

THE COGNITIVE BASES FOR FRAMING EFFECTS

HOW AUDIENCES process news cognitively is central to understanding the effects of news content and news frames. In this chapter we offer an account of the psychology of the audience to set the groundwork for our studies of the effects of news frames on learning, cynicism, and understanding. Our discussion focuses specifically on the strategy frame and how it might interact with the audience's knowledge and normal cognitive functions.

News frames make salient certain features of a news event and depress others. What is salient in a story primes mental associations in the receiver and, through a process of spreading activation in the knowledge system, stimulates other, related concepts as well. Strategic frames invite negative attributions about political actors because the stories suggest that politicians are motivated by self-interest. These attributions may be automatic in the sense of being effortless and, after repeated application, may become the accepted narrative account organizing thinking about a politician or politicians in general.

We proceed first by discussing some general principles of the organization of knowledge and information processing; second, we discuss the importance of stories and narrative to understanding, recall, and the organization of knowledge; third, we take up the role of news in creating impressions of the political actors it discusses; fourth, we build from news and impression formation to account for the way strategic news frames might affect trust; finally, we explain existing findings on agenda setting, media priming, and framing in terms of our model of the psychology of news processing.

Previewing the Theory

Our theory may be summarized as follows:

1. Knowledge of politics is organized as connections among concepts or constructs in memory (sometimes called "nodes") that differ in how easily they can be accessed. These nodes hold substantive, emotional, and personal trait qualities.

2. The pattern of connections is through associations (sometimes hierarchical ones); activation spreads through the knowledge store along these lines of association.

3. Access to knowledge depends on activation, which in turn depends on recency and frequency of prior activation, chronic ease of access, and current external stimulation.

4. Framing makes certain information in a news story salient and depresses the importance of other information. News frames stimulate access to certain information, making it more accessible at least temporarily. Priming and the spread of activation are the mechanisms through which news frames stimulate thought processes and emotional reactions.

5. The knowledge activated by news frames accomplished through priming and spreading activation alters the accessibility of beliefs through changes in the ease of activation and through cuing scripts (or stock stories) pertinent to the topic.

6. The judgments activated by news frames take place in two ways: recall of information as the basis for political judgments; tallying the affective implications of information as judgments (i.e., on-line).

7. News frames that describe the behavior of a political actor or entity invite inferences by the citizen about the character of the actor (sometimes called character traits). These traits are both knowledge about the entity and have evaluative implications for how the person feels about the actor. When a single trait is implicated again and again, it can become the organizing "theme" for the person's theory about the actor or about political actors in general.

8. Strategic frames describe the behavior of politicians, make salient the self-interest of those actions, invite negative character attributions, cue stock stories about "politics as usual," and reinforce cynicism (as mistrust).

9. News stories, even those strategically framed, often carry substantive information about issues, albeit set in the context of self-interested manipulation. Attentive exposure can alter political knowledge by increasing the accessibility of information, changing the associations among constructs, and cuing and strengthening existing localized networks of concepts.

In the following sections, we develop the components of the explanation.

Knowledge, Association, and Spreading Activation

Any serious explanation of the process of learning and political judgment must begin with assumptions about how people organize the information they have and how they organize information about politics in particular.¹

Models of how knowledge is stored in memory are numerous and diverse. Some assume that there are both visual and conceptual bases to knowledge,² others argue that propositional structures are all that we need.³ Some models adopt the view that constructs are linked through networks of association that are hierarchical,⁴ associational without hierarchy or differentiation,⁵ or associational with some hierarchical structure.⁶

We cannot determine which model of knowledge storage is correct because current research tools do not allow direct access to the mental storehouse of knowledge. So the best assumptions are those that work to solve problems and paradoxes in observable data. We assume that knowledge is stored as a network of associations between nodes where

the linkages vary from no connection to strongly connected. Nodes can be concepts such as "health reform" and "HMO," character traits such as "aggressive" or "intelligent," and affective components such as "liked" or "enthusiastic."

A key principle of an associative knowledge network is *spreading activation*.⁷ This principle holds that whenever a focal node is brought into conscious awareness (i.e., is activated), some of its activation is then transferred to nodes that are linked to the focal node. The stronger the association, the greater the likelihood that a neighboring node will also be brought into awareness.

Positing an associative network with spreading activation as the basis of knowledge systems allows the explanation of three pervasive processes: cognitive priming, distortion, and inference-making. Cognitive priming refers to the well-established fact that activation of a construct stimulates neighboring constructs so that subsequent recall of the neighbors is easier than if no previous priming had taken place.⁸ Another way to describe priming is that associates of the activated construct are made more accessible for later recall. For example, after reading newspaper stories about candidates for mayor during the previous week, people later asked to recall information from a televised debate among the candidates should find it easier, argue proponents of priming, to retrieve information from the debate than people who read news about something else. The principle is that using one's knowledge not only makes recall of the activated knowledge easier but also facilitates recall of related information.

Distortion and inference-making are closely related phenomena. They both require inferences, but distortion typically implies logically or pragmatically unacceptable inferences while simple inference-making does not. Stereotyping⁹ can involve both distortion and inference-making. A study by Thomas Gilovich¹⁰ described earlier shows how patterns of association can yield inferences that go beyond the information presented. Participants chose a more interventionist and aggressive solution to a military problem when the language cued World War II rather than Vietnam. One account of these findings argues that by priming World War II, inferences associated with avoiding the errors of appeasement were activated, whereas such notions as the hazards of foreign entanglements were primed by Vietnam inferences.

A substantial body of research suggests that the cues a text makes salient can alter what is recalled, what is inferred, how events are

judged, and how events are interpreted. This research has focused on social stereotypes,¹¹ sexual minorities,¹² person perception,¹³ and even biographies of famous personalities.¹⁴ These inferential processes are central to our ability to understand texts. Without inference, only excruciatingly detailed texts would be easily interpreted.¹⁵ These same necessary inference processes all show that simple cues activate related knowledge, altering what readers attribute to texts and the actors portrayed there.

The point of this excursion into inference, distortion, and priming is to make clear their centrality to ordinary information processing activities. Associative networks and spreading activation provide the outlines of an explanation of these important processes. Some treatments of mental models have adopted the script or schema view of knowledge organization to explain inference-making, person perception, and stereotyping.¹⁶ Although we have no quarrel with this approach to the modeling of knowledge (and invoke it later) it is an unnecessary complication to the associative network with spreading activation. One way to view scripts and schemas is as specific patterns of linkage within an associative network of constructs. Priming, distortion, and inference-making can be explained by assuming that knowledge is organized as scripts or schemas. Parsimony suggests that associative networks governed by spreading activation are to be preferred.

Stories Organize Associative Networks

These networks of knowledge may also be the repositories of the stories people have acquired about politics that allow them to make sense of their too often confusing political and social worlds. We have labeled this the cognitive-narrative approach. Evaluations and judgments are the mediators of political outcomes. They are, however, a small part of the public and private discourse about politics. People do not only emote about politics, they lament it, explain it, and reason about it with other citizens.¹⁷ Once they have stated their opinions and perhaps expressed their dismay, what do they say? Evaluations and judgments once stated may lead to a memory search for supporting information so that the judgments are seen by the interlocutor as having sufficient reason. They may also be supported by stock stories that help people make sense of their political and social worlds.

The study of narrative has a rich history in rhetoric and in literature¹⁸ but its treatment in cognitive science has been spotty.¹⁹ In their recent essay, Roger Schank and Robert Abelson²⁰ have sought to change all this, arguing that:

1. Virtually all human knowledge is based on stories constructed around past experiences.
2. New experiences are interpreted in terms of old stories.
3. The content of story memories depends on whether and how they are told to others, and these reconstituted stories form the basis of the individual's remembered self.

Three propositions from this essay are important to the model we are proposing: (1) stories are the basis for understanding and making sense of events; (2) organizing information in the form of stories facilitates retrieval of information; (3) salient cues in the environment can bias which story is activated.

Research in comprehension has long held that understanding new information depends on integrating the new into previously stored information that is itself already understood.²¹ Schank and Abelson take this claim a step further by noting that what people know and understand best are stories; as a result, much of successful understanding is embedding new information in a story meaningful to the hearer: "Because we can only understand things that relate to our own experiences, it is actually very difficult for us to hear things that people say that are not interpretable through those experiences."²² The new is understood in terms of the old:

When a new story appears, we attempt to find a belief of ours that relates to it. When we do, we find a story attached to that belief and compare the story in our memory to the one we are processing. Our understanding of the new story becomes, at that point, a function of the old story.²³

Little research has been done to evaluate Schank and Abelson's claims about stories and understanding. Nancy Pennington and Reid Hastie have shown that jurors try to comprehend the complexities of a criminal case by reducing the evidence to a story about the crime.²⁴ Their stories involve episodes from the evidence presented in the case, are usually consistent with legal norms, emphasize the motives of the accused, and mediate the jurors' confidence and decisions.

Many other decision-making contexts also yield stories as a part of the decision-making process,²⁵ but not all do. When specialists make decisions in their areas of expertise, the nature of the language, reasoning, and description is not particularly story-like.²⁶ Hastie and Pennington predict that stories are especially common when it is necessary "to organize a large, complex, conflict-filled collection of evidence as a temporal narrative summary . . . especially in social situations where communication, argumentation, and revision of both the evidence and decisions based upon it are sure to follow."²⁷ Even though they are not the only structures of knowledge used, stories can be a framework within which to bolster understanding.

Stories can also enhance the recall of information from memory by "preserving the connectivity of events that would otherwise be disassociated over time."²⁸ To do so, "they must be stored away in a fashion that enables them to be accessed as a unit. If this were not the case, stories would have to be reconstructed each time they were told, a process that would be more and more difficult as the connections between events fade from memory."²⁹ This view of the representation of stories in memory is quite speculative and we know of no empirical evidence to support or refute it.³⁰ A plausible alternative is a set of associations among constructs and personal episodes³¹ that is activated when an appropriate cue is present in the environment, and that fades with disuse.

Less speculative is the facilitating effect of story memory on the retrieval of information. Those instructed to organize a set of unrelated test words into a story had five times the recall of a group told simply to remember the words.³² Texts that have a strong narrative structure are read more quickly and material from them recalled better than when expository ones are used.³³ Stories also invite causal and motivational thinking that enhances recall. When readers report what they are thinking when they read stories, they sometimes report attributing causes and motives to the character. The more they do so, the better their later recall of the content of stories.³⁴

The conditions that enhance memory are not well known, but narratives are certainly more likely to organize knowledge when the information being communicated is organized in a story format. The art of telling a good story is much of what is behind interesting journalism, good teaching, and being socially adept. It may also be part of the basis for remembering news, lessons, and people.

Which stored stories are activated depends in part on the subtle cues in the environment. What is made prominent by those who manipulate the symbolic environment activates and primes what is retrieved from memory. Schank and Abelson suggest that activation and priming apply not only to information retrieved from memory but also to entire stories. Some evidence supports the claim that scripts (or stereotypical stories) can be cued by sentences,³⁵ and proverbs primed by other proverbs with similar themes.³⁶

If stories and story cues have the capacity to elicit stock stories existing in an audience, then in studying political news it is important to understand what kinds of stories about politics people hold and what categories of stories exist in the news environment. Such inquiry will help us understand how people make sense of their political worlds.

Stories About People

Central to a citizen's understanding of the role of stories in making sense of the behavior of political actors is understanding stories about people — what they are like, how they are organized, and what they imply. Most brief stories, whether or not they are about people, are organized around some theme. That theme may be the story's point or moral or it may simply be an organizing proposition. Themes organize stories and assist in the recall of information from the narrative.³⁷

In stories about people, traits may play a role akin to themes in more general types of stories. Bernadette Park asked people to write open-ended descriptions of one another as they got acquainted over a seven-week period.³⁸ She found that individuals attributed traits to one another more frequently than anything else, including describing others' behavior, their physical attributes, attitudes toward them, and demographic characteristics. They did not begin by describing behaviors and other more directly observable features and then move to traits — traits organized their views right away. Later essays by these individuals considered whether the early trait attributions were correct and adjustments were made as writers deemed necessary.

Park concluded that traits organized people's impressions by combining in a shorthand way various behaviors and events.³⁹ To show this more rigorously, she took advantage of a cognitive process known as the fan effect.⁴⁰ As the number of pieces of disconnected information to be remembered increases, so does the response time to verify what has been previously learned. But the effect is reduced when the pieces

of information to verify are conceptually organized. The organizing theme effectively interconnects the facts.

Park's studies of traits and behaviors indicated that when learned behaviors were organized around traits, the fan effect was reduced. This conclusion implies that traits organize behaviors and events and, in this sense, may be an organizing principle for our information about people.⁴¹

When people try to understand stories, they usually make inferences that allow them to bridge events whose connections are only implied. The kinds of inferences made during comprehension are ones that explain what is happening and these explanations are often motivations and causal antecedents for action.⁴²

Stories about people are often concerned with their traits and their motivations. Persisting motivations can come to be seen as character traits. When research on understanding stories about people is combined with research on character judgments in evaluations of political candidates, it follows that character traits may organize impressions about political actors in the same way that they organize impressions about acquaintances.

Political Knowledge and Political Impressions

So far, our discussion of knowledge has been general and not involved its contents. The content of political knowledge — specifically, knowledge about candidates and elections — seems to revolve around two broad clusters: policy and position, and character and competence.

Richard Lau's 1986 analysis of the open-ended NES data from 1972 and 1976 concluded that voters organize political information in four clusters: issues, groups, personality, and party, with the same voters tending to rely on the same types of information when responding to different political stimuli.⁴³ So, for example, those with well-developed party information see party identification as more central to candidate evaluation than those without. Arthur Miller and his colleagues also analyzed the open-ended NES questions found broad groupings similar to those uncovered by Lau.⁴⁴

These conclusions are consistent with others finding that policy positions and personal attributes formed two distinct clusters in memory.⁴⁵ Lau's analyses are consistent.⁴⁶ The position and person clusters become related when voters draw inferences about candidate traits from the candidate's position on issues. So, for example, voters in 1984

may have seen Mondale and Reagan's stands on defense spending as a sign that the individual candidate was strong or weak, competent or incompetent. Policy positions carried implications about candidates' character.

The process more often moves from issue to trait, from position on defense for example, to a self-interested reason for position on defense.⁴⁷ This direction of movement is consistent with both experimental and survey work, which suggests that people are more likely to draw inferences from issues to traits than vice versa.⁴⁸ The reasons are several. Just like everyone else who has to handle large quantities of information, voters are "cognitive misers." Instead of holding onto various detailed issue positions, these are reduced to personal qualities that are more familiar to the voter and can be further reduced to simple evaluations of the candidate in pro and con terms.

Second, impression formation is a common and continual daily activity in ordinary social encounters. Political decision-making is in many ways little different from forming impressions and making judgments about liking, competence, ability, and integrity. Donald Kinder and Susan Fiske argue that candidate appraisals are similar to personal appraisals.⁴⁹ Wendy Rahn and her colleagues present evidence showing that policy positions affect judgments of candidate competence and integrity.⁵⁰ This in turn affects overall evaluation of the candidate and likelihood of voting. In short, positions are the basis for impressions and impressions the basis for voting.⁵¹

Impressions — specifically, those relevant to emotional evaluation and voting — are central determinants of political judgments and may be a significant component of people's political knowledge, even that of sophisticated consumers. Knowledge of policy and position is not absent from the cognitive storehouse; instead it is mediated through impressions of personal character.

Automatic Inferences

The impressions that people form about politicians from their positions and their behaviors are kinds of inferences, specifically called *trait* inferences.⁵² Trait inferences are an everyday process in ordinary social interaction. They are based on the behaviors people engage in and how those behaviors are represented.⁵³

For example, if a candidate is described in news accounts as changing what he says depending on who is listening, performing for the

cameras, and using equivocal language in position papers, one might infer that he is manipulative. This description is the larger category in which the other behaviors fit, but, more important, is an attribution about the candidate,⁵⁴ serving both to group his behaviors and explain them. The grouping is cognitively efficient and the labeling allows the audience to understand the candidate's behavior in ways consistent with ordinary interpersonal judgment.

One common assumption people make in explaining the behavior of others is what has been called the fundamental attribution error.⁵⁵ This "error" biases explanations of others' behavior toward personal interest or motive and away from situational or contextual reasons. The result is that trait inferences too readily become trait explanations, with the categorization of behaviors becoming the reason for behavior.⁵⁶

Recent research has provided evidence that trait inferences from very simple texts are automatic. This means that people are allocating limited cognitive energy to this kind of inference while making the inferences without conscious awareness. The presence of automatic thought processes is generally based on solid evidence that is growing in depth and breadth.⁵⁷ Automatic priming of trait inferences was discovered in research by James Uleman and his colleagues.⁵⁸

When people are required to read and remember sentences known to imply traits, they tend to find that the implied traits are better cues in later recall than words semantically similar to the contents of the original sentence. For example, the sentence "The secretary solves the mystery halfway through the book" implies that the secretary is clever. "Clever" turns out to be a better cue for surprise recall tests of the sentence than semantically related words, such as "typewriter" and "detective." Even though people are not asked to make trait inferences, they seem to do so, storing the trait inference as a part of the learning episode, as Tulving and Thompson suggested in their theory of episodic memory.⁵⁹ If the trait inferences were not made, it would be difficult to understand how they could be better cues in later, surprise recall than words meaningfully associated with the original sentences.

The likelihood that trait inferences are made depends in part on the task readers are given or the task implied by the kinds of questions asked. In one study passages that invited trait inferences lead to more inferences of this type than comparison passages with similar words but less likely to invite trait inferences.⁶⁰ Moreover, the trait inferences

increased markedly when the researchers' questions suggested that the readers' tasks were either to form an impression or understand the passage rather than simply recall the facts of the passage. The authors note that thinking "of the traits used in this study as concepts linked together as part of a network of knowledge about dispositions, the present data suggest that the task variable affects how strongly the traits are activated."⁶¹

Impression formation and comprehension are tasks likely to guide consumers of political information under most circumstances. Trait inferences should follow whenever they are implied, even if reporters do not directly attribute them to the individuals in the news story.

Negative information about people and events has more alerting power than equivalent positive information. It carries more weight in social judgments⁶² and is easier to recall.⁶³ These effects are well established, but they are usually assumed to apply only when the audience is actively attuned to the activity of monitoring what is negative and positive about stories. What happens to negative social information when people are passive consumers or are engaged in other activities? Does negative social information have any special status in these contexts?

When the traits inferred are potentially consequential to the reader's well-being, attention to such traits may be redirected toward them even when the person is engaged in relatively automatic processing of other materials. Felice Pratto and Oliver John asked people to respond to negative (e.g., selfish, intolerant) and positive (e.g., sincere, kind) trait words in the Stroop color test.⁶⁴ This test involves a highly automatic task in which people have to name the color of the word appearing on a screen as soon as possible. Their task is to attend to the word's color, not its meaning. The subjects were both accurate in doing so and very quick (about .650 seconds). The authors found that negative words slowed the speed of responding (by about 30 milliseconds), did not change accuracy of color recognition, and increased the accuracy of later (surprise) recall of the words. Common and uncommon negative words produced the same effect.

These data suggest that automatic vigilance regarding negative information is

a default response: ... [monitoring] potentially undesirable information when specific information processing goals are not active. ... Thus, bias toward undesirable information and the influence of such information on

judgment seem most pronounced when people do not realize that such influences are occurring.⁶⁵

When readers are processing information about candidates simply to understand and stay informed, they may be most susceptible to the biasing effects of negative trait inferences, attending a bit longer and learning a little more than with positive traits.

Summary

Let us summarize our conclusions so far. Political knowledge is organized as a set of associations among constructs more and less strongly linked. The activation of one or more constructs spreads to constructs linked to the activated ones. This organizational system for knowledge is compatible with explanations of priming and inference-making and minimizes the need for using the concept schema as an organizing vehicle. Narrative knowledge may be especially important in making sense of new information, retrieving old information, and organizing information in personally meaningful structures.

The content of political knowledge is centered on policy and position, and character and personality. The character traits of political actors are in large part the result of inferences from policy positions and spontaneous inferences from stories that imply trait inferences. Character traits are both the shorthand for organizing behavioral information and the organizing inferences in stories, especially stories about people. Negative traits are especially strongly weighted, producing attention and recall even when the audience is not consciously aware of the information's social implications.

The structure and organization of political knowledge set the stage for understanding framing effects in general, and strategic framing in particular. To explain the effects of news frames on learning and judgment requires understanding the processes by which political information stored in memory is used by more and less well-informed citizens who make political judgments.

From Knowledge to Political Judgments

Two processes have been hypothesized to link external messages, political knowledge, and political judgments: memory-based (MB) and on-line (OL). The memory-based approach assumes that political judgments depend on the integration of information retrieved from

memory, and that what is retrieved depends on what is accessible. The clearest and most pertinent statement of this position about the framing effects of news is that of Vincent Price and David Tewksbury.⁶⁶

The on-line approach assumes that the key information in a news story is evaluated and stored as an evaluation as it is processed. The basis for the evaluation is assumed to be lost. The strongest statement of this position in the arena of political judgment has been advanced by Milton Lodge.⁶⁷

We examined each of these processes and reached three conclusions. First, both processes—memory-based and on-line—are needed to explain framing effects. What is learned from news, how the learned material is translated into emotion-laden evaluations, and how people understand and explain politics to one another are questions answered by a theory that finds a place for learning, forgetting, and sense-making. Second, we believe that Lodge's theory of on-line processing, which he offers as a position counter to memory-based processing, overstates the role of on-line evaluation and understates the role of retrieval. Third, the effects of news frames on learning, cynicism, and attitudes and lay explanations of politics can be seen as direct consequences of our theory.

Memory-based Judgments

Memory-based models of framing effects are based on the assumption that political judgments are the result of retrieving information that is accessible in memory. Accessibility in turn depends on several factors. These include how recently⁶⁸ and frequently⁶⁹ the information has been used, how chronically accessible⁷⁰ it is, and its current state of activation—either directly by outside stimulation or indirectly through stimulation and spreading activation (cognitive priming). Information that is accessible contributes to the evaluations made of political actors, policies, and events.

Price and Tewksbury's explanations of media priming, framing, and agenda setting are memory-based accounts that offer a careful, detailed examination of the processes by which information in memory is made more or less accessible. They argue that all three media effects are the result of changes in accessibility of stored information. When the news media adopt a relatively consistent approach to what is reported or how what is reported is framed, then the news environment is homogeneous and so are the patterns of activation of

knowledge. Under these conditions, changes in the accessibility of knowledge can be attributed to the what and how of news coverage.

The memory-based model reduces media effects to accessibility effects. What is accessible is retrieved and what is retrieved is the basis for judgment, interpretation, and action. The position presented by Price and Tewksbury offers a thorough discussion of the complexities of accessibility. However, the link between what is retrieved and how this information enters into political judgments is given a less detailed explication.

Over thirty years ago, in research on how people were judged, verbal and impression memory were distinguished.⁷¹ Verbal memory was the repository of raw, unadulterated information; impression memory was the summary evaluation based on reception, extraction of evaluative implications, and integration into an overall evaluation. Subsequent work has aimed at providing a theory of how incoming information affects valuation and integration necessary for understanding how judgments are made.⁷² The view is *not consistent* with the assumption that the information is stored, then retrieved, then valued, and then integrated. The research shows instead that people remember best recently received information, and their evaluation is determined more by what is presented first. Hence, two different repositories and processes are posited.

In a 1975 monograph on attitude formation, Martin Fishbein and Icek Ajzen reviewed literature on the relationship between beliefs recalled and a person's attitude. They concluded that "there appears to be little evidence for the hypothesis that belief statements consistent with a person's own position are recalled or recognized better than belief statements inconsistent with his position."⁷³

Simply put, the attitudes people report do not seem to be related to the beliefs that are supposed to support those attitudes. The link between judgment and what is accessible from memory appears tenuous.⁷⁴

On-line Judgments

Hastie and Park⁷⁵ proposed a resolution of this paradox by distinguishing between two types of *tasks*:⁷⁶ those in which judgments occur as information is being processed (on-line tasks) and those in which judgment is suspended while information is processed and stored (memory-based tasks). When instructions led people to make judg-

ments on-line, correlations between the overall evaluation and memory measures were low. When judgment was suspended until after the information was processed, correlations between judgment and memory were more substantial. The authors interpret these findings to suggest that under most circumstances people build evaluations as they consume information. Since the basis of the evaluation is not stored with the evaluation, the recall-judgment relationship is weak. When the judgment is a surprise, recall of pertinent information forms the basis of the judgment and the correlation between recalled information and judgment is enhanced. But if most of the tasks of everyday information processing are treated as if they are on-line judgment tasks, then accessibility of memory as the basis for judgment may be over-rated. If Hastie and Park's findings are robust, holding in the context of more realistic political judgments and not just the hypothetical person judgments of the laboratory, then accessibility of information may be a misleading route to political judgment.

Two important studies by Lodge and his colleagues offer the basis for claiming that political judgments are made on-line and that the memory-based models of judgment are misleading.⁷⁷ We will argue that Lodge's conclusions offer a necessary balance to the emphasis on memory-based processes of judgment. However, we will also conclude that balance is the key to understanding judgment. A reasonable model of political learning and judgment from news requires both on-line and memory-based components.

Lodge, McGraw, and Stroh conducted a field experiment in which people read position statements by hypothetical Republican and Democratic candidates for office.⁷⁸ One group read forty position statements for their grammaticality (the memory-based task). Later, after giving their overall evaluation of the candidates, they evaluated the statements. The other group read the forty statements, rated them in terms of liking and disliking, and were instructed to use the statements to "form an overall impression of the candidate while rating the issues" (p. 404). Evaluations of the issue positions done while reading them were strongly correlated with evaluations of the candidate. Correlations between remembered issues and candidate evaluation were not significant except in the memory-based task. When reading candidate profiles in order to form an impression, issue evaluations were strongly related to individuals' overall evaluation of the candidate but their later recall was not. When distracted from

forming an impression, memory for issues is related to candidate evaluation.

The authors seem to dismiss memory for issues as a basis for judgment when they conclude "voters do not typically rely on their memory for specific issues to inform their evaluation but instead call up their tally when asked for an evaluation."⁷⁹ This interpretation is too strong, we think. First, the instructions to those in the on-line group were too direct. They were told to use the issue stands to form an impression. They did and these effects were strong. The presence of the on-line effects may be as much the result of strong and unnatural instructions as they are of real on-line processing of candidate profiles. If people treat tasks such as processing news and reading profiles as on-line tasks, then the instructions in this condition are unnecessary and produce experimental demand.

Second, the memory group is given an equally strong and unusual instruction — to evaluate the grammaticality of the statements. The instruction to process superficially would reduce memorability⁸⁰ and distract readers from the content of what they are consuming. The experimental instructions afford little opportunity to process information in a manner that reflects the way people ordinarily consume news or politics. Under realistic conditions of news processing, people are not told to form impressions or to evaluate grammar. Rather, they try to understand what they are reading and evaluate it. Under such circumstances, the on-line judgments might have been less strong and the memory-based judgments stronger predictors of outcome.

We do not deny that the absence of correlation between memory-based judgments and candidate evaluation is a solid effect, consistent with many others reported in the research literature. The absence of a correlation between memory and judgment along with the presence of an on-line correlation is consistent with the existence of an on-line evaluation process. But potential problems with experimental demand in the on-line task instructions and the unrealistic instructions in the memory-based task lead us to be hesitant in assuming that memory-based judgments do not occur in real political contexts.

A recent study offered a further test of the role of on-line and memory-based processes in political judgment.⁸¹ This work provided a testing opportunity more realistic than the first study. People first completed attitude and opinion surveys and then read a campaign fact sheet — like those used in local media — about two hypothetical candi-

dates. Half the participants then evaluated the candidate and listed likes and dislikes. This procedure constituted a manipulation of deeper processing of the fact sheets. The other half were dismissed. Everyone was re-contacted at some later time (up to thirty-one days later) and asked to evaluate the candidates and recall what they could remember about their positions. Those dismissed in the first round were asked to evaluate the candidate for the first time.

The authors reach two conclusions with consequences for a theory of political judgment. First, memory for facts and gist from the campaign fact sheet are low overall and drop quickly over time while candidate evaluation remains stable. In their words,

memory for campaign messages is weak: citizens forget a lot of campaign information rather quickly. By all normative standards—*were we to rely on recall*, the citizen would appear to be rather unaware of what goes on in political campaigns.⁸² (emphasis in original)

Second, candidate evaluations are the result of on-line evaluations of candidate messages and not what is recalled from those messages. The researchers conclude:

[T]he campaign raises issues that mobilize issue opinions that voters successfully integrate, along with other factors . . . , into a running affective tally for each candidate. In this process recollections do not play a decisive role, short of the requisite that the OL tally be recalled.⁸³

These conclusions would seem to suggest that memory, learning, and retrieval are unimportant factors in understanding citizens' judgments of political processes. Such a conclusion flies in the face of considerable research in attitude formation,⁸⁴ voting,⁸⁵ and public opinion.⁸⁶

The conclusion is also too extreme for the data of the studies by Lodge and his colleagues. The second study finds little evidence of memory for gist or detail of the messages studied even under conditions in which participants were required to process the information deeply. But, at the same time, this was a study of hypothetical candidates for whom the participants had no vested interest or history. The absence of previous information structures to which to connect the new information makes retrieval especially difficult. The information was presented in the form of "campaign fact sheets," which are little more than listings of positions. No narrative structures,⁸⁷ no emotional

tags,⁸⁸ no typical news structures⁸⁹ were employed to enhance recallability of the information. The task was a complex one, requiring a long initial survey and a dry fact sheet followed by even more questions for those in the deeper processing conditions. These factors conspire to reduce the absolute levels of recall across the participants.⁹⁰

The conclusion that memory is not related to candidate evaluation in the Lodge study is certainly consistent with their analysis. At the same time, basic correlations between recall and candidate evaluation and on-line judgment and candidate evaluation are not significantly different. The differences arise in the more sophisticated regression and structural equation analyses. Although we do not dispute the conclusion that on-line judgments predict candidate evaluation—they clearly do—we are reluctant to conclude from this and the previous study that the on-line judgments supplant or replace memory-based evaluations in accounting for candidate evaluations.⁹¹ Rather, the two processes may be complementary, existing side-by-side as the messages of a political campaign produce evaluations, activate knowledge, create new associations, and provide the stock stories for understanding the specifics and generalities of political events.

On-line and Memory-Based Processes

The bottom line is that on-line evaluations account for overall judgments for on-line tasks such as processing news when evaluating candidates or officeholders. The absence of correlation between judgment and memory in a variety of studies and a variety of contexts is too consistent to deny that something else besides simple retrieval is going on. At the same time, one should not conclude from the few studies done to separate memory-based from on-line processes that on-line processes *replace* memory-based ones. In fact, Lodge seems to accept memory-based processes as a part of the judgment model. "We are not concluding that issues involving encoding, representation, and retrieval of political information are unimportant."⁹² In a theoretical statement about the candidate evaluation process, Lodge includes recall as an input to candidate evaluation, but also argues that the fallibility and deterioration of memory of campaign issues minimizes the impact of memory-based evaluations.⁹³

[M]emory traces weaken over time, if not reactivated. Hence, a plausible explanation for the failure of citizens to recall many, if any, campaign

events is that most instances and policies are so seldom activated ... that they weaken with disuse and become decreasingly accessible.⁹⁴

We agree that discovering the conditions under which on-line and memory-based processes are activated is a priority. But achieving it does not begin by assuming that all memory-based findings are an artifact of searching memory for supportive beliefs when evaluating candidates or stating attitudes, or expressing public opinions. It is difficult to believe that all the research on voting and attitude and opinion formation in the public opinion context shows no effect for memory, only on-line processing. At the same time, the existing data do indicate the existence of on-line processes, especially perhaps in understanding the effects of media framing.

A Model of Framing Effects

Our goal has not been to lay the groundwork for a general cognitive model for the processing of political information but to make explicit the necessary cognitive assumptions for a model of media-framing effects. A schematic version of that model is presented in Figure 4.1. The model aims to account for the relationship between news frames generally and two categories of outcomes—learning and judgments.

News frames include strategic, conflict, personality, issue, and episodic frames. They are always about a topic and usually carry substantive information within their particular frame. News frames highlight certain aspects of news and downplay others through selection, emphasis, exclusion, and elaboration.⁹⁵ News frames activate constructs, invite inferences (trait as well as other types), and cue stories in receivers as a function of the content and style of the news story.

The processes of spreading activation and priming increase the accessibility of nodes associated with those directly activated by the story itself. News frames that describe behavior will tend to activate trait inferences easily and even automatically. Constructs in the associative network that are semantically related to those activated directly will also tend to be made more accessible, allowing them to be more retrievable in the short run. Stories stored as associations among constructs and personal episodes may also be activated by the stories presented in the news (as well as other cues), especially under conditions where stories in the news are similar to those stored in memory.

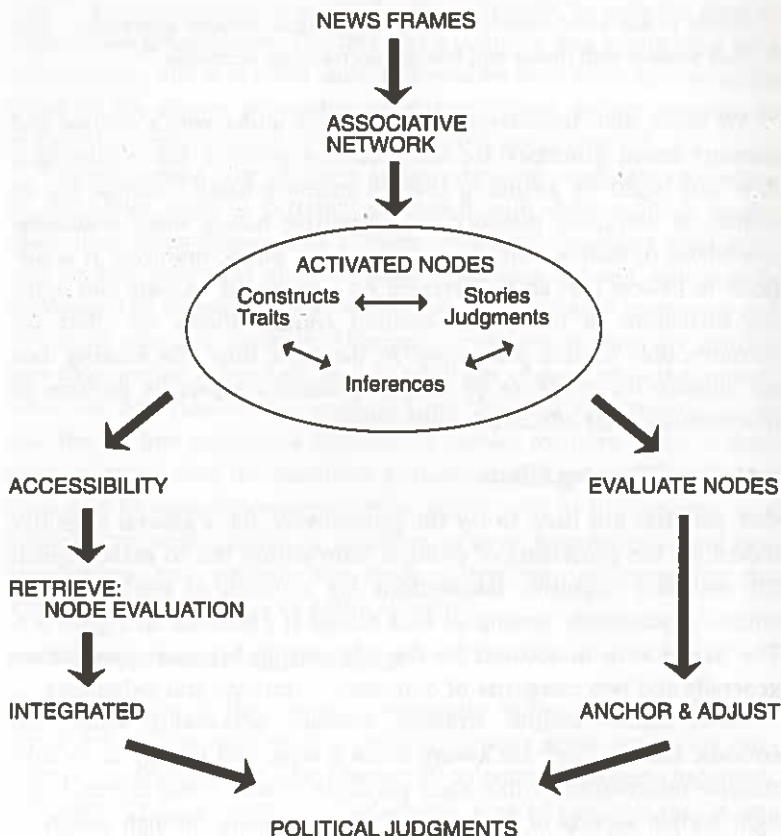


Figure 4.1. Components of a Cognitive Model of Effects of Framing on Political Judgment.

The model of Figure 4.1 hides a great deal of information in the notation that inferences and traits are activated by political news frames. When the texts direct attention to behaviors implying personal characteristics, traits can be inferred automatically from texts. Even political issues have an effect on character evaluations.

Once information has been activated, it becomes available for use. Political judgment in the form of affective evaluation or choice occurs through two processes: memory-based and on-line. The first presumes that information is retrieved from memory along with its affective

implications⁹⁶ and integrated into a summary judgment.⁹⁷ What is retrieved is the basis (or reasons) for the summary judgment. The on-line process presumes that the message is evaluated sequentially. These evaluations are integrated with the existing evaluative node (the anchor) and an adjusted evaluation is made and stored.⁹⁸ We think that the currently available evidence supports our assumption that on-line and memory-based components of judgment together account for evaluative outcomes.

Retrieval of information depends on what is accessible; that in turn depends on the recency and frequency of activation and chronic accessibility levels. What is accessible depends in turn on the spread of activation, priming, trait, and other types of inferences drawn within the associative network and cued initially by the message.

Retrieval and evaluative judgments give feedback to the associative network. They strengthen (and weaken) existing association, add new associations, modify existing evaluative tags, and, in general, alter the patterns of association tying the network together.

The basic assumption of our research and of the model of Figure 4.1 is that people learn from news. What they learn is both explicit and implicit, substantive and evaluative. And what they learn depends in large measure on how information about the political world is framed. In these senses, our model is consistent with current cognitive models of political information processing.⁹⁹ It differs from other models primarily in emphasis. Price and Tewksbury specifically take up the effects of news, reducing them to changes in accessibility and failing to give serious consideration to rules for integrating information in the judgment process. Lodge's model seems to minimize the role of memory-based judgment, implying that most of what has passed for a correlation between memory and judgment is an artifact. The model of Figure 4.1 finds a place for both memory-based and on-line judgment and assumes that stories play a significant role in the information retrieved about politics and in the judgments people make about political events.

The issue for our model is not whether memory-based and on-line components contribute to judgment but when, how much, and under what conditions. The tasks facing consumers of news determine whether the on-line or memory-based component is given greater weight. When evaluations of political entities are invited, impression formation is the primary task and on-line judgments

should predominate. This does not mean that consumers cannot adopt goals that allow both to have strong memory effects on judgment, even while carrying out a judgment of political character.¹⁰⁰ For example, in making up one's mind about two candidates vying in a primary, overall evaluation is the key judgment. But, if, at the same time, the evaluator knows that talk at the workplace will focus on not only who but why, then attention to the reasons for the judgment may be given some prominence while a judgment is being reached. Personal goals and needs could lead to a balancing between memory-based and on-line bases for judgment.

When the audience is distracted from processing, overloaded by other stimulation, surprised by a subsequent judgment request, or processing information superficially because interest or attention is low, then memory for information in the news will probably be poor and the judgment largely due to memory-based processes.

An interesting problem is posed by the poor memory regularly found when tasks invite memory-based judgment. Numerous studies show that when people are asked to memorize facts, they recall fewer than when the same facts are supposed to be used in deeper psychological processing such as impression formation.¹⁰¹ This is what Lodge and his colleagues found in one of their studies. Under impression-formation instructions, memory for issues was stronger than when the positions were rated for grammaticality. Yet, memory did not correlate well with judgments. This lack of correlation does not mean that people do not learn when they are processing on-line. Rather, they simply do not seem to be able to unpack the reasons for the evaluation they have built up.

The reason for this paradox is not completely clear. Robert Wyer and Thomas Srull speculate that asking people to recall everything they can about a target of judgment leads to the retrieval of relevant and irrelevant information that together will be only weakly related to overall judgment.¹⁰² Hastie and Park, however, find that in on-line tasks the recall of relevant information is greater than irrelevant while the two are about equal in memory-based tasks.¹⁰³ Impression-based tasks, then, do enhance learning (in contrast to tasks instructing memorization) and what is learned is relevant to the judgment requested.

The weakness of memory-based processes in predicting judgments may also depend on the kind of retrieval task employed. The studies by Lodge and Hastie and Park all obtained information through free

recall, rather than using cued recall or recognition. Free recall under most conditions produces the lowest levels of retrieval from memory while other forms yield greater retrieval.¹⁰⁴ Social conditions such as group discussion, which are a place for stimulated recall and recognition, may also produce greater recall and stronger memory-based judgments.

Our knowledge about the conditions favoring memory-based versus on-line judgments is incomplete. Processing news for impression formation, candidate or policy evaluation, comparison to opponents and the like would seem to favor on-line processes of judgment. Conditions of information overload, distraction, surprise judgments, and superficial processing of news would seem to favor memory-based judgments. The goals guiding the consumption of news and the conditions surrounding retrieval can also be factors shifting the relative importance of memory-based and on-line processes in accounting for overall judgments. Hastie and Park employed talk-aloud procedures to discover how people were carrying out their judgments:

Talk-aloud procedures suggest that our spontaneous judgment conditions ... are treated as both on-line and memory-based tasks by the subjects. They both induce an initial impression on-line, spontaneously, and rejudge in a memory-based fashion when the experimenter explicitly requests a judgment at the end of the experiment. Of course, even this complication seems trivial when compared to the duration and complexity of real world legal ... medical ... or diplomatic judgments.¹⁰⁵

And, we might add, political judgments.

Agenda Setting, Media Priming, and Framing

Our model of processing political news has implications for the three most important media effects: agenda setting, priming, and framing. Agenda setting may be most easily understood as a memory-based process in which accessibility of topics increases with their availability in the news environment. Media priming has also been explained in terms of cognitive accessibility, but may require a version of the on-line tally to make the account satisfactory. Framing effects involve on-line processes of judgment in central ways.

Agenda setting research reports a consistent correlation between topics the news media treat and problems the public identifies as salient.¹⁰⁶ Media priming draws a correlation between the attention

the news media give to an issue and the importance the issue has in evaluations of political actors.¹⁰⁷ Evaluations are more heavily biased toward issues receiving a great deal of attention.

Iyengar has described media priming as the result of changes in accessibility.¹⁰⁸ As the media treat the same topic again and again, frequency of activation increases along with the short-term accessibility of the topic. With repeated exposure, long-term (or chronic) accessibility may increase. The longer term changes may evolve through processes analogous to media cultivation of social perceptions¹⁰⁹ that are believed to alter patterns of accessibility.

Cultivation theory holds that people's perceptions of the extent of violence in society are distorted to reflect the unrepresentative amount of violence portrayed in prime time. Recent attempts to explain these effects have prominently featured the principles of cognitive accessibility. One theory holds that people who are heavy television consumers have more accessible examples of violent behavior because television increases accessibility through frequency and recency of activation and availability through vivid and distinctive examples provided by the television experience.¹¹⁰ Research has shown that heavy television users exhibit the usual distortions in their estimates of violence in society compared to light consumers.¹¹¹ Consistent with the accessibility-availability explanation, heavy viewers made these judgments more quickly than light viewers. Just as television entertainment may cultivate distorted beliefs about society by altering patterns of accessibility, so too political news may cultivate beliefs and judgments by altering patterns of what is made available. If so, we would expect heavy consumers of political news to make judgments about the importance of issues that reflect media priorities and to make those judgments quickly in contrast to those who consume less political news.

Media priming may also be the result of changes in accessibility as the news media give more or less coverage to issues relevant to the judgment of political actors and groups. If the issues are then rated as more and less important and accessibility becomes concomitantly easier or more difficult, so media priming results from changes in accessibility. One problem with this explanation is that changing the accessibility of issues may change their retrievability but not their correlation with judgments of performance. The correlation is the heart of the media-priming effect.

Media priming may indeed change accessibility, but it may also lead people to think about the issue more and, according to the principle of self-polarization,¹¹² develop more polarized attitudes. The polarization effect could manifest itself as a stronger correlation between the issue and an overall evaluation.

Future research will be needed to test whether media priming and agenda setting both result from the same underlying accessibility processes. If the media-priming effect is the by-product of accessibility only, then, *in the absence of any media coverage*, issues that are high in accessibility should exhibit strong issue-judgment correlations while low ones should not. If the accessible items do not show this correlational pattern, then the media-priming effect is simply a result of accessibility. If thinking about some issues and not others increases the correlation between the contemplated issues and overall judgment, then some form of thought polarization stimulated by media coverage may be the causal mechanism. Media-priming studies might then use thought-listing techniques to determine if coverage that focuses on certain issues leads to more thought about those issues than more diffuse or balanced coverage.

Episodic News Frames

Framing effects are more subtle than media priming and agenda setting. Framing is not simply concerned with the presence of the topics but with how topics are treated in the news. The implication is that how the news frames issues will invite certain inferences and suppress others, cognitively priming some information in the network of knowledge while bypassing other nodes. These inferences and associations become a part of what is made accessible by the framed message. Framing may alter the interpretation of the events described through these inferences and associations.

Shanto Iyengar's research examined the effects of episodic and thematic news frames.¹¹³ Episodic frames focus "on specific episodes, individual perpetrators, victims, or other actors at the expense of more general, thematic information" (p. 5) and depict "concrete events that illustrate issues while thematic framing presents collective or general evidence" (p. 14).

Iyengar finds that episodic frames tend to elicit attributions of responsibility for the cause and the treatment of problems that are

directed at individuals rather than society or situations. The reasons for this effect may be found in what has been called the fundamental attribution error and actor-observer differences.¹¹⁴ When viewing the behavior of others, there is a consistent tendency to explain actions in terms of a person's characteristics rather than the surrounding situation. This bias is stronger for explaining other's behaviors than explaining one's own. Creating situational explanations requires more cognitive energy than person-based explanation does.¹¹⁵ When television portrays the news in personal terms, psychological biases attributing responsibility to individuals are activated and require the least cognitive work.

Iyengar explains episodic framing in terms of the accessibility bias, indicating that "[e]pisodic reporting tends to make particular acts or characteristics of particular individuals more accessible, while thematic reporting helps viewers to think about political issues in terms of societal or political outcomes."¹¹⁶ Our model suggests an alternative.¹¹⁷ Viewers do not perform heavy cognitive work remembering details of individual events. Instead, viewers exposed to episodic frames make relatively automatic trait inferences to the individuals portrayed and in so doing orient their attributions toward persons rather than situations. These same trait inferences may be made accessible in later recall or may contribute to an on-line judgment of the situation portrayed through the process of trait evaluation, and anchoring and adjustment.

In our view, the effects of episodic framing on attributions of responsibility occur through a process of automatic trait attribution implying personal rather than situational responsibility and *not* a process of retrieval of concrete, specific behaviors portrayed in the news. Whether the inferred traits are retrieved or evaluated on-line in subsequent judgments depends on the various task, goal, and motivational factors favoring on-line and memory-based judgments. But what is activated in episodic news is personal trait information rather than situational considerations.

Strategic News Frames

Like episodic news, strategic news draws the audience's attention to the motivations of the people depicted. In doing so, personal traits are automatically activated. With the focus of strategic coverage squarely on winning and losing and the self-interest implied by this orientation,

the traits activated are likely to be negative ones indicative of artifice, pandering, deceit, staging, and positioning for advantage — in general, mistrustfulness.

Our model suggests that both memory-based and on-line processes will explain the effects of strategic news coverage. People will learn about candidates' strategic activities recalling the basis for their judgments of cynicism and will evaluate candidates and their campaigns in more cynical ways. The stories they tell also will reflect cynicism about political life. In short, strategic news will encourage learning of strategic information, activate cynical attributions, and reinforce cynical political narratives.

Over the long haul, as patterns of association are activated and re-activated and strategic stories told and told again, cynicism about a candidate will be cultivated to become cynicism about candidates and campaigns generally and, perhaps, policy debates and governance as well.

Summary

Our model of how people process news provides an organizational frame for the studies of the effects of news frames on learning and cynicism that follow. We have argued that framing is a way of inducing a particular kind of understanding about events in the news. This understanding comes about through processes of activation, association, and inference. The inferences people make when they read or watch news depend on what the news activates and what patterns of association already exist in the audience's mind. Activation and association will make certain concepts and their semantic neighbors more readily accessible in future encounters and, in this sense, news reception should have a direct effect on learning what is read and watched. It may also have an indirect effect by readying news consumers to learn related ideas because they too are activated, although to a lesser extent, when news is fully received.

Our model recognizes that how the news is covered is as important as what it covers. People are especially sensitive to making inferences about others' personal traits. When strategic news implicates the self-interested motivations of political actors, it invites negative political judgments. It may do so through memory-based learning or automatically through a process of on-line tallying of inferred negative traits or both.

In addition to learning and judging, people are interpreters of political reality, trying to make sense of it. We have argued that personal stories are an important device allowing people to organize, recall, and make sense of the political world they encounter. Strategic news tells a particular kind of story—focusing on winning and losing, positioning for advantage, and implicating self-interested motivation. These news stories may invite a parallel set of personal stories reflecting the cynicism of news.

In the next four chapters, we test some of the effects of news suggested in the previous four.