of newscasts that emphasized unemployment or saw no newscasts at all. In other respects, each of these three sequential experiments followed experiment 1's basic design. The recruitment of participants, the splicing in and editing out of stories, the questionnaires administered on the first day and on the sixth: all these procedures were followed as described previously. Counting experiment 1, then, we have eight separate and independent tests of agenda-setting, distributed across four experiments and six different problems.

The results from all four sequential experiments are displayed together in table 3.1. The table shows the average composite importance rating of the target problem before and after exposure to the newscasts. The message could not be clearer. In *every* instance, participants emerged from our experiments believing that the target problem was more important than they did when they began. Seven of the eight changes are statistically significant.

The single exception to this pattern, which occurred in the inflation condition of experiment 2, is no great mystery. In February of 1981, when experiment 2 took place, inflation was running at an annual rate of more than 10 percent. In the preexperimental questionnaire, before they glimpsed a single inflation news story, participants gave inflation an average score of ninety-two on our composite scale of zero to one hundred. Thus we had virtually no opportunity to convince participants of inflation's importance: everyone was already convinced.

Putting this exception aside, the four sequential experiments yield striking evidence of agenda-setting. As in experiment 1, the changes observed in experiments 2, 8, and 9 correspond to substantial shifts in

TABLE 3.1
Change in Problem Importance

Experiment	Problem	Importance Rating of Problem: Before the Experiment	After the Experiment	Change: Pre- to Post-
1	Defense	47	67	20*
2	Defense	48	58	10*
	Inflation	92	93	01
	Pollution	63	76	13*
8	Arms control	76	82	06*
	Civil rights	64	69	05*
	Unemployment	75	82	07*
9	Unemployment	78	83	05*

*$p < .05$

problem hierarchies. In experiment 2, for example, pollution as a national problem moved up from fifth to second most important among participants shown news about pollution, while defense rose from sixth to fourth among participants who watched newscasts that emphasized U.S. defense weaknesses. Similar shifts occurred in the relative importance of arms control, civil rights, and unemployment in experiments 8 and 9.

The agenda-setting hypothesis can be tested in a second way. In experiments 2, 8, and 9 (though regrettably not in 1), the questionnaire asked participants to name "the three most important problems facing the nation." As a second test, therefore, we can compare the proportion that mentioned the target problem in the preexperimental questionnaire with the proportion naming it in the postexperimental questionnaire, following exposure to the altered newscasts. These comparisons are shown in table 3.2.

As indicated there, the evidence in support of agenda-setting is even more striking for this measure than it was for composite ratings. Except, once again, for the inflation condition in experiment 2—where *every* participant named inflation as one of the country's most important problems, both before and after the experiment—references to the target problem were more numerous after the newscasts than before. Some of these increases are massive. In experiment 8, for example, after exposure to coverage of the perils of the arms race, the percentage of participants naming arms control as one of the country's three most important problems rose from 35 percent to 65 percent; in experiment 9, the corresponding percentage, this time for unemployment, increased from 50 percent to 86 percent. Over the seven independent tests, an average of 37 percent nominated the target problem as one of the nation's most important in the preexperimental questionnaire; 57 percent did so in the postexperimental questionnaire.[6]

TABLE 3.2
Change in Problem Importance

Experiment	Problem	Percentage Naming Problem as One of Country's Most Serious: Before the Experiment	After the Experiment	Change: Pre- to Post-
2	Defense	33	53	20*
	Inflation	100	100	00
	Pollution	0	14	14*
8	Arms control	35	65	30*
	Civil rights	0	10	10*
	Unemployment	43	71	28*
9	Unemployment	50	86	36*

*$p < .05$

We also assessed the *specificity* of these effects. In general, we looked for "spillover" in agenda-setting. We supposed that drawing viewers' attention to a particular problem might enhance not only the importance they ascribe to that problem but to related problems as well. For example, stories emphasizing dependence on foreign sources of oil might reasonably be expected to raise concern about rising prices, since the public seems to regard the two problems as causally linked (Hendricks and Denney 1979). Reasonable or not, we encountered such spillover effects in only two instances. In experiment 8, participants exposed to news about the arms race became more concerned not only with arms control but also with the conflict in the Middle East. In experiment 9, participants furnished with coverage of unemployment became more concerned about economic problems in general. As a rule, however, the agenda-setting effects we uncovered are notable for their specificity. News about energy influenced viewers' beliefs about the importance of energy and energy alone; news about defense influenced viewers' beliefs about defense and defense alone; and so on.

In sum, the evidence from the four sequential experiments strongly supports the agenda-setting hypothesis. With a single and understandable exception, problems given steady news coverage grow more important, at least in the minds of the viewers. The evening news would seem to possess a powerful capacity to shape the public's national priorities.

ASSEMBLAGE EXPERIMENTS

In sequential experiments viewers are exposed either to a sustained dose of news about a particular problem or to no news at all. One virtue of assemblage experiments is that they permit a more precise calibration of treatment conditions. Here we examine six such experiments in an effort to learn more about the functional relationship between the amount of news coverage and the size of the agenda-setting effect.

Experiment 3 was conducted in New Haven during April and May of 1981 with Yale University undergraduates. Students viewed a forty-minute collection of "typical" news stories that paid either no attention to the nation's energy problems (zero stories), some attention (three stories) or considerable attention (six stories).

Experiment 4 was run in New Haven during late September to early

October 1981. This time participants were recruited from the general community and randomly assigned to one of six experimental treatments. Participants watched a collection of fifteen news stories that gave either moderate attention (three stories) or extensive attention (six stories) to one of three national problems: defense, energy, or inflation. Participants assigned to either the moderate or extensive treatment conditions for any one problem (say defense) saw *no* stories about the other two (energy, inflation). This design enables us to assess the agenda-setting effect induced by some exposure to a problem versus none, as well as the impact induced by incremental increases in coverage.

Experiment 5, which took place in New Haven during August–September of 1981, followed this same design, with two amendments. First, in place of stories about defense, energy, and inflation, we substituted stories about unemployment, civil rights, and social security. Second, we reduced the number of stories bearing on the target problem in the moderate and extensive coverage conditions to two and four, respectively.

Experiments 6, 13, and 14 represent the natural culmination of this trend of diminishing experimental interventions. In experiment 6, conducted in New Haven in May and June of 1981, participants watched a collection of news stories that included either just a *single* story about the target problem—this time either pollution or unemployment—or no stories at all. Likewise, in experiment 13, run in Ann Arbor in June 1983, and in experiment 14, conducted in New Haven in August of 1983: in the former instance, participants watched a collection that included one story either about unemployment or energy; in the latter, participants were exposed to a collection that featured a single story either about government efforts to halt drug smuggling or about the difficulties facing public schools.[7]

We measured problem importance in these six assemblage experiments just as we did in the sequential experiments: i.e., by composite ratings and spontaneous mentions.[8] The test of agenda-setting is different here, though, because assemblage designs forego the preexperimental questionnaire that is a standard fixture of the sequential design. Participants in assemblage experiments complete only one questionnaire, immediately following exposure to the news presentations. Therefore, the appropriate test of agenda-setting here is to compare the importance participants attach to a target problem across different experimental conditions representing different levels of coverage.

The results for the composite importance ratings are shown in table

3.3. The rows reflect different problems across the six experiments; the columns reflect intensity of coverage, from no news stories at all on the left to a maximum of six stories on the right. If the agenda-setting hypothesis holds, the importance ratings of the various target problems should increase from left to right as coverage intensifies—and they generally do. In fact, twelve of the thirteen ratings increase, ten to a statistically significantly degree. As was true in sequential experiments, agenda-setting proved elusive only for those problems that were regarded as highly important at the outset. In the case of inflation in experiment 4, for example, a virtual bombardment of coverage—six stories in a collection of fifteen—was required to boost ratings still higher than those offered by viewers who saw no stories about inflation.

Support for agenda-setting is generally more striking when importance is measured by the spontaneous nomination of national problems, shown in table 3.4. In every instance but one, participants shown some stories about a particular problem—as many as six stories or as

TABLE 3.3

Problem Importance as a Function of Intensity of Coverage

		Composite Ratings							
		Number of Stories							Difference: Maximum Coverage Minus No Coverage
Experiment	Problem	0	1	2	3	4	5	6	
3	Energy	64			66			74	10***
4	Defense	58			63			70	12***
	Energy	72			67			72	00
	Inflation	81			81			90	09***
5	Civil rights	69		71		86			17***
	Social security	77		84		88			11***
	Unemployment	78		87		84			06*
6	Pollution	77	81						04***
	Unemployment	88	89						01
13	Unemployment	90	95						05***
	Energy	75	68						−07
14	Drugs	43	53						10***
	Education	70	74						04*

*$p < .20$
**$p < .10$
***$p < .05$

TABLE 3.4
Problem Importance as a Function of Intensity of Coverage

Experiment	Problem	Percentage Naming Problem as One of Country's Most Serious: Number of Stories 0	1	2	3	4	5	6	Difference: Maximum Coverage Minus No Coverage
3	Energy	24			50			65	41***
4	Defense	33			57			64	31***
	Energy	21			46			46	25***
	Inflation	45			50			79	34***
5	Civil rights	15		29		33			18**
	Social security	10		41		44			34***
	Unemployment	30		30		67			37***
6	Pollution	10	27						17***
	Unemployment	53	73						20***
13	Unemployment	50	68						18**
	Energy	0	23						23
14	Drugs	0	11						11***
	Education	14	11						−03

*$p < .20$
**$p < .10$
***$p < .05$

few as one—were more likely to name that problem as one of the country's most important than were those whose attention was directed elsewhere. All but one of these differences surpass statistical significance and some of them are extraordinary.[9] In experiment 5, for example, whereas less than one-third of the participants exposed to two stories on unemployment named it as one of the country's most serious problems, fully two-thirds of those exposed to four stories on unemployment did so. Perhaps the most arresting result of all is that agenda-setting can be triggered by such ostensibly innocuous provocations. In experiments 6, 13, and 14, viewers' priorities were significantly affected by a *single* news story.

Persistence of Agenda-Setting

Measurable immediate influence is not the same as influence that lasts, of course. We assessed the influence of television news in assemblage

experiments immediately following the broadcasts. Sequential experiments are somewhat more informative, but they tell us only that television news's influence is detectable twenty-four hours after the experimental intervention is completed. That the effects survive this long is certainly important. Television dispenses news periodically, typically on cycles of twenty-four hours or less. The regularity and frequency of broadcasts means that for many viewers, agenda-setting is a continuous process. When the networks develop priorities, viewers' beliefs are affected—and affected again as new priorities arise. Having said that, however, we are still left with the question of how long our experimentally-induced effects last.

We designed experiments 13 and 14 partly to investigate the persistence of agenda-setting effects. In the former, we reinterviewed as many participants as possible over the telephone one week after they had been exposed to our news broadcast. Participants were told that we were conducting an opinion poll of the Ann Arbor community. Virtually everyone we were able to reach agreed to participate (75 percent of the original group). In the followup to experiment 14, we mailed to each participant a second questionnaire one week after their experimental session. Eighty-three of the original 121 participants (69 percent) completed and returned the questionnaire. In both followup sessions, among many other questions, participants were asked to name the country's most serious problems. Experiments 13 and 14 thereby afford a test of the persistence of agenda-setting effects—and a stringent one at that. The two experiments are not only assemblage designs, which produce less powerful effects than do sequential designs, but they represent the weakest of the assemblage designs, involving as they do only a single story.[10]

Nevertheless, both experiments reveal evidence of persistence. These results are displayed in table 3.5. As indicated there, participants in experiment 13 who had been exposed to a single story about unemployment continued, one week later, to nominate unemployment more frequently as one of the country's most important problems than did those who saw no news about unemployment. This difference was virtually as great at one week's remove from the experimental intervention as it was immediately afterwards. More generally, the table shows that the agenda-setting effect was maintained over the one week period in two instances, diminished in one, and actually strengthened in another. Keeping in mind that alterations in viewers' political priorities were prompted originally by a single story, the degree of persistence revealed here is remarkable.

TABLE 3.5
Immediate and Delayed Effects of Coverage on Problem Importance

Experiment	Problem	Percentage Naming Problem as One of Country's Most Serious: Immediate: Number of Stories 0	1	Difference	One Week Later: Number of Stories 0	1	Difference
13	Unemployment	46	72	+26**	54	73	+19**
	Energy	0	15	+15	4	8	+ 4
14	Drugs	0	14	+14***	0	14	+14***
	Education	14	13	− 1	8	26	+18***

Note: Table includes only those participants interviewed immediately after the experiment *and* one week later.

*$p < .20$
**$p < .10$
***$p < .05$

Time Series Tests of Agenda-Setting[11]

Our experimental results suggest that television newscasts shape and intensify viewers' sense of which national problems are important and which are not. But do our experimental results generalize to the natural setting that is our real interest? We think they do—partly because of the convergence of findings across experiments, problems, and populations; partly because of the steps we took to diminish the artificiality of our experiments—but we cannot be completely confident.

To bolster our confidence and complement our experimental results, we undertook a nonexperimental test of agenda-setting. We examined trends in television news coverage over time, and compared them with changes over comparable periods in public opinion. Prior efforts of this sort suggest that there should be a correspondence between the two, and a strong one. Thus Funkhouser (1973) discovered striking concurrence between the amount and timing of attention paid to various problems in the national press between 1960 and 1970 and the importance accorded those problems by the American public. Across the decade, public opinion seemed to follow, not lead, the press's agenda, results that were substantially fortified by the more sophisticated analyses that followed (MacKuen 1981, 1984).

Funkhouser and MacKuen presumed, as we do, that agenda-setting effects should be observed and estimated over time, as problems appear and disappear, and as network news coverage shifts accordingly. What we have attempted to do in our experiments is convert the variation in coverage that occurs naturally over time to contemporaneous variation across experimental conditions. We create and then offer to our viewers alternative portrayals of political reality. As an important check on the experimental results, here we will determine through time-series analysis the extent to which the preoccupations of network news become the political preoccupations of the American public.

For this purpose, we compiled results from national surveys between 1974 to 1980 pertaining to three prominent national problems: energy, inflation, and unemployment. By ransacking Gallup, Yankelovich, and Center for Political Studies surveys, we were able to obtain a measure of the importance attached by the public to each of the three problems for every two-month period between January 1974 and December 1980.[12] Our specific measure of problem importance stems from "the most important problem facing the nation." Unfortunately, the exact wording, format, and coding of the question varies across survey organizations. Gallup and Yankelovich accept multiple answers while CPS does not; and Yankelovich interviewers consistently "pull" more answers from survey respondents than do Gallup's. To ensure comparability in results across the three survey organizations, we took as our dependent variable the percentage of *responses* to the question rather than the percentage of *respondents*. (For a detailed explanation of this procedure, see Appendix B).

We measured television news coverage of the three problems by recording the number of pertinent news stories appearing in the weekday CBS Evening News.[13] Using the Vanderbilt Television Archive's *Abstracts* of daily newscasts as our source, we classified news stories on the basis of their major focus (news stories that lasted less than thirty seconds were excluded). The number of news stories for each problem was totaled for every month and then averaged for each bimonthly observation.

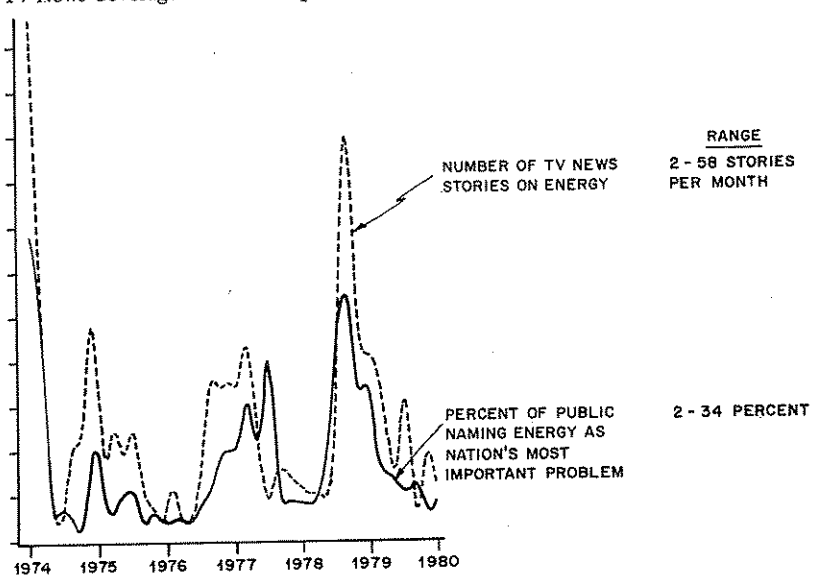
Measured in this way, the attention provided these three problems by television news underwent dramatic changes between 1974 and 1980. Figure 3.1 displays the 1974–80 time graphs for energy; figure 3.2 does so for inflation; figure 3.3 provides the same information for unemployment. Between 1974 and 1980, CBS's coverage of energy ranged from two stories per month to fifty-eight stories per month. Inflation received as few as six stories per month to as many as thirty-seven. Monthly coverage of unemployment ranged between no stories at all to a modest peak of seven.

Over the same period there were also striking changes in the impor-

tance the American public ascribed to the three problems. The proportion of the public naming energy as one of the country's most important problems fluctuated from a low of 2 percent to a high of 34 percent; inflation, from 19 to 72 percent; and unemployment, from 2 to 32 percent (see figures 3.1, 3.2, and 3.3). And to the naked eye, at least, these fluctuations in public concern seem to move roughly in tandem with fluctuations in television news coverage.

That the trends move together does not, of course, tell us anything about the *causal* impact of television news coverage on problem importance. The parallel trends might mean that news coverage influences public opinion, but it could mean just the reverse: that news organizations respond to the public's priorities. In order to attract the largest audience, the networks might feature stories about inflation when the public seems concerned about inflation and stories about unemployment when the public seems preoccupied by unemployment. Or the correspondence in the over-time trends might reflect that the networks and the public are responding in concert to real changes in the world. Soaring prices are noticed in New York as in Peoria, with implications that are easy to imagine for both the networks and the public. Our task

FIGURE 3.1
TV News Coverage and Public Opinion toward Energy, 1974–1980

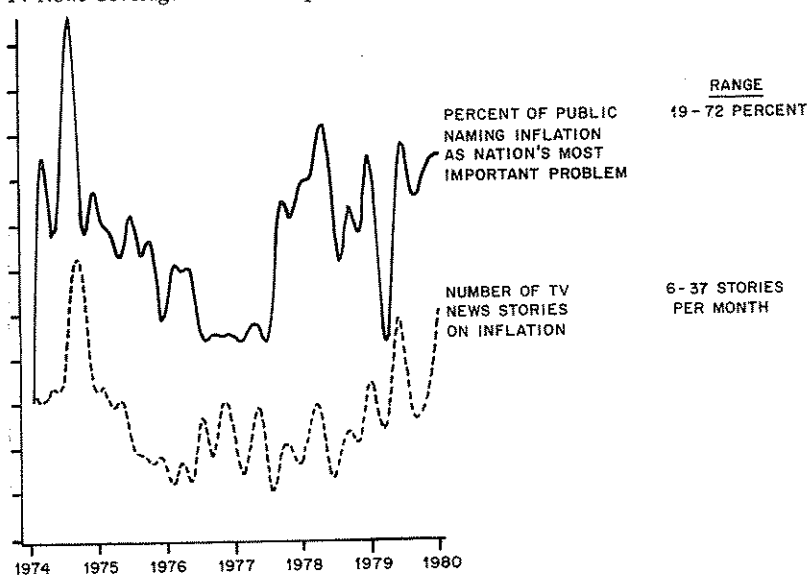


Source: AIPO, Yankelovich, National Election Studies Surveys; Vanderbilt TV News Abstracts

must be to determine not just the association between television news and public opinion, but rather the precise causal impact (if any) of television news on public opinion.

To do so, we relied on a procedure that computes a consistent estimate of the impact of television news coverage on public opinion purged of the reverse effect, if any, of public opinion on news coverage (see Appendix B for the technical details). This procedure also estimates the impact of television coverage over and above the effects due to real world conditions. Because energy shortages, price increases, and job loss can all be experienced personally, they may influence public opinion directly. To take such effects into account, we coded various measures of real world conditions and incorporated them into our analysis. They included the cost and availability of energy, American dependence on foreign sources of energy, meetings of OPEC oil ministers in the energy analysis; various aggregate indicators of prices and interest rates in the inflation analysis; and aggregate measures of the extent of unemployment and change in unemployment in the unemployment analysis. Finally, we also included a measure of major presidential speeches devoted primarily to energy, inflation, or unemployment (see

FIGURE 3.2
TV News Coverage and Public Opinion toward Inflation, 1974–1980

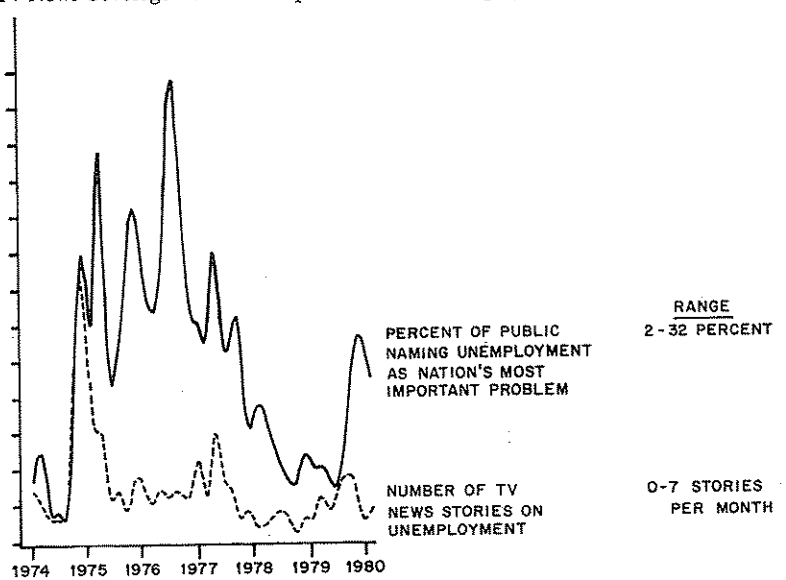


Source: AIPO, Yankelovich, National Election Studies Surveys; Vanderbilt TV News Abstracts

Appendix B for details on all these measures). In short, our analysis attempts to reveal the degree to which television news influences public opinion, independent of the effects due to actual conditions and to presidential efforts to mobilize public opinion.

The results for energy are shown in table 3.6.[14] As indicated there, television news coverage does indeed influence the importance the American public attaches to energy. For every seven stories broadcast, public responses citing energy as one of the country's most important problems increased by about 1 percent. Notice that this is a *contemporaneous* effect: television coverage in the current period influences public opinion in the current period. We also tested for but could not find lagged effects: i.e., the amount of coverage devoted to energy during any two-month period apparently had no effect on opinion toward energy expressed during the next two-month period. Perhaps surprisingly, public opinion on energy was unaffected by real world conditions. Energy costs, fuel oil costs in particular, dependence on OPEC imports, OPEC oil minister meetings: none of these boosted public concern with energy independently of television news coverage.[15] The public's concern for energy *was* shaped independently by the president, however. When the president chose to address the nation on the subject of energy, he succeeded in raising the level of public concern by over 4 percent.

FIGURE 3.3
TV News Coverage and Public Opinion toward Unemployment, 1974–1980



Source: AIPO, Yankelovich, National Election Studies Surveys; Vanderbilt TV News Abstracts

TABLE 3.6
Predictors of Public Opinion toward Energy, January 1974–December 1980 (Two-stage, maximum likelihood estimates)

Predictors	Coefficient
Number of stories on energy	.13*
Presidential speeches on energy	4.44*
Constant	12.52*
Adjusted R^2 = .55	
Standard error of regression = 3.20	
Durbin-Watson statistic = 2.06	

Number of observations = 42.
*$p < .05$

The American public's preoccupation with inflation between 1974 and 1980 was determined by a similar combination of news coverage and presidential rhetoric (see table 3.7). The number of television news stories about inflation significantly increased the percent of responses naming inflation as the nation's most important problem. On average, five stories per month on inflation elevated public concern by 1 percent (again, an entirely contemporaneous effect), whereas a presidential address to the nation on the economy increased the degree of public concern about inflation by over 8 percent. Again, actual conditions had no direct impact on public opinion: changes in the consumer price index, the consumer price index for food, and interest rates were

TABLE 3.7
Predictors of Public Opinion toward Inflation, January 1974–December 1980 (Ordinary least square estimates)

Predictors	Coefficient
Number of news stories on inflation	.21*
Presidential speeches on inflation	8.26*
Constant	41.92*
Adjusted R^2 = .49	
Standard error of regression = 7.38	
Durbin-Watson statistic = 1.54	

Number of observations = 42.
*$p < .05$

all unrelated to the importance the American public attached to inflation, once the influence of television news coverage was taken into account.[16]

This brings us finally to the case of unemployment, where television news effects appear to be weaker. As shown in table 3.8, eleven stories per month were required to boost public concern about unemployment by a single percentage point. Moreover, on statistical grounds, we cannot be certain that television news coverage had *any* effect at all. And unlike public opinion on energy and inflation, the American public's concern about unemployment was unaffected by presidential addresses. Instead, the importance of unemployment to the American public was determined by actual conditions. As unemployment spread and deepened, more and more Americans considered it to be among the country's most pressing problems, largely independently of trends in television news coverage.

The comparatively frail results uncovered for television's impact on public concern about unemployment may be due to the chronically low level of news coverage. Over the seven-year period under examination here (which preceded the dramatic increases in unemployment that occurred in 1981 and 1982), CBS broadcast an average of just four stories on unemployment every two months. This represents less than one-third of the coverage CBS gave to energy and less than one-fourth of the attention the network devoted to inflation. If the *networks* regard unemployment as less newsworthy than rising prices or energy shortages, then so, too, may the public.

This point aside, we should not be deflected from the central message carried by the time-series results. Here we find strong convergent

TABLE 3.8

Predictors of Public Opinion toward Unemployment, January 1974–December 1980 (Maximum likelihood estimates)

Predictors	Coefficient
Number of news stories on unemployment	.09
Unemployment rate	3.18*
Average duration of unemployment (weeks)	1.41*
Constant	−23.34*
Adjusted R^2 = .50	
Standard error of regression = 3.98	
Durbin-Watson statistic = 1.89	

Number of observations = 42.

*$p < .05$

support for television agenda-setting. Between 1974 and 1980, the American public's political preoccupations underwent sharp changes, changes that we have traced in part to changing patterns of television news coverage.[17]

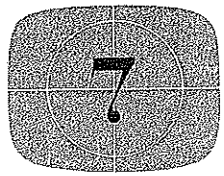
Conclusion

Taken all together, our evidence decisively sustains the agenda-setting hypothesis. The verdict is clear and unequivocal: It issues from sequential experiments that last a week, from assemblage experiments that last an hour, and from time-series data that span seven years; it holds across different measures of importance; and it is confirmed for a variety of problems, from national defense to social security. By attending to some problems and ignoring others, television news shapes the American public's political priorities. These effects appear to be neither momentary, as our experimental results indicate, nor permanent, as our time-series results reveal.

All told our evidence implies an American public with a limited memory for last month's news and a recurrent vulnerability to today's. When television news focuses on a problem, the public's priorities are altered, and altered again as television news moves on to something new.

parallels to Postman

television news depends less on the fixed attributes of viewers, such as their level of education, than on qualities that change with changing circumstances such as their partisanship, interest, and activism. Partisanship depends, in some small measure at least, upon the success enjoyed by the incumbent administration, on the policies the parties adopt, and on the appeal of the candidates the parties nominate (this evidence is summarized in Kinder and Sears 1985). Similarly, interest and activism depend partly on circumstances, rising in response to strong provocations and ample opportunities, declining as provocations fade and opportunities close (Hansen and Rosenstone 1984). Thus the capacity of television news to set the public's agenda waxes and wanes with changes in politics. Events that weaken partisanship, interest, and participation reduce the resources the public could otherwise draw upon to resist television news influence. By the same token, events that strengthen partisanship, interest, and participation thereby produce a more resourceful viewing public, one less likely to be buffeted about by the sketches of national life presented each night by the evening news.



The Priming Effect

The preceding chapters have supported the agenda-setting claim lavishly: television news does indeed influence the priorities the American public assigns to national problems. But the power of the networks does not end with viewers' political agendas. Beginning here, we take up the more subtle and more consequential possibility of what we will call priming. *By calling attention to some matters while ignoring others, television news influences the standards by which governments, presidents, policies, and candidates for public office are judged.*

Priming refers to changes in the standards that people use to make political evaluations. In assessing the performance of a government, a president, a policy, or a candidate, citizens can apply any number of standards. Our view of President Reagan, for example, might be influenced by his stance on arms control, the vitality of the national economy, his position on abortion, his judicial appointments, his performances at press conferences, and much, much more. According to the priming hypothesis, should television news become preoccupied with, say, the prospects of nuclear annihilation, then citizens would judge the president primarily by his success, as they see it, in reducing the risk of war. Should television news shift its attention to the economy citizens would follow suit, now evaluating the president largely by his success, as they see it, in maintaining prosperity—at least according to the priming hypothesis.

Our main business in this chapter is to see whether there is anything to such claims. We develop a theory of priming, argue for its psychological plausibility, and then test it against a series of television experiments focusing on presidential performance.[1]

A Theory of Priming

For theoretical guidance we have drawn upon ideas developed within the information processing perspective in psychology. Our general point of departure is Simon's observation that "human thinking powers are very modest when compared with the complexities of the environments in which human beings live. Faced with complexity and uncer-

tainty, lacking the wits to optimize, they must be content to satisfice—to find 'good enough' solutions to their problems and 'good enough' courses of action" (1979, 3). Like Simon, we find it useful to begin with the modest assumptions about human cognitive capacity typically made in psychological theory and corroborated in psychological research.

A major conclusion of such research is that people do not pay attention to everything. To do so would breed paralysis. Attention is highly selective; people notice only particular features of special consequence. Because of this fundamental limitation, the impressions we form of others tend to be organized around a few central themes (Asch 1946). With respect to the impressions we form of presidents, such themes might include the political party he represents, the policies he favors or opposes, his performance in office—the achievements and failures he has appeared to bring about, the kind of person he seems to be, particularly with respect to his apparent competence and integrity, the racial, religious, class and ethnic groups he stands for and against, and the general values he appears to embrace. These themes represent the central standards against which presidents are measured.

A second conclusion of research on judgment is that rather than undertaking exhaustive analysis, people ordinarily prefer heuristics—intuitive shortcuts and simple rules of thumb. One such heuristic is reliance upon information that is most *accessible*. When asked to evaluate a particular president, Americans do not consider everything they know. Nor do they even consider everything they know relevant to the central themes listed above. Instead, they draw upon a sample of what they know, and a sample of convenience at that. Some considerations prove decisive; others are ignored altogether. The relative importance of each depends in part on its momentary accessibility. Fischhoff, Slovic, and Lichtenstein put the general point well: "People solve problems, including the determination of their own values, with what comes to mind. The more detailed, exacting, and creative their inferential process, the more likely they are to think of all they know about the problem. The briefer that process becomes, the more they will be controlled by the relative accessibility of various considerations" (1980, 127). Under ordinary circumstances, judgments about the president are offered rather casually. Because the judgment process is seldom "detailed, exacting, and creative," judgments of the president depend less on the entire repertoire of people's knowledge and more on which aspects of their knowledge happen to come to mind.

The importance of accessibility as a heuristic device in everyday judgment is supported by considerable experimental evidence. Consider these examples: (1) Americans are more likely to say that they pay a fair share of federal income tax if they have just been asked a battery of questions probing their support for popular programs like aid to education and environmental protection than if they have not (Turner and Krauss 1978). Presumably, questions about particular and popular uses of tax monies primed people to take such uses into account when they decided whether their own tax burden was fair; (2) Americans report themselves to be substantially less interested in politics if they are first reminded of their limited political knowledge by being taken through a series of difficult questions regarding the activities of their representative in Washington, than if they are asked about their interest before this series of questions (Bishop, Oldendick, and Tuchfarber 1982); (3) More generally, Kahneman and Tversky have demonstrated that sizable shifts in choice can be produced by "seemingly inconsequential changes in the formulation of choice problems" (Tversky and Kahneman 1981, 453; also see Kahneman and Tversky 1979, 1984). Framing the problem in one way rather than in a logically equivalent alternative way can radically alter which options are chosen and which foregone.[2]

The upshot of all this research is not that judgment in general or political judgment in particular is capricious. Indeed, Kahneman and Tversky offer their own prospect theory as a systematic alternative to the conventional theory of rational choice they attack. The point is rather that a person's judgment depends in part on what comes to mind—on considerations that are, for whatever reason and however briefly, accessible.[3]

To a considerable degree, what information is accessible for presidential evaluations and what is not is a matter of circumstance. When political circumstances change, what comes to the citizen's mind most readily will also change. The circumstantial basis for judgments of presidential performance no doubt has many sources, but among the most important may be television news. We suggest that the standards citizens use to judge a president may be substantially determined by which stories newscasts choose to cover and, consequently, which considerations are made generally accessible. The more attention television news pays to a particular problem—the more frequently a problem area is primed—the more viewers should incorporate what they know about that problem into their overall judgment of the president.

Experimental Tests of Priming

Sequential Experiments

Although designed primarily to test the agenda-setting hypothesis, experiments 1, 2, and 9 also provide evidence relevant to priming. All three experiments followed the standard sequential procedure. In ex-

periment 1, participants viewed newscasts that either emphasized inadequacies in U.S. defense preparedness or did not; in experiment 2, one group of participants watched newscasts emphasizing defense, while another watched newscasts dotted with stories about inflation;[4] in experiment 9, participants either viewed newscasts that paid special attention to unemployment or did not.

We are interested in whether such experimentally-induced variations in news coverage influenced the standards viewers applied in evaluating the president's overall performance. With this purpose in mind, we asked participants on the final day of each experiment (twenty-four hours after the last broadcast) to rate the president's performance with regard to various problems, including "maintaining a strong defense" (experiments 1 and 2), "reducing inflation" (experiment 2), and "keeping unemployment down" (experiment 9). Participants were also requested to evaluate the president's general performance.[5]

If the priming hypothesis is correct, we should find that viewers who were shown stories about a particular problem gave more weight to the president's performance *on that problem* when evaluating the president's overall performance. In experiment 1, for example, people who were exposed to a steady stream of stories about defense should weigh defense performance more heavily in their evaluation of Carter's overall performance than should people whose attention was directed elsewhere. Put more formally, we estimate priming as the difference between the impact of ratings of the president's handling of a particular problem on evaluations of the president's general performance when television news covers the problem and when it does not. (Details on estimation are provided in Appendix B.)

The results from experiments 1, 2, and 9, displayed together in table 7.1, support the priming hypothesis forcefully.[6] Consider, for example, the findings from experiment 1. Among participants in experiment 1 whose newscasts contained no stories about defense, a one point improvement in ratings of Carter's handling of defense (between fair and good, for example) was associated with about a one-quarter point (.27: the baseline condition) improvement in evaluations of his general job performance. Among viewers exposed to defense stories, in contrast, the impact of ratings of the president's performance on defense was more than twice as great. For viewers who were primed with defense, a one point improvement in their assessment of Carter's performance on defense produced nearly a two-thirds of a point improvement in their evaluations of his general job performance (.62: the primed condition).

Priming was just as substantial for defense and inflation in experiment 2. It was notably less for employment in experiment 9, no doubt because concern over unemployment was pervasive even without any experimental intervention. Note that the baseline coefficient in experiment 9 was .69, by far the largest we encountered in all our experiments. Experiment 9, remember, was conducted in July of 1982, during the depths of a serious recession. At this time, unemployment already dominated the public's political calculus. Even so, exposure to still more news about unemployment in experiment 9 did enhance, if marginally, the importance of unemployment in citizens' views of Mr. Reagan's overall performance as president.

In some ways, the results from the three experiments are unexpectedly strong. Experiments 1, 2, and 9 were designed with agenda-setting in mind, not priming. For the purpose of testing the priming hypothesis, they included too few participants in each condition, they omitted questions asking participants to evaluate the president's performance on the preexperimental questionnaire (which would have permitted a more sensitive test of priming), and they ignored subtle features of the newscasts that might well influence the magnitude of priming (such as implications regarding the president's responsibilities for causing or solving the problem). Despite these limitations—in fact, *because* of them—we take these results to be strong, if preliminary, support for priming.

Experiment 8 was designed to overcome these limitations and so to test priming in a particularly powerful way. Residents of the greater New Haven community were recruited in the usual manner and ran-

TABLE 7.1

Priming Presidential Evaluations: The Impact of Problem Performance Ratings on Evaluations of Presidential Performance as a Function of TV News Coverage (ordinary least squares estimates)

Experiment	Problem	No TV Coverage (Baseline)	TV Coverage (Primed)	Difference: Primed Minus Baseline
1	Defense	.27	.62	.35***
2	Defense	.26	.72	.46***
2	Inflation	−.01	.37	.38**
9	Unemployment	.69	.73	.04*

*$p < .25$
**$p < .05$
***$p < .01$

domly assigned to one of three treatments. One group of people viewed newscasts over the course of a week emphasizing unemployment (three stories, for a total of ten minutes). A second group saw newscasts emphasizing arms control (three stories, nine minutes in total). A third group saw newscasts featuring steady coverage of civil rights (three stories, seven minutes total). In the postexperimental questionnaire, all participants rated Reagan's performance with regard to unemployment, the nuclear arms race, and civil rights, and also evaluated Reagan's overall performance as president.

In creating newscasts for experiment 8, we selected stories that implied a high degree of presidential responsibility: stories that suggested the president to be responsible either for causing a particular problem or for solving it. Our assumption was that priming should be most pronounced when the president was so implicated. We develop this assumption further and test it in chapter 9. Here we merely assume that the level of presidential responsibility conveyed in television coverage influences the magnitude of priming, so we did our best in experiment 8 to hold presidential responsibility at a uniformly high level in all three treatments.[7]

As in experiments 1, 2, and 9, we test priming by examining the effect of the viewers' ratings of the president's performance on *particular* problems on their assessment of his *general* performance. This may depend upon the prominence accorded those problems by television news. The results, shown in table 7.2, indicate strong support for priming. The estimated effects due to priming shown there are sizable, for arms control, civil rights, and unemployment alike. In each of the three cases, the importance of the particular problem for the president's overall standing more than *doubled*, thanks only to increases in television news coverage.[8] Together with the earlier analyses

TABLE 7.2

Priming Presidential Evaluations: The Impact of Problem Performance Ratings on Evaluations of Presidential Performance as a Function of TV News Coverage: Experiment 8 (ordinary least squares estimates)

Problem	No TV Coverage (Baseline)	TV Coverage (Primed)	Difference: Primed Minus Baseline
Arms control	.03	.49	.46*
Civil rights	.24	.68	.44*
Unemployment	.37	.83	.46*

*$p < .01$

of experiments 1, 2, and 9, these results demonstrate that television news powerfully shapes the standards viewers use to evaluate the president.

ASSEMBLAGE EXPERIMENTS

Partly to investigate the relationship between the intensity of news coverage and the magnitude of priming, we undertook two assemblage experiments. In experiments 3 and 4, participants viewed a collection of news stories at a single one hour sitting. Experiment 3 was run in April and May of 1981 with Yale University undergraduates and included five experimental conditions. Students saw either *no* stories about energy problems, *three* stories on energy, or *six* energy stories scattered through the collection; and such stories implied either *strong* presidential responsibility for the nation's energy predicament or *moderate* responsibility. Experiment 4 was conducted during June and July of 1981, with participants drawn from the general New Haven community. As in experiment 3, two levels of coverage (three stories vs. six stories) were combined with two degrees of presidential responsibility (strong vs. moderate), this time for each of three problems: energy, defense, and inflation. Thus participants saw either three stories or six stories about the target problem, and such stories pointed responsibility either toward or away from the president. In both experiments, after watching the collection of news stories, participants rated Carter's success in a variety of specific areas, including "implementing a national energy policy" (experiments 3 and 4), "holding inflation in check" (experiment 4), and "maintaining a strong national defense" (experiment 4), and also evaluated Carter's general performance as president.

Experiments 3 and 4 were obviously designed to investigate how, if at all, the degree of presidential responsibility implicit in television news coverage contributes to the priming effect. We will find out, but not until chapter 9. For now, we ignore the level of presidential responsibility and concentrate on the more elementary relationship between the magnitude of priming and the sheer amount of coverage. Therefore we test for priming effects in experiments 3 and 4 exactly as we did in the sequential experiments (see Appendix B for details).

The results from both experiments, displayed together in table 7.3, reveal consistent and substantial support for priming. In experiment 3, energy performance ratings were more influential in evaluations of Mr. Carter's general performance among students exposed to stories about energy than among those exposed to no stories about energy. The identical pattern appeared in experiment 4 for energy, defense, and infla-

TABLE 7.3

Priming Presidential Evaluations: The Impact of Problem Performance Ratings on Evaluations of Overall Presidential Performance as a Function of TV News Coverage (ordinary least squares estimates)

Experiment	Problem	No TV Coverage (Baseline)	TV Coverage (Primed)	Difference: Primed Minus Baseline
3	Energy	.18	.25	.07**
4	Energy	.19	.33	.14**
4	Defense	.04	.12	.08*
4	Inflation	.25	.39	.14**

*$p < .20$
**$p < .05$

tion alike. Although these priming effects are generally smaller than those recorded in sequential experiments—as well they should be—they nevertheless provide additional and clear support to the priming hypothesis.[9]

Testing an Alternative to Priming

According to both sequential and assemblage experiments, when television news increases its coverage of a particular problem, viewers weigh their ratings of the president's performance on that problem more heavily when they evaluate the president's general performance. This result is, of course, what we have termed priming—problems covered by television news become more accessible and therefore more important in the viewer's political calculus. However, the result is consistent with an alternative view: that television coverage of a particular problem causes viewers to adjust their ratings of the president's performance on that problem to become consistent with their overall evaluation of the president. This possibility, which is the very opposite of priming, we call *projection*.

How might projection work? Suppose the networks run a series of stories on unemployment. Such stories supply viewers with new information and may remind them of what they already know. In evaluating the new information and mulling over the old, people are very likely, in part, to be guided by their prior opinions. In particular, the president's supporters and his critics may interpret the television stories quite differently. His supporters may take the news about unemployment as indicating that things are not so bad; that they're getting better,

and in any case, that high unemployment is caused not by the president's policies, but by foreign competition or by the failed policies of the past. The president's critics, on the other hand, may see things as bad and getting worse, and may hold him directly accountable. The result of such ruminations will be that viewers' ratings of the president's performance on unemployment will now closely reflect their overall evaluation of him—not because unemployment dominates their overall impression, but because they have projected their overall impression onto the president's unemployment performance. What we have termed priming may in fact be projection.

Not only is projection a plausible alternative interpretation, it is an alternative with real consequence. The political differences between priming and projection are enormous. If priming holds, then television news possesses the capacity to alter the standards by which a president is judged, and therefore the degree of public popularity a president enjoys and the power he can wield. If projection holds, then we will have discovered that people interpret new events or reinterpret old events in order to maintain consistency with their existing predispositions—an interesting discovery, though hardly a new one (e.g., Abelson 1959) and, most important, one that implies a sharply reduced role for television news as a molder of opinion.

Disentangling priming from projection requires a departure from standard statistical procedures. In estimating priming effects so far, we have assumed that overall evaluations have no impact on specific performance ratings. If this is mistaken, which is the same as saying that projection is present, then our estimates of priming are positively biased. Obviously we need estimates of priming that are purged of projection. For this purpose, we turn again to experiment 8. An essential feature of that experiment was that participants were asked to evaluate President Reagan on two occasions, before and after watching the television broadcasts, six days apart. This enables us to obtain estimates of priming uncontaminated by projection.

To do so, we relied on the method of two stage least squares (2SLS) (see Appendix B for details). We followed this procedure for the three problems separately, each time estimating the impact of problem performance on overall evaluation for the experimental group and for the control group. If priming is at work, the 2SLS estimate of the impact of problem performance on overall performance should be greater when the problem is primed than when it is not. That is, priming is indicated by the *difference* between the two estimates: the impact of ratings of performance on the target problem on overall performance should be

more pronounced among those who have just watched newscasts dotted with stories devoted to that problem, than among those whose newscasts were purged of such stories.

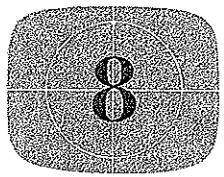
The results from this analysis support the priming hypothesis handsomely. Once projection is taken into account, priming effects persist. If anything, these results suggest that our earlier estimates of priming somewhat *understated* the impact of television news (see Appendix B for details).

Conclusions

By providing glimpses of some aspects of national life while neglecting others, television news helps define the standards that viewers apply to presidential performance. Our experiments show priming to be a robust effect; it occurs in coverage of various problems, for both Democratic and Republican presidents; in different experimental arrangements, and in analyses that remove the effects due to projection. Together, these results constitute impressive support for priming.

Although we detected priming in every experiment, the effects were more pronounced in sequential experiments than in assemblage experiments. On average, priming coefficients derived from experiments 1, 2, 8, and 9 were more than three times as great as those derived from experiments 3 and 4 (.37 vs. .11). This contrast is strongly reminiscent of the pattern of results we found with respect to agenda-setting in chapter 3. There, as here, periodic exposure spread over several days appeared to be more influential than a single concentrated exposure. The contrast is important, since the periodic exposure that is characteristic of sequential experiments represents more faithfully the ordinary citizen's actual encounters with television news than does the sudden burst of exposure that is the defining feature of assemblage experiments.[10]

The next several chapters probe more deeply into priming. We will see whether priming can be detected not only in viewers' assessments of the president's performance but also in assessments of his character (chapter 8); whether priming is strengthened when the news implies that the president or his administration is responsible for the problem (chapter 9); who among the viewing public is most susceptible to priming (chapter 10); and how, if at all, priming influences the considerations that voters take into account as they cast their ballots (chapter 11).



Priming and Presidential Character

From chapter 7 it is apparent that television coverage can effectively prime viewers' judgments of a president's performance. Now we determine the extent to which coverage can also prime viewers' judgments of a president's *character.* This is hardly a frivolous generalization. Presidential campaigns are many things: competitions between the two major political parties; ideological struggles over the direction of national policy; referenda on the incumbent's performance in office. But they are also tests of character (Kinder and Abelson 1981). Candidates must project intelligence, honesty, compassion and more, or suffer the consequences. More generally, how much support a president can muster during his term and how many votes he receives on election day depend heavily on how he is judged in personal terms. Because character is important to the public, it becomes important to our analysis of priming.

To test whether television news can prime the standards viewers apply to presidential character, we must first identify those aspects of a president's character that voters deem most important. In doing so, we have assumed, as Lane did, that "people seek in leaders the same qualities they seek in friends, that is, they simply generalize their demands from one case to the other" (1978, 447). According to four autonomous lines of research in psychology, such demands seem to center on the largely independent dimensions of *competence* and *sociability.* These two dimensions emerge as critical traits in investigations of leadership in small groups (task vs. socioemotional leadership, Cartwright and Zander 1968); in attitude change research on source credibility (expertise vs. trust, McGuire 1985); in research on interpersonal attraction (respect vs. affection, Rubin 1973); and, perhaps most pertinent here, in explorations of the criteria people apply in evaluating friends and acquaintances (intellectual competence vs. affection, Rosenberg 1977).

Americans also seem to demand competence and some version of sociability from their president, though the evidence to date is rather sketchy. References to competence and sociability emerge frequently