

Learning about Change: Information, Motivation, and Political Perception

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Abstract

EVAN PARKER-STEPHEN: Learning about Change: Information, Motivation, and Political Perception.
(Under the direction of James A. Stimson.)

Does the American mass public, broadly speaking, meet its normatively prescribed duty to monitor and react to changes in the political-economic world? Do specific segments of the mass public pose an obstacle to this “monitorial model” of political competence, which is itself central to democratic accountability? This study explores these questions with three separate studies. It will be shown that citizen learning and inference rest on two crucial factors: real-world information and psychological motivation. Taken together, the three studies demonstrate how the relative importance of information and motivation changes as a function of both individual characteristics, including cognitive capability and partisanship, and the contextual characteristics of the political environment, especially political campaigns. Attention is given to differential learning across several socioeconomic and political partisan classes to assess the breadth of understanding about politically consequential real-world change. It will turn out that, on the issues that affect policy and election outcomes, politically relevant information is often distributed fairly evenly across the mass public. The prototypically ill-informed, which is to say, the people who have relatively low levels of education, income, and so forth, present a less serious obstacle to the monitorial model than do political partisans, whose perceptions are affected by their motives to preserve consistency with their partisan attitudes and beliefs. However, even though these partisans’ perceptions are affected by such “motivated reasoning,” their temporal-perception patterns reflect responsiveness to political-economic reality nonetheless. In broad perspective,

this study demonstrates that knowledge of changing objective conditions, not static facts, is an instructive barometer for gauging citizen performance. Contrasted against conventional academic wisdom, the monitorial perspective produces markedly different, indeed more optimistic, conclusions about the political-information competency of the American mass public.

To my parents, Nancy and Jim

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Chapter 1

Political-Economic Information Flow and Citizen Response

To a great extent, students of political knowledge have used cross-sectional surveys to examine information distributions in the American mass public. This study introduces an alternative, across-time approach. Accordingly, the central concern is not with citizen recall of textbook-style political facts, or “information statics,” but with how citizens respond to “information dynamics”—that is, information about changes in the political-economic environment. To begin, we explain why distinguishing information statics and dynamics is crucial for evaluating the mass public’s political-information competence. Following this, we explore selected static and dynamic knowledge distributions in the American mass public.

The question is why the static-dynamic distinction is needed. The answer rests on the differential role that two learning mechanisms—cognitive capability and individual motivation—play in affecting understanding of static levels versus dynamic trends. Capability is especially important, but not because it invariably affects what people know (this is certainly true). Capability’s role is emphasized because information about

changes is relatively easier to comprehend. To help illustrate the point, consider perceptions about the Defense Department's budget: It is easy to see that people could know about an increase in defense spending without knowing the absolute amount spent on defense. This is more than an appeal to common sense, however, because evidence shows that perception systems are especially adept at recognizing changes across time (Johansson, von Hofsten and Jansson, 1980).

A second learning mechanism, motivation, furthers the need to distinguish information statics and dynamics. This is because information about changes is often of greater value than news about levels. For example, imagine that one wishes to evaluate government economic policy: Learning that unemployment is increasing has more utility than learning that the unemployment rate is, say, five percent. And so, motives to attend to news about dynamics should be relatively stronger. Now the crucial point: If capability and motivation work as suggested, then together they imply something important about mass political-information competence. Namely, the distribution of information about dynamics could be more widespread, indeed more democratic, than studies of static knowledge would suggest.

In the pages that follow we explore this possibility. By dividing the American mass public into different "information classes"—groups whose members share similar capabilities and motivations—we can examine how thoroughly information statics and dynamics resonate within each group. Importantly, this analysis focuses on information that has real political significance: We consider what people know about economic conditions and what they know about the policy programs of the Democratic and Republican Parties. As it turns out, the distinction between information statics and dynamics makes a difference. Our results not only challenge previous conclusions about political knowledge levels in the American mass public, but also reveal that the microlevel foundations of aggregate opinion change are broader than what conventional

academic wisdom suggests.

1.1 Knowledge and Citizen Performance

Political observers' interest in citizen knowledge is motivated largely by concerns about a permanent and potentially large "information underclass" (Jerit, Barabas & Bolsen 2006, 266; also see Althaus 2003). As to its existence, as well as its breadth, findings from cross-sectional research could not be more clear: To a wide degree, the American mass public can recall neither general nor domain-specific political facts from memory (Delli Carpini and Keeter, 1996; Bennett, 1988; Luskin, 1987; Neuman, 1986). Bennett (1988) reports a cogent summary result: On knowledge tests that probe static facts—asking people to identify the names of elected officeholders, the details of public policy, the procedural rules that undergird the U.S. system, and so forth—most Americans receive the academic equivalent of a "D+" (but see Jerit, Barabas & Bolsen 2006).

Of course, this portrait of public ignorance contrasts sharply with the informed character of aggregate-opinion dynamics. Here national economic fluctuations affect aggregate presidential approval and electoral outcomes (Kramer, 1971; Hibbs, Rivers and Vasilatos, 1982; MacKuen, Erikson and Stimson, 1992; Durr, 1993); the public's preferences for activist government react to changes in current government policy (Page and Shapiro, 1992; Stimson, 1998; Wlezien, 1995); and these policy preferences, in combination with the political parties' policy promises, influence the outcome of national elections (Stimson, MacKuen and Erikson, 1995). Thus the aggregated public, not the isolated individual, constitutes a firmer foundation for democratic rule (Converse, 1990; Erikson, MacKuen and Stimson, 2002).

The difficulty is that the aggregate-level results sidestep the problem of an information underclass. Indeed, aggregate opinion patterns could be driven by a relatively

small portion of the overall public—namely, by the well-informed—while the rest reacts more-or-less randomly (Converse, 1990; Page and Shapiro, 1992). Coupled with the observation that ignorance of information statics is found disproportionately among particular demographic groups, this “miracle of aggregation” suggests that broad segments of society might contribute minimally to the public’s overall political preferences (Althaus, 2003). For democratic theory and for practical politics, it matters deeply whether aggregated public opinion represents the consistent voice of an elite stratum, on the one hand, or whether it represents a broader based input of substantial minorities, majorities, or even the bulk of the citizenry, on the other. This is a matter of evidence and it constitutes a central focus of this study.

To evaluate which of these possibilities rings true requires testing how thoroughly information penetrates into the general public. The available evidence suggests that political information reaches a narrow segment of the overall public (roughly one-third¹), but yet, this work is silent about responsiveness to the political-economic changes that move collective opinion. There are reasons to expect that the mass public could be informed about these dynamics even though they do not know static facts. To see why, let us consider how capabilities and motives relate to learning about information about changes versus static facts.

1.1.1 Capability and Motivation

Capability should affect knowledge globally, as greater skill surely enhances understanding. But we are interested in whether it has a differential effect. On the surface it is easy to see why comprehending changes could be less taxing than memorizing political facts, but this expectation has deeper roots human perception systems. In

¹NES interviewer ratings of respondent knowledge suggest that approximately one-third of one pooled sample (1970–2004) has “Fairly High” or “Very High” levels of political information.

short, scholars have shown that people’s perceptive capacities are better-equipped to comprehend changes than statics. In Johansson and colleagues’ words, “perceptual systems are tuned especially to abstracting information from stimulus change over time” (Johansson, von Hofsten and Jansson, 1980, 56). Although this claim is about visual perception—literally, what people see—the broader point matters for political learning. If people are especially adept at picking up on stimulus change, then irrespective of the stimulus, comprehension of changes should occur on a relatively wider scale.

Motivation’s importance is similar because its influence should be especially pronounced when people confront signals about political and economic dynamics. The reason has to do with the relevance of these dynamics to decision-making. On the economic side, news about trends can inform financial decisions and occupational concerns. And on the political side, changes provide a basis for judging the performance of elected officials and public policies. Consider, for example, that whether people know the country is moving in or out of a recession, or whether the Republican Party is becoming increasingly conservative in its policy programs, matters greatly for economic and political decisions. The ability to recall static facts—say, the actual percent of GDP growth, or the length of a Senator’s term—is far less important. In short, because the incentives associated with learning about changing conditions outweigh those associated with memorizing static facts, people should disproportionately pick up on dynamics.

1.2 Information Class

The capability-motivation framework predicts differently shaped knowledge distributions. To move closer to examining this possibility, we now consider the problem in concrete terms. The question is how one can assess the role of capability and motivation in affecting static versus dynamic knowledge. Our solution is to contrast awareness of

information statics and dynamics across different “information classes”—that is, groups of people that share similar capabilities and motivations. If the capability hypothesis holds, then responsiveness to dynamics should occur on a wide scale—even among people who widely lack knowledge of static facts. If motivation matters, then we should be able to connect group-based incentives to observed response patterns.

To develop concrete classes, we consider how capability and motivation map onto particular perceptual domains. More specifically, we ask how these mechanisms connect to learning about national economic conditions and the policy promises of the Democratic and Republican Parties. It is worth emphasizing that these perceptual domains have real political significance. What people believe about economics and party policies affects individuals’ political decision-making, on the one hand (on the economy see Fiorina 1981, Kramer 1983; on party positions see Downs 1957, Brady & Sniderman 1985), and aggregate-level opinion swings, on the other (Durr, 1993; MacKuen and Stimson, 1989; MacKuen, Erikson and Stimson, 1992).

1.2.1 Class and the Economy

What might an economy-based information class structure look like? Given the global reach of capability’s influence on knowledge, there is good reason to expect that people’s comprehension of economics will vary. Simple cognitive capability coupled with training to deal with abstract ideas should allow better-educated people to understand basic economic principles. And often, better-educated people are socialized to be more keenly aware of the social as well as the personal environment. As a result, understanding of economic conditions should be most pronounced among the high-education classes.

But in the economic world, agents will pursue economic information and understanding for purely instrumental reasons. Real estate agents and used car salesmen must attend to inflation, interest rates, and economic cycles when they make a living.

Consumers who buy houses, refrigerators and automobiles similarly profit from economic literacy. Indeed, all economic agents, which is to say everyone, has good reason to understand something about economics. However, those who are more closely integrated into the financial decision-making structure should have stronger motivations to pay attention. Therefore, private economic incentives should most strongly motivate richer citizens to track the national economy.

Of course, in the U.S., education and income tend to be correlated for obvious reasons. Although we might separate out people's capabilities (read: education) and motivations (read: income) as separate information classes, it is equally useful to acknowledge that these factors are distributed jointly in the general public. Combining education and income factors, then, one can say that people of higher socioeconomic status (SES) should most readily pick up on information about the national economy. This expectation is consistent with considerable evidence already well-established (Duch, Palmer and Anderson, 2000; Krause, 1997; Krause and Granato, 1998).

Crucially, however, a pattern that shows High SES people are most likely to learn does not preclude the possibility that lower education and income classes are also responsive—especially if learning about economic dynamics requires a relatively low cognitive threshold. Furthermore, the economy's connection to a range of self-interested decisions means that that members of each SES class should have strong motives to pay attention. Generally speaking, there is every reason to expect that capabilities and motives extend far into the public simply because all members of the public act as economic agents on a daily basis.

1.2.2 Class and Policy Programs

As to the public's understanding of party policy programs, the capability-motivation framework produces less clear-cut expectations. SES is important because higher education should presumably make left-right information easier to comprehend—an ordinary matter of capacity. But motives are less obvious. Rather than practical instrumentality as in the economic case, political passion is the likely motivating force. And so, those people with a personal partisan orientation should be most likely to attend to a party's left-right policy activity. To the SES dimension, therefore, one must add a party-based one.

Introducing this partisan dimension modifies expectations about knowledge of political dynamics. Scholars have shown that political partisans appear to give careful attention and thought to information about their *own* party, while at the same time actively searching for information that confirms preexisting beliefs about political opponents (Campbell et al., 1960; Markus and Converse, 1979; Bartels, 2002). The important implication for political knowledge is that party identifiers may not assimilate *reliable* information about the opposition. Across all SES categories, therefore, assimilation of out-party information should be less objective, and perceptions less accurate, than for the in-party.

1.2.3 Message Character and Opportunity

Political learning is largely a function of individual-level attributes, but the character of political information should also condition what people know: it affects opportunities to learn (Delli Carpini and Keeter, 1996; Althaus, 2003). When the real world's meaning is easy to understand, when its implications are obvious, then anyone who pays attention can comprehend the material. On the other hand, when the character of the world is complicated or contradictory, then people will have a hard time figuring out its meaning

even if they seriously attend to public affairs. The message is, in theory at least, as important as the capacity and motivation of the receiver.

For present purposes, information about the economy is fundamentally different from information about party activity. Economic conditions are reported widely by the media, which tend to focus on objective indicators of economic performance (Nadeau et al., 1999, but see Hetherington 1996). Moreover, because economic experts are accountable to an objective reality, they should put forward their best estimate of the economy's current standing and future prospects. This is not to say that all economic information at any given time is freely available, uniform, or easy to understand: economic analyses are marketed for a price, stocks are bought and sold by people who differ in their economic evaluations, forecasters vary in their prognostications, and so forth. However, in the larger sense, economic information should be pervasive, accurate, and transparent. That these characteristics enhance opportunities to learn should widen mass responsiveness to economic conditions.

In contrast, information about the political parties has a markedly different tone. Although hints of the Republican or Democratic Party's left-right behavior can be gleaned from media reports about legislators' voting patterns or from politicians' commentaries, consensual statements about the policy promises are not a staple of the mainstream press. The onus to pick up on such political information thus falls heavily on individual citizens. Complicating matters further, party leaders and political activists, in the name of strategy, make misleading statements about their opponents. Accordingly, the information sources to which many partisans turn will often deliberately distort reality. Taken together, these observations suggest that acquiring knowledge about party location is a challenging task.

1.3 Data & Methods

What is needed now is empirical evidence of people’s information acquisition. Here one must first identify, more specifically, what sorts of economic and political information signals people encounter in their everyday lives.

1.3.1 Information Signals

Economic information is observable in several objective indicators of economic performance. First, consider that most people ought to know something about *inflation*. It is a matter of routine reporting and price rises are experienced in everyday activities. Furthermore, inflation is a raw (almost) unambiguous number, which makes for easier comprehension of trends if not absolutes. A second widely available economic signal is *unemployment*. Many people should have incentives to follow unemployment conditions and, like inflation, experts gauge unemployment using an objective number. A third, relatively more opaque set of indicators involves current *business conditions*—that is, whether the economy is in recession, expansion, or somewhere in between. The Conference Board’s Leading, Lagging, and Coincident Indicators are each meant to tap these conditions. Given the nature of the opinion data to be used here (see ahead), we use the annualized month-to-month percentage change in each of the three indices to construct a measure of *business conditions* that is the average percent change over all three.

For information about the Democratic and Republican Party’s policy positions, we focus on the aspects of party behavior that send signals about policy intentions. One obvious signal is the *voting behavior* of legislators whom the media cover regularly. To measure this signal we use Keith Poole and Howard Rosenthal’s DW-NOMINATE House Legislator scores (Poole and Rosenthal, 1997), calculating an average score for each party for each Congressional session. A second party position signal involves the

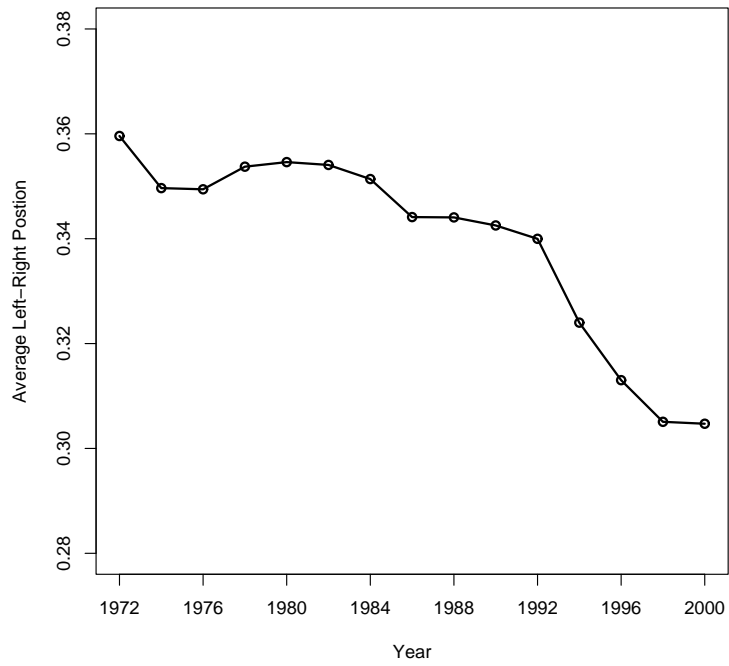
statements put forth by the party organization, the most prominent of which is the *party platform*. Party platforms not only articulate an issue agenda, but also set the ideological tone for the current presidential campaign, a fact which makes the party platform an especially telling indicator of left-right position. To measure this we draw on Ian Budge and colleagues' party manifesto scores (2001), which, for every presidential election year, indicate the liberal-conservative balance as reflected in the parties' policy promises.

Figure 1.1 and Figure 1.2 illustrate what these indicators, which have been rescaled to range from zero (far left) to one (far right), say about party activity from the period 1972 through 2000. The Democratic Party indicators are inconsistent: Legislative voting in Figure 1.1(a) grows consistently more leftist over time, but party platforms in Figure 1.1(b) suggest that party policy moved to the right through 1992 and then veered leftward on out. This inconsistency suggests that ordinary citizens could find it difficult to discern a pattern in the Democratic Party's policy movement over the period in question. For the GOP, on the other hand, House legislative voting in Figure 1.2(a) and party platform scores in Figure 1.2(b) both show consistent upward movement. According to both measures, then, Republican Party policy has become consistently more conservative over the thirty-year period.

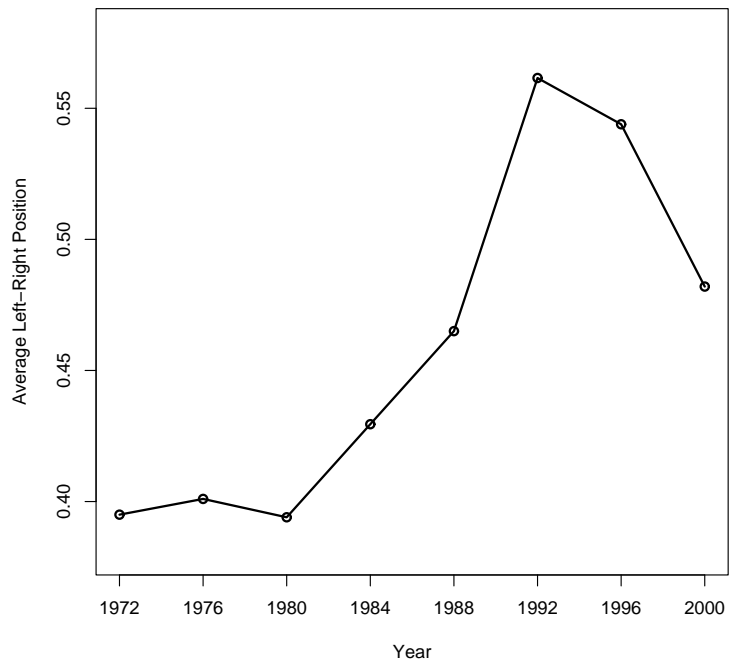
1.3.2 Knowledge Indicators

To tap knowledge of political-economic conditions, this study draws on data from two public opinion surveys: the Surveys of Consumer Attitudes and Behavior's (SCA) monthly time series (1978–1996)² and the American National Election Studies' (NES) Cumulative Series (1970–2000). We rely on two measures of *static knowledge*: (1)

²University of Michigan, Survey Research Center, Economic Behavior Program. ICPSR version. Ann Arbor, MI: University of Michigan, Survey Research Center, 1978–1996. Ann Arbor, MI: Inter-university Consortium for Political and Social Research, 2000.

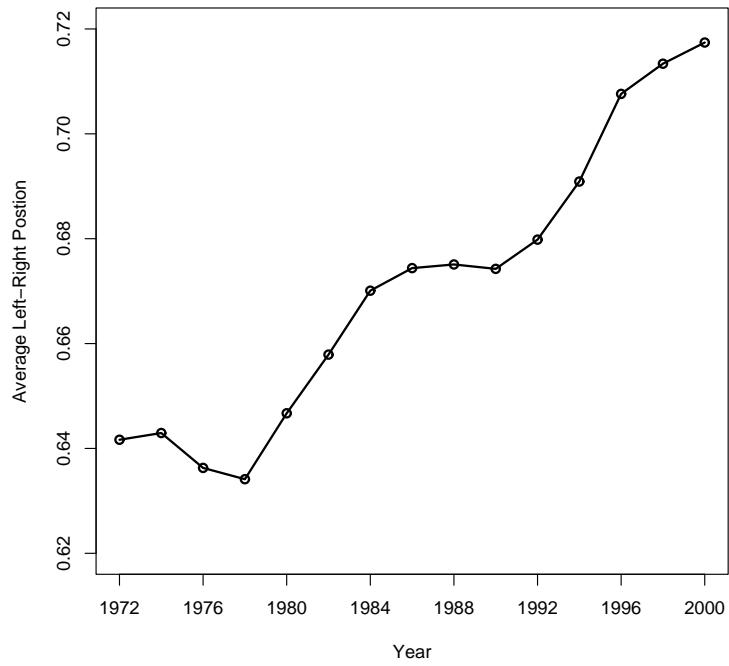


(a) DW-NOMINATE: Democratic Party

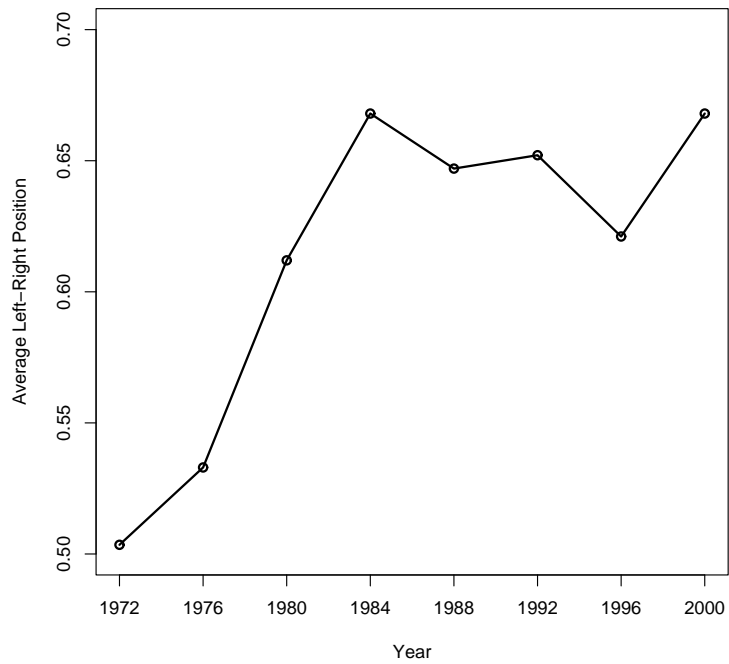


(b) Party Platform: Democratic Party

Figure 1.1: Democratic Party Left-Right (0-1) Policy Position Indicators : 1972–2000



(a) DW-NOMINATE: Republican Party



(b) Party Platform: Republican Party

Figure 1.2: Republican Party Left-Right (0-1) Policy Position Indicators: 1972–2000

respondents' forecasts of the actual inflation rate as reported in the SCA, and (2) respondents' relative placements of the Democratic and Republican Party on three issue scales: Liberal-Conservative, Services-Spending, and Guaranteed Jobs.³

To measure knowledge of economic dynamics we use the Surveys of Consumer Attitudes data. In addition to its monthly cross-sectional studies the SCA has an embedded panel component. Approximately half of each cross-sectional sample was asked about expectations of visible economic signals at two points in time, creating a two-stage panel that has a six-month interval for panel respondents. This rolling panel design allows us to control for individuals' prior inflation expectations (at $t - 1$), and so we model change in individual expectations as a function of change in objective conditions. Our specific focus is on awareness of three types economic changes: people's beliefs about inflation, unemployment, and business conditions.⁴

To measure awareness of party left-right dynamics, the National Election Studies are helpful. Since 1970, the NES have asked people to place the Republican and Democratic Parties in left-right space on a variety of issues ranging from health care to minority assistance to defense spending. However, these issue placements have not been asked consistently, which means that we cannot use individual measures to assess receptivity to changes in party programs. Our solution to this "irregular series" problem is to use Stimson's (1998) dyadic dominance algorithm to extract the left-right dimension that is common to each of the specific party position placements.⁵ Doing so produces a

³For exact question wording please see Appendix.

⁴The inflation question reads: "By about what percent do you expect prices to go up (down), on average, during the next 12 months?" The unemployment question asks: "How about people out of work during the coming months—do you think that there will be more unemployment than now, about the same, or less?" "Less" = 1, "Same" = 2, "More" = 3. The business retrospections question reads: "Would you say that, at the present time business conditions are better or worse than they were a year ago?" "Worse now" = 1, "About the same" = 2, "Better now" = 3.

⁵The NES also asks respondents to place the Democratic and Republican Parties along the liberal-conservative continuum, which is at first glance a clear measure of what people believe about party left-right positioning. For the moment, we ignore this measure because it conflates operational and

left-right public perceptions time series for each party for each biennium, 1970–2000.⁶ This technique is employed repeatedly to create unique perceptions series for each of the information classes of interest.

Figure 1.3 illustrates what these series, which have been rescaled to range from zero to one, look like for the full NES sample in each year. The average perceptions series are the solid black line, and for reference purposes, the light grey line shows the change in the party platform scores. In Figure 1.3(a), one can see that the public has seen Democrats as supporting more rightist policies through the 1980s—the average reading in 1990 shows that the public saw a party that was “purely moderate,” falling at 0.50 on the left-right scale midpoint. Following this, however, perceptions begin to trend left through the 1990s. Figure 1.3(b) shows that, with few exceptions, the public has come to view Republicans as heading in a more conservative direction over the thirty-year period.

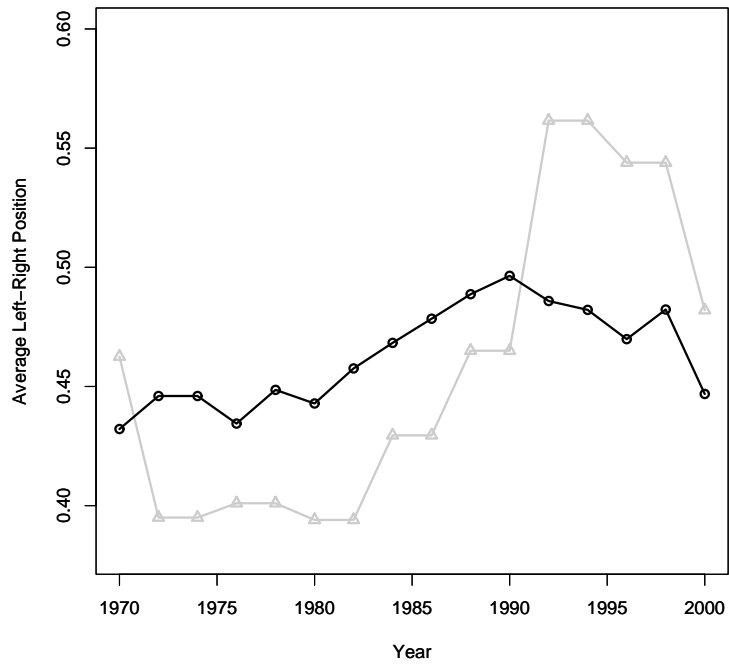
1.4 Results

1.4.1 Economic Statics

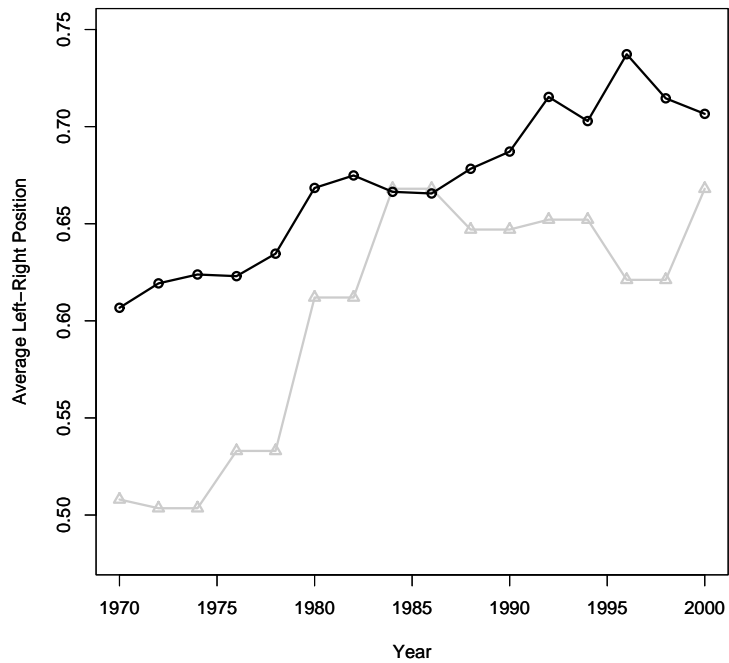
As a first test of static knowledge, we examine people’s ability to forecast the actual inflation rate. The SCA asks every respondent to guess about the inflation rate in the coming year, which is advantageous because inflation has objectively correct and incorrect sorts of responses. When the consensus lies in the 3-5 percent inflation range,

symbolic notions of liberals and conservatives, and here interests are purely operational. In any case, the derived policy perceptions series correlate with the liberal-conservative placement series at approximately .65 for both Democratic and Republican Party perceptions. See the Appendix for the exact questions and their loading on the underlying left-right factors.

⁶The reader may well wonder why the series does not extend to 2004. As will be seen, the measurement strategy employed subsequently requires observations for all years. The 2002 ANES did not ask questions about the Democratic and Republican Party issue-placement items, and so the time series spans 1970–2000.



(a) Democratic Party Perceptions (Black Line) and Democratic Party Policy Activity (Gray Line)



(b) Republican Party Perceptions (Black Line) and Democratic Party Policy Activity (Gray Line)

Figure 1.3: Average Public Perceptions of Party Left-Right Policy Positions versus Actual Left-Right Party Policy Activity: 1970 through 2000

Table 1.1: Knowledge of Actual Inflation by Income and Education: Percent within 10-points of Optimal Forecast

Education	Income		
	Low	Medium	High
Less than High School	70%	78%	83%
High School, Some College	81	86	89
College, Post-College Graduate	88	91	94

Data Source: Survey of Consumer Attitudes (Monthly 1978–1996)

for example, someone who volunteers 25-percent clearly knows little about inflation.

Table 1.1 presents people’s inflation expectations across education and income levels. Accuracy is assessed by scoring the percentage of respondents in each category who offer a reasonable guess about the inflation rate—one that is within 10 percentage-points of the optimal forecast as predicted by current and previous values of inflation. As one might expect, as education and income levels increase, so too does the percentage of subgroup respondents who correctly forecast the inflation rate. In other words, heightened capabilities and motives to pay attention produce heightened awareness of inflation levels.

In Figure 1.4, we collapse the education and income categories into a tripartite SES stratum. Figure 1.4 also reports a finer-grained assessment of accuracy. Moving from left to right on the x-axis, we plot the percentage of respondents in each SES class whose forecasts are within ten-, five-, and two-percent of the optimal forecast. Again the expected pattern holds: Low SES citizens are least accurate while High SES citizens are most likely to provide accurate forecasts.⁷ But note that in the case of the two

⁷Across classes, the standard deviation in forecast displacement, that is $|Expected_i - Actual_t|$, is also telling. Here the standard deviation of forecast for Low SES class is 8.4, but for Middle SES it is 6 and for High SES it is 4.5.

percentage-point criterion—which, given the typical 3-5 percent range of inflation, is not especially stringent—fewer than half in the High SES subgroup can provide accurate forecasts. This is a telling result: although capabilities and motivations produce the expected information hierarchy, the fact remains that a large proportion of High SES people have difficulty forecasting inflation levels.

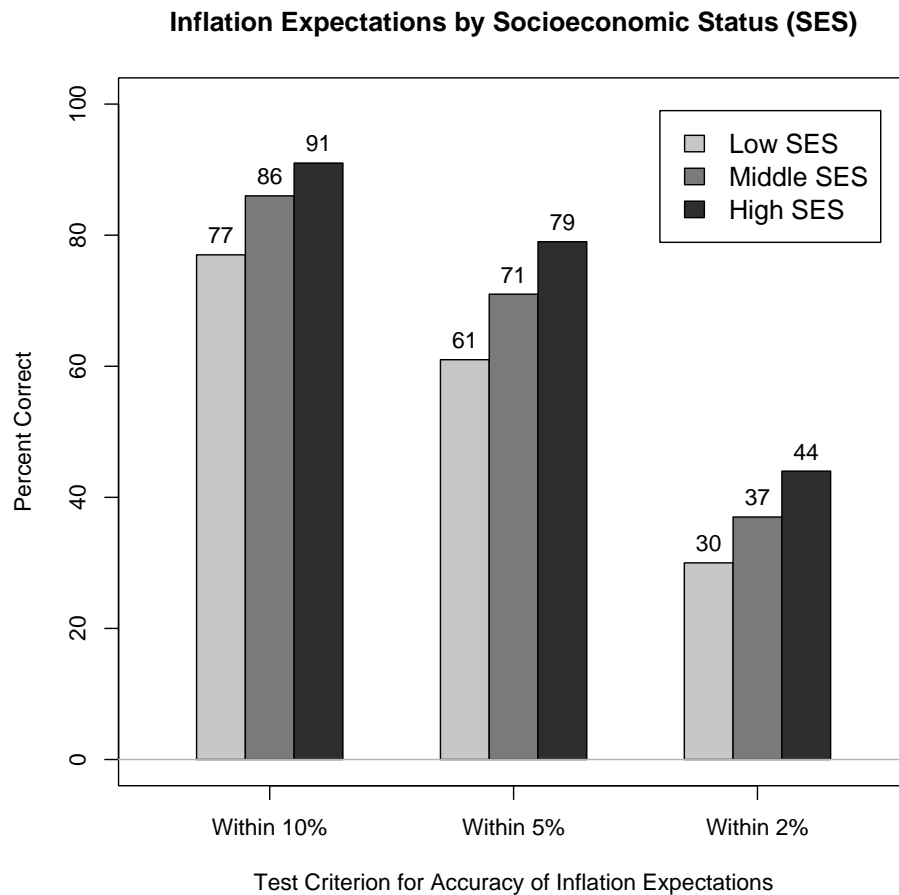


Figure 1.4: The Percentage of Inflation Forecasts within the Specified Range: by Socioeconomic Status (SES)

Table 1.2: Knowledge of Relative Democratic-Republican Position by Income and Education: Liberal-Conservative Scale

Education	Income		
	Low	Medium	High
Less than High School	22%	25%	31%
High School, Some College	44	48	56
College, Post-College Graduate	76	79	82

Data Source: National Election Studies (1970–2000)

1.4.2 Political Statics

We report a parallel analysis of people’s grasp of party statics in Table 1.2, which reports the conditional percentage in each education by income group who correctly place the Democratic Party to the left of the Republican Party on the Liberal-Conservative scale. Several features are notable. First, education, our proxy for capability, is especially influential. Between 76- and 82-percent of college educated people correctly place Democrats to the left of Republicans. By contrast, people with less than a High School education are correct only 22- to 31-percent of the time. Capability’s effect is exactly as we would expect.⁸ In addition, we see that income—not likely a motivating force—has only a marginal effect on accuracy.

Figure 1.5 combines the education and income groups into a single SES stratum. It reports the percentage in each SES class that report relatively correct party placements on three issue scales: the Liberal-Conservative, Spending-Services, and Guaranteed Jobs placements. Clearly the high SES group is consistently most astute, but what is more notable is the high degree of inaccuracy across the board. Fewer than half in the High SES class correctly place the Democrats to the left of Republicans on the

⁸“Don’t Know” and “Refused” responses are scored as incorrect placements.

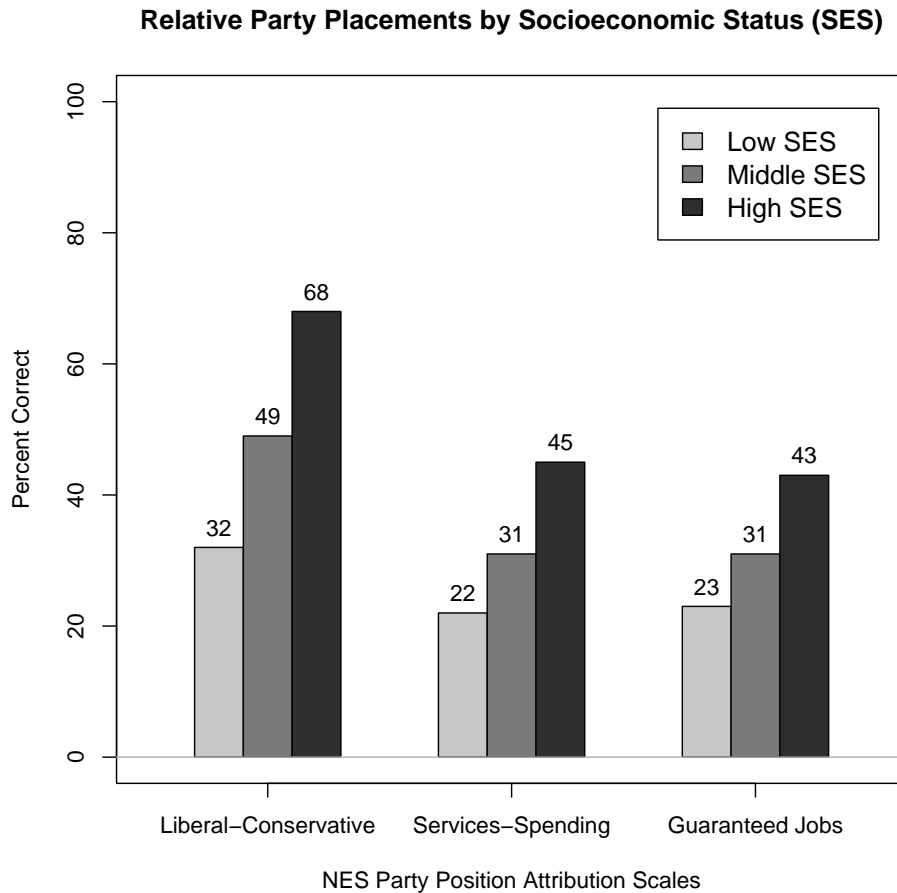


Figure 1.5: The Accuracy of Party Left-Right Policy Placements: Percent Placing Democrats to the Left of Republican Party on Issue Placement Scales: by Socioeconomic Status (SES)

defining party issues of taxes versus spending and government-sponsored assistance, and this inaccuracy increases as one climbs down the SES ladder. Contrasted against class-based understanding of economic statics, comprehension of party positions proves to be particularly challenging.

That people, especially Low SES citizens, are not widely knowledgeable about economic and political absolutes confirms findings already established: Capability and motivational differences across the SES information class structure produce a knowledge distribution that is skewed toward ignorance in the lower classes. But does this

distribution describe mass-level knowledge about changing conditions?

1.4.3 Economic Dynamics

Inflation

Let us return to the case of inflation. We have seen that ordinary citizens, especially Low SES ones, have difficulty comprehending the inflation rate in an absolute sense. Now we examine their grasp of change by regressing changes in respondents' inflation expectations on real changes in inflation, prior inflation trends and prior inflation expectations.⁹ Here the important coefficients are those associated with changes in realized inflation (Δ Inflation) and, to a lesser extent, the coefficients associated with the lagged inflation rate (Inflation_{t-1}). Note that a separate model is estimated for each SES class.

Table 1.3 reports the results of the individual-level estimations.¹⁰ What is most striking is the high degree of responsiveness to changes in inflation *across SES class*. The significant influence of both changes in inflation and the lagged inflation rate indicate that error correcting behavior occurs. Substantively speaking, Low, Middle, and High SES people all adjust their expectations about future inflation trends systematically—that is, in accordance with real changes in inflation. Note the broader significance: unlike the static case, comprehension of inflation dynamics is observable throughout the mass public.

However, an information-class hierarchy still persists. As SES class increases from

⁹Readers will recognize this as the “error correction model” (see Beck 1987, Keele 2005) in that it analyzes both long- and short-term effects of inflation on changes in expectations, controlling for prior expectations.

¹⁰In the analyses that draw on the Survey of Consumer Attitudes, statistical significance tests are not reported because all parameter estimates are easily distinguished from zero due to the large N.

Table 1.3: Error Correction Model: Δ Inflation Expectations on Inflation Information and Lagged Expectations, 1978–1996

	Socioeconomic Status		
	Low	Middle	High
Δ Inflation	0.45 (0.08)	0.83 (0.05)	0.82 (0.04)
Inflation _{<i>t</i>-1}	-0.03 (0.00)	-0.03 (0.00)	-0.03 (0.00)
Inflation Expectations _{<i>t</i>-1}	-0.74 (0.01)	-0.73 (0.01)	-0.74 (0.01)
Constant	5.94 (0.57)	4.90 (0.38)	5.15 (0.26)
Adjusted-R ²	.46	.49	.46
RMSE	8.32	5.75	4.63
N	9382	9901	13,488

OLS Regression, Standard Errors in Parentheses
Notes: All coefficients significant at $p < .001$
Data Source: Survey of Consumer Attitudes (Monthly 1978–1996)
Changes and Lags are six-month intervals

Low to Middle/High, the Δ Inflation coefficient grows from 0.45 to above 0.80, respectively. Furthermore, the RMSE for the estimations decreases monotonically with increasing SES. Taken together, these statistics suggest that High SES individuals respond more rapidly to changes in inflation and that they do so in more orderly ways. Given that these individuals have, on average, relatively greater capabilities (read: higher education) and stronger motives to pay attention (read: higher income), this enhanced sophistication is what we should find.

Table 1.4: Error Correction Model: Δ Unemployment Expectations on Unemployment Information and Lagged Expectations, 1978–1996

	Socioeconomic Status		
	Low	Middle	High
Δ Unemployment	0.12 (0.01)	0.11 (0.01)	0.08 (0.01)
Unemployment _{<i>t</i>-1}	-0.05 (0.00)	-0.08 (0.01)	-0.10 (0.01)
Unemployment Expectations _{<i>t</i>-1}	-0.73 (0.01)	-0.77 (0.01)	-0.73 (0.01)
Constant	2.03 (0.03)	2.23 (0.03)	2.28 (0.03)
Adjusted-R ²	.40	.41	.39
RMSE	0.65	0.64	0.64
N	14146	13908	18524

OLS Regression, Standard Errors in Parentheses
Notes: All coefficients significant at $p < .001$
Data Source: Survey of Consumer Attitudes (Monthly 1978–1996)
Changes and Lags are six-month intervals

Unemployment

As a second test of responsiveness to economic dynamics, we consider people’s grasp of changes in U.S. unemployment. Following the same strategy as above, we model changes in people’s unemployment expectations as a function of changes in the unemployment rate, the lagged unemployment rate, and respondents’ prior expectations about unemployment conditions.

The results of this analysis, which appear in Table 1.4, provide further evidence

that information about economic changes resonates across the information class structure. For Low, Middle, and High SES groups, changes in unemployment significantly influence changes in their expectations. The coefficient values for Δ Unemployment suggest that Low SES citizens respond slightly more quickly to short-term changes in unemployment. But this result makes sense: Low SES people tend to have weaker job security, thus their incentives to track unemployment signals carefully are strong.¹¹

To this point, the analysis of economic responsiveness has concentrated on aspects of the economy that might be peculiarly easy to inform—both inflation and unemployment are readily observable and regularly covered by the media. For politics, more complicated economic conditions are important as well. With this in mind, we move to a broader measure of people’s economic sensitivity—whether they comprehend changes in business conditions.

Business Conditions

The SCA probes respondents’ retrospective evaluations of business conditions by asking people whether these conditions are better or worse than they were a year ago. The actual state of business conditions is reflected in the 12-month percentage change in each of the Conference Board’s indicators of economic growth: the Leading, Coincident, and Lagging Indices. (Recall that we use the average change over the three.) The error correction model is again used to assess sensitivity to changes in economic growth.

Table 1.5 shows that the changing conditions coefficient increases monotonically with information class—from .45 in the case of Low SES people to .58 among Middle and .63 among High SES individuals. Clearly, then, High SES individuals find the greatest sophistication in their responses to economic change. But even so, changes in

¹¹This is not to say that everyone uses the same sorts of information to arrive at their judgments. Some people likely rely on informal social networks or simple observation while others acquire information from hard news sources or economic experts.

Table 1.5: Error Correction Model: Δ Business Retrospections on Business Conditions Information and Lagged Retrospections, 1978–1996

	Socioeconomic Status		
	Low	Middle	High
Δ Business Conditions	0.45 (0.01)	0.58 (0.01)	0.63 (0.01)
Business Conditions Retrospections $_{t-1}$	-0.73 (0.01)	-0.75 (0.01)	-0.75 (0.01)
Business Conditions $_{t-1}$	0.25 (0.01)	0.28 (0.01)	0.27 (0.01)
Constant	1.82 (0.03)	1.97 (0.03)	2.07 (0.02)
Adjusted-R ²	.40	.43	.44
RMSE	1.65	1.65	1.63
N	12874	12590	16828

OLS Regression, Standard Errors in Parentheses
Notes: All coefficients significant at $p < .001$
Data Source: Survey of Consumer Attitudes (Monthly 1978–1996)
Changes and Lags are six-month intervals

economic growth do resonate right through the mass public. All three classes adjust their economic evaluations to reflect changes in the actual economy, and the systematic portion of the response is roughly comparable across classes. In short, matters of economic boom and bust are observed and appreciated by everyone.

1.4.4 Political Dynamics

Evidence for broad-gauged comprehension of economic change is important. But for questions of political-information competence, it is equally important to study how

political information is distributed. Toward this end, we examine the public's reactions to changes in the Democratic and Republican Party's policy programs. Recall that these reactions are represented by extracting an average biennial perception of each party on the familiar left-right (0-1) scale.

Admittedly, the task here is more difficult: People should pay less attention to political as opposed to economic information because instrumental motivations are in large measure absent. Further, political information lacks the clarity and commitment to reality that characterizes economic information. Beyond theoretical concerns, the policy awareness test is also complicated by measurement difficulties. The economic analysis has 228 monthly readings of individual beliefs; on the political side we are limited to 16 aggregated observations of public opinion and, for the platform data, eight observations of each party's position. This small sample introduces limitations that affect modeling decisions throughout.

We begin by attending to a problem with the Democratic Party's information signals, which are actually inconsistent. Platform scores suggest rightward movement early and a shift left towards the end of the thirty-year period, whereas legislative voting moves consistently leftward. There is no reason to suspect that one might be more influential than the other and, logically speaking, citizens' perceptions will not track both. So we must begin with a calibration exercise that asks which of the two Democratic Party indicators influences public perceptions. To do this, we draw on the perceptions series of people who should be most likely to consider politics objectively—High SES individuals who lack strong partisan commitments. We regress these judges' average perceptions on party platforms and legislative voting separately. The regression results (not reported) indicate that the judges class picks up on information registered in the Democratic Party platform but not information about legislators' voting patterns. By contrast, both left-right indicators are significantly related to judge's Republican

Party perceptions (the latter is an especially potent predictor). For the sake of model consistency, our focus for the time being is on the party platforms.

Party Platform Change

Regarding whether the overall public tracks party platform trends, one can identify two sorts of questions. First, over the long haul, has the public changed its ideological assessments of the two parties? Note that the question is about dynamics, not statics. That is, the question is not whether people see Democrats as more liberal than Republicans, but whether the public has shifted its perceptions of each party in accordance with movements in the respective party platforms. Second, has the public picked up on short-term, election-to-election swings in party policy? Evidence for public sensitivity to short-term changes is stronger evidence for grasp of policy dynamics, but that does not mean that a long-term relationship is not important as well. One might expect that people discount specific election-to-election shifts but integrate information over the long haul nonetheless.

To address the first (long-term) question we examine whether the overall public comprehends long-term movements in party platforms by regressing party perceptions on party platform scores. The regression estimates reported in Table 1.6 show that, in fact, the mass public does pick up on party policy dynamics. For both the Democratic and Republican Parties, as platforms grow increasingly liberal (conservative), the mass public's average placements do as well. This result is important for what is to follow because it establishes a baseline: over the past quarter century the mass public, as a whole, has adjusted its perceptions to reflect long-term trends in party positions.¹²

¹²Note that these are not mere linear trends. Both the Republican and especially the Democratic Platform series have turning points that are picked up by the general public. The exact timing of these shifts, as can be seen in Figure 1.3, is not exact.

Table 1.6: Party Left-Right Perceptions: by All Respondents

	Perception Series	
	Democratic Party	Republican Party
Party Platform Score	0.21* (0.09)	0.50* (0.18)
Constant	0.36** (0.11)	0.37** (0.04)
Adjusted-R ²	.39	.48

OLS Regression, Standard Errors in Parentheses

* $p < .05$, ** $p < .01$; One-tailed tests

In each model, $N = 8$

Let us now move past this baseline to consider party perceptions across the information class structure. Table 1.7 and Table 1.8 present separate regression analyses for each SES class. Looking first at Table 1.7 we encounter a puzzle: Low and Middle SES classes comprehend the general Democratic Party trend but High SES people do not. This pattern might seem to contradict the capability-motivation theory, but in fact, the theory likely predicts this result. Consider: party identifiers—who are differentially motivated to learn about own- versus opposite-party policies—are not distributed evenly across the socioeconomic stratum. Low and Middle SES classes are disproportionately Democratic, which means that these classes are comprised in large measure of people who are attentive to and thoughtful about the Democratic Party. The High SES class, on the other hand, has a greater proportion of Republicans—the very people who are least likely to seek reliable information about the Democratic Party’s evolution.

We return to this complication momentarily, but first consider Table 1.8, which shows that people of each SES class comprehend the Republican Party’s long-term movement. And, importantly, the foundations of the overall public’s response (as seen

Table 1.7: Democratic Party Left-Right Perceptions: by SES

	Socioeconomic Status		
	Low	Middle	High
Party Platform Score	0.32** (0.10)	0.24* (0.12)	0.18 (0.11)
Constant	0.34** (0.05)	0.36** (0.06)	0.35** (0.05)
Adjusted-R ²	.55	.29	.17

OLS Regression, Standard Errors in Parentheses
 * $p < .05$, ** $p < .01$; One-tailed tests
 In each model, N = 8

in Table 1.6) appear to be fairly egalitarian. In the Republican Party case, the data clearly indicate that all sorts of people, including those at the bottom of the SES scale, observe and understand the long-term trajectory of Republican Party policy.

Let us now return to the puzzle posed by the results in Table 1.7. Partisan bias could explain the result, but to test this we need to add a second party-based dimension to the information class structure. That is to say, we need separate left-right perceptions series for Democrats, Independents, and Republicans. These series are illustrated in Figure 1.6. Clearly partisans, especially Republicans, locate the opposition away from the center and toward the endpoints of the left-right scale. Republican identifiers see Democrats as substantially more liberal than do Independents or Democrats themselves.¹³ Democrats locate Republicans slightly closer to the conservative endpoint. The net impact of these differences suggests that partisans' ability to register shifts in

¹³This pattern recalls the "Left Shift" first observed by Brady and Sniderman (1985). See MacKuen and Parker-Stephen (2006) for an elaboration on the prevalence of left-shifted party preference attributions in the American mass public.

Table 1.8: Republican Party Left-Right Perceptions: by SES

	Socioeconomic Status		
	Low	Middle	High
Party Platform Score	0.48** (0.12)	0.47* (0.19)	0.51* (0.18)
Constant	0.36** (0.08)	0.39** (0.12)	0.37* (0.11)
Adjusted-R ²	.69	.42	.50

OLS Regression, Standard Errors in Parentheses

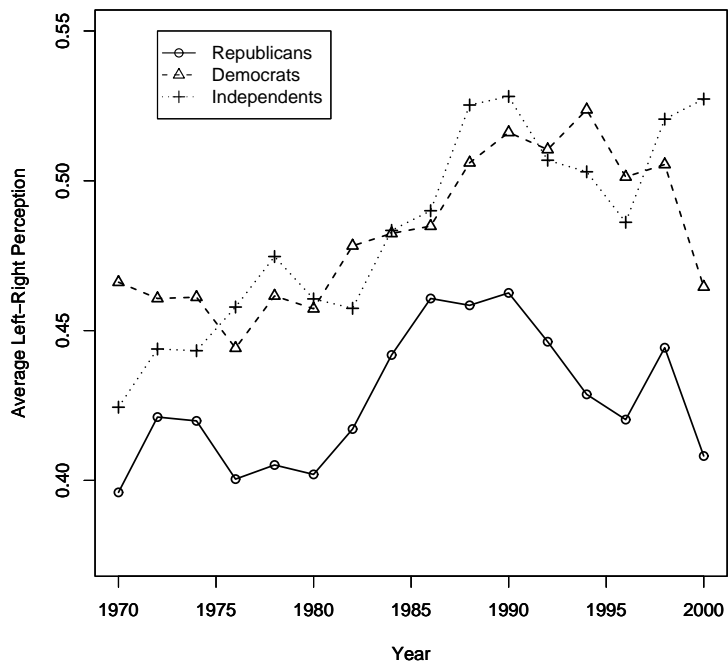
* $p < .05$, ** $p < .01$; One-tailed tests

In each model, N = 8

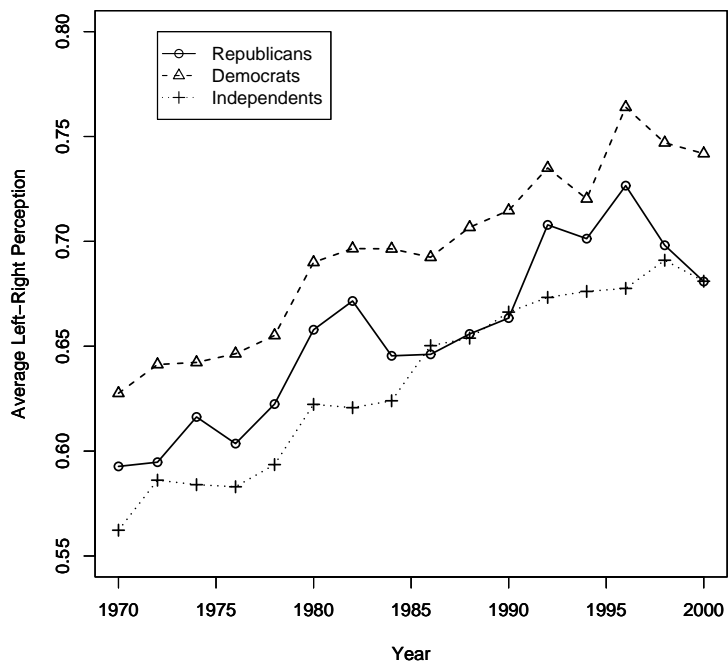
the opposition party is muffled somewhat.

Tables 1.9 and 1.10 consider whether statistical differences in party left-right perceptions are apparent across partisan groups. In the case of the Democratic Party, Table 1.9 portrays a clear partisan bias effect. Democratic identifiers, who are most likely to pay attention to the Party's platform, clearly react to information about their party. Independents, too, show significant (though weaker) learning. But Republican identifiers, who are rarely likely to encounter relevant information about the Democratic Party *via Democrats*, display across-time perceptions that are unconnected to the party platforms. For further evidence of the information-class hierarchy note the Adjusted-R² values, which increase monotonically with motivation to learn about the Democratic Party's policy program.

Table 1.10 shows that Democrats, Independents, and Republicans all pick up on long-term left-right swings in Republican Party policy. The consistency of Republican elites' policies, indeed the Party's outright embrace of conservatism since the late



(a) Democratic Party



(b) Republican Party

Figure 1.6: Average Left-Right Position: by Partisan Group, 1970 through 2000

Table 1.9: Democratic Party Left-Right Perceptions: by Party Identification

	Partisan Group		
	Democrats	Independents	Republicans
Party Platform Score	0.31** (0.09)	0.30* (0.15)	0.14 (0.12)
Constant	0.34** (0.04)	0.35** (0.07)	0.36** (0.06)
Adjusted-R ²	.59	.32	.04

OLS Regression, Standard Errors in Parentheses
 * $p < .05$, ** $p < .01$; One-tailed tests
 In each model, $N = 8$

1960s, probably helps to explain why information rings throughout the party-based information class structure. Without staking too much on this result, it seems as though staying “on message” in politics can increase awareness of party dynamics.

Short-term Change

Our final step in assessing how political-information dynamics are distributed is to consider how election-to-election swings in party policies affect left-right perceptions. Because the political-information class structure has proven to be more nuanced than that for the economy, we consider receptivity within each partisan information class. Table 1.11 presents the Democratic identifiers model. Previously we saw that information about the Democratic Party reaches Democrats to a greater extent than non-Democrats, but here, one can observe variation among Democrats as well. High capability Democrats pick up on short-term policy changes, while among those with lesser

Table 1.10: Republican Party Left-Right Perceptions: by Party Identification

	Partisan Group		
	Democrats	Independents	Republicans
Party Platform Score	0.54*** (0.10)	0.56*** (0.09)	0.49*** (0.12)
Constant	0.37*** (0.06)	0.29*** (0.06)	0.36*** (0.06)
Adjusted-R ²	.65	.70	.53

OLS Regression, Standard Errors in Parentheses
 * $p < .05$, ** $p < .01$, *** $p < .001$; One-tailed tests
 In each model, $N = 8$

capabilities, these swings go unobserved. That learning takes place even though Democratic Party elites have put forth conflicting signals is a normatively appealing (albeit puzzling) result. Table 1.12 tempers this optimism, however, as it shows that not one Republican SES class reacts to short-term changes in Democratic Party platforms.

House Legislator Voting

To this point, the analysis of across-time political knowledge has focused on the party platforms measure exclusively. This has necessitated the study of learning in presidential election years—a mere seven instances of party policy change. But recall that, in the Republican Party case, where the information signal is consistent, we also have at our disposal the average Poole-Rosenthal scores for each Congress. Although this Congressional voting measure does not accord with public perceptions of Democrats, it seems to resonate forcefully in the GOP case. As a final analysis, therefore, we take advantage of the expanded time series and use the Congressional voting data to assess

Table 1.11: Δ Democratic Party Perceptions (Short-term): Democrats by SES

	Socioeconomic Status		
	Low	Middle	High
Δ Party Platform Score	0.40 (0.29)	0.10 (0.21)	0.74* (0.25)
Party Platform Score _{t-1}	-0.10 (0.54)	-0.08 (0.27)	0.71* (0.28)
Left-Right Perception _{t-1}	-0.13 (1.16)	-0.19 (0.63)	-2.17* (0.67)
Constant	0.11 (0.32)	0.13 (0.19)	0.68* (0.20)
Adjusted-R ²	.82	.23	.63

OLS Regression, Standard Errors in Parentheses
 * $p < .05$, ** $p < .01$; One-tailed tests
 In each model, $N = 7$

how information about the Republican Party moves through the electorate in the short term.

Presented in Table 1.13, the in-party model reveals that political information resonates broadly. Here, both Middle and High SES Republicans pick up on short-term changes in their party’s voting behavior. Moreover, the results reveal a strong corrective effect as people “return” to their general (correct) beliefs about the left-right behavior of the Republican Party. In short, Republicans widely attend and react to changes in the voting behavior of Republican Party elites.

A similar, albeit weaker, pattern emerges in Table 1.14, which examines changes in Republican Party perceptions among Democrats. Here Middle and High SES Democrats comprehend short-term changes in elite voting. Although opposite-party bias

Table 1.12: Δ Democratic Party Perceptions (Short-term): Republicans by SES

	Socioeconomic Status		
	Low	Middle	High
Δ Party Platform Score	0.43 (0.49)	0.51 (0.36)	0.62 (0.40)
Party Platform Score _{t-1}	0.01 (0.47)	0.04 (0.28)	0.24 (0.28)
Left-Right Perception _{t-1}	-0.61 (0.91)	-0.89 (0.72)	-1.45 (0.44)
Constant	0.28 (0.26)	0.36 (0.21)	0.44 (0.21)
Adjusted-R ²	.18	.45	.25

OLS Regression, Standard Errors in Parentheses
p* < .05, *p* < .01; One-tailed tests
 In each model, N = 7

affects perceptions, it does not entirely rule out intelligent responses to political change. Both Middle and High SES people appear, on average, capable of comprehending changes in the Republican Party’s policy promises.

This pattern, however, holds only for the best case. When information about the political party is ambiguous in the case of the Democratic Party, or when the data are too sparse, this short-term relationship between elite party change and public perceptions atrophies. From what we have seen, it is *possible* that party positions get translated into public perceptions, but this is not easy. Of course, this is a matter of mechanisms. The overall long-term behavior of the political parties is presumably the most visible trend, thus it is here that capabilities for seeing change are most likely to result in accurate understanding. And indeed, the long-term relationship between

Table 1.13: Δ Republican Party Perceptions (Short-term): Republicans by SES

	Socioeconomic Status		
	Low	Middle	High
Δ Poole-Rosenthal Score	1.98 (1.33)	4.05*** (0.55)	3.80*** (0.83)
Poole-Rosenthal Score _{$t-1$}	0.59 (0.66)	0.33 (0.17)	0.47 (0.33)
Left-Right Perception _{$t-1$}	-0.55 (0.40)	-0.92*** (0.13)	-0.78** (0.22)
Constant	-0.04 (0.22)	0.33*** (0.08)	0.19 (0.12)
Adjusted-R ²	.04	.23	.65

OLS Regression, Standard Errors in Parentheses

$*p < .05$, $**p < .01$, $***p < .001$; One-tailed tests

In each model, N = 15

changes in party platforms and public perceptions stands strong. What is lacking, however, is the resolution needed to observe the direct impact of these party platforms on public opinion.

1.5 Discussion

The public’s grasp of political and economic affairs has long been a subject of compelling interest. The consistent conclusion of scholarly research—which holds that political ignorance is pervasive in American politics—is now (nearly) conventional wisdom. In a revealing remark, Luskin opines that recent attempts to refute this conclusion have moved merely “from denial to extenuation” (Luskin, 2002). Though there may be

Table 1.14: Δ Republican Party Perceptions (Short-term): Democrats by SES

	Socioeconomic Status		
	Low	Middle	High
Δ Poole-Rosenthal Score	0.96 (0.87)	2.28* (0.85)	1.69* (0.55)
Poole-Rosenthal Score _{<i>t</i>-1}	-0.29 (0.23)	0.62 (0.43)	0.67 (0.37)
Left-Right Perception _{<i>t</i>-1}	-0.26 (0.16)	-0.70* (0.30)	-0.66* (0.27)
Constant	0.37* (0.16)	0.05 (0.12)	0.01 (0.09)
Adjusted-R ²	.19	.34	.38

OLS Regression, Standard Errors in Parentheses
 p* < .05, *p* < .01; One-tailed tests
 In each model, N = 15

exceptions, that is, the overarching conclusion about the American mass public must be that ordinary people are grievously ill-informed about public affairs.

We disagree. Our analyses of thirty year's worth of political-economic data indicate that the public is able to comprehend and assess critical changes in the real world. People have instrumental reasons to pay attention to the economy and, although they may not grasp static facts, the largest portion of the public does incorporate real-world information into their assessments of inflation, unemployment, and business conditions. Thus the most essential components of retrospective economic voting, for example, are available to people from the top of the information scales down to the level of, say, the bottom tenth of the mass public.

Citizen learning about the parties' policy programs, on the other hand, is a more

severe test for democracy. Understanding left-right abstractions requires some political understanding, and on the motivational side people have weaker instrumental reasons to learn about party positions. Indeed, their main motivations having to do with partisan identification hardly encourage accuracy. And yet, the evidence suggests that the public does do a fair job in learning about change in the parties' stance. Certainly, the long-term evolution of the parties' policies from the 1970s to the present has been noticed and learned by the public. This is true for the overall public, but importantly, it is true for the top, middle, and bottom thirds of the information class structure. There is even evidence (if not consistently strong evidence) of the public's reacting to short-term changes in the parties' policies. Here the best evidence suggests that sensitivity to short-term change in the environment exists in two-thirds of the public.

By distinguishing static facts from change, we move away from a schoolboy definition of information competence to a focus on political learning dynamics. This proves to be a critical step: the focus on change produces markedly different conclusions about how ordinary citizens handle political information, and in turn, what ordinary citizens know about public affairs: the mass public, in the broadest sense, is sensitive to fluctuations in the economy and the policy direction of the major American parties.

This result has important implications for the character of American democracy. Scholars have known for some time that the temporal patterns of mass political behavior are on average orderly, but exactly who is responsible for generating these sensible movements remains a point of contention. And for good reason: A public signal generated by the top ten or twenty percent of the public is far different than one generated by two-thirds or ninety percent of the public. Previous work on this question argues that the shape of aggregate opinion patterns is determined in large measure by an elite information class (Bartels, 1996; Althaus, 1998). Our results consistently indicate otherwise. Across a range of capabilities and motivations, representing a broad

collective of diverse interests and desires, information about consequential real-world phenomena resonates to produce ordered and sensible reactions to political phenomena. The distribution of information dynamics is best characterized as egalitarian and democratic.

1.6 Measurement Appendix

The following 7-point policy attribution scales are used to construct the across-time left-right perceptions series for the mass public and all other subgroups. Here we make use of Stimson's (1998) algorithm to extract an averaged reading of mass perceptions for each biennium. The factor loadings on this dimension are reported in Table 1.15 for the estimation that uses the full NES sample in each study year.¹⁴

Health There is much concern about the rapid rise in medical and hospital costs. Some feel there should be a government insurance plan which would cover all medical and hospital expenses. Others feel that medical expenses should be paid through private insurance like Blue Cross. Where would you place the () party on this scale? (1972, 1976, 1978, 1988, 1994)

Jobs Some people feel that the government in Washington should see to it that every person has a job and a good standard of living. Others think the government should just let each person get ahead on his/her own. Where would you place the () party on this scale? (1972, 1974, 1976, 1978, 1980, 1982, 1984, 1988, 1992, 1994, 2000)

Aid to Minorities Some people feel that government in Washington should make every possible effort to improve the social and economic position of blacks and other minority groups. Others feel that the government should not make any special effort to help blacks because they should help themselves. Where would you place the () party on this scale? (1970–2000, but not 1992)

Rights of Accused Some people are primarily concerned with doing everything possible to protect the legal rights of those accused of committing crimes. Others feel that it is more important to stop criminal activity even at the risk of reducing the rights of the accused. Where would you place the () party on this scale? (1970, 1972, 1974, 1976, 1978)

¹⁴Readers familiar with the NES issue-placement scales will note that a frequently-asked item regarding the proper role for women (working versus in the home) is not included in the dimensional analysis. The reason is twofold. First, the question suffers from severe social desirability bias. Second, the item loads poorly on the left-right scale.

Urban Unrest There is much discussion about the best way to deal with the problem of urban unrest and rioting. Some say it is more important to use all available force to maintain law and order-no matter what results. Others say it is more important to correct the problems of poverty and unemployment that give rise to the disturbances. Where would you place the () party on this scale? (1970, 1972, 1974, 1976)

Services-Spending Some people think the government should provide fewer services, even in areas such as health and education, in order to reduce spending. Other people feel that it is more important for the government to provide many more services even if it means increases in spending. Where would you place the () party on this scale? (1982, 1984, 1986, 1988, 1990, 1992, 1994, 1996, 2000)

Defense Spending Some people believe that we should spend much less money for defense. Others feel that defense spending should be greatly increased. Where would you place the () party on this scale? (1980, 1982, 1984, 1986, 1988, 1990, 1992, 1996, 2000)

Russia Some people feel it is important for us to try very hard to get along with Russia. Others feel it is a big mistake to try too hard to get along with Russia. 1984,1988: Some people feel it is important for us to try to cooperate more with Russia, while others believe we should be much tougher in our dealings with Russia. ALL YEARS: Where would you place the () party on this scale? (1980, 1984, 1988)

Table 1.15: DYMIMIC Loadings of NES Party Issue Placements on Left-Right Dimension

Issue Scale	Party	
	Democratic	Republican
Health	-.92	.94
Jobs	.59	.95
Aid to Minorities	.87	.93
Rights of Accused	.62	.16
Urban Unrest	-.97	-.48
Services-Spending	.93	.15
Defense Spending	-.71	-.97
Russia	.97	-.92

Chapter 2

Perception Aggregation

In a notable departure from earlier research, students of political behavior began, in the 1980s, to study the movement of aggregate public opinion over time. Among other things, these scholars have found that aggregate-level political perceptions have roots in real political conditions (Erikson, MacKuen and Stimson, 2002; Zaller, 1992; DeBoef and Kellstedt, 2004), react to policy changes in expectedly rational ways (Page and Shapiro, 1992; Wlezien, 1995; Stimson, 1998), and move systematically with experts' expectations about economic growth (Durr, 1993; MacKuen, Erikson and Stimson, 1992; Kramer, 1983). In short, the aggregate results have consistently revealed an informed and responsive mass public.

The evidence for an informed public is rigorous and robust. It is also paradoxical, however, because numerous individual-level studies show that citizens' political perceptions are neither accurate (Delli Carpini and Keeter, 1996; Granberg, 1993) nor impartial (Bartels, 2002; Kuklinski et al., 2000; Evans and Andersen, 2006). To the contrary, these studies have consistently found a mass public that is grievously ill informed, indeed misinformed, about politics. To a great extent, individual citizens, especially strong partisans, appear to see and hear what they want to see and hear.

Seeking to reconcile the macro-micro discrepancy, some scholars have drawn on the properties of aggregate opinion in large samples. They posit that the opinions of the ill informed are “errors” in that they originate from random guesses and stable responses rooted in predispositions (Converse, 1990; Erikson, MacKuen and Stimson, 2002). Because neither randomness nor stable responses create systematic variance over time, these researchers argue that ill-informed responses will cancel out in the aggregate. Lacking orderly opinions, the ill informed contribute no variation to explain. As a result, aggregate measures of opinion “magnify” the opinions of the well informed, which explains why these measures find overall accuracy even though many people are misinformed about politics (Converse, 1990; Page and Shapiro, 1992).

The catch, however, is that the assumption of errors canceling is problematic.(Althaus, 1998, 2003; Duch, Palmer and Anderson, 2000; Bartels, 1996). In Charles Taber’s words, “the central rub is that ‘error’ in individual information processing is frequently not random...but rather is systematically distributed” (2003, 457). This should be especially true for strongly partisan individuals, as they will often ignore or discount information when it goes against their partisan beliefs. When these committed citizens encounter political news, they “accept what is congenial to their partisan values and reject what is not” (Zaller, 1992, 241). In the most recent terminology, political partisans are “motivated reasoners.”

The work on motivated reasoning tends to be cross-sectional, but its across-time implication is clear: motivated reasoning will lead partisans to develop political misperceptions that endure over time, even in the face of contrary evidence. If so, then the aggregate results, as scholars have reported them, are even more perplexing. One of the most striking features of the aggregate patterns is their orderly response to real-world events and political phenomena. How can one reconcile aggregate-level accuracy with individual-level perceptual bias?

In the pages that follow, I offer an explanation that helps to resolve this puzzle. The explanation rests on the observation that both individual- and aggregate-level scholars have overstated their cases for the character of partisans' perception. On the one hand, while motivated reasoning undeniably exists, especially among strong partisans, individual-level scholars have not adequately explored how objective conditions can and do override motivations to see the world in a certain way. On the other hand, aggregate-level scholars, by not considering the potential for systematic errors, have put forward an incomplete theory of perception aggregation.

To demonstrate support for these claims, this study considers individual and aggregated political perceptions simultaneously. The individual-level analysis examines whether partisans' perceptions systematically favor a preferred real-world state. Work on motivated reasoning gives reason for expecting such bias, but because this work has been cross-sectional, it treats objective conditions as constants—that is, as non-factors.¹ By examining the accuracy of partisans' and non-partisans' subaggregate perceptions over time as well, this study grants objective conditions a dynamic role. This “micro-macro” approach makes a difference. This study is the first to put forward an empirically-driven resolution to the micro-macro perceptions paradox.

2.1 The Character of Individual-Level Perception

As defined by Bernard Berelson and his colleagues, “political perception refers to the process by which people develop impressions of the characteristics and positions of political candidates, parties, and institutions” (Berelson, Lazarsfeld and McPhee, 1954, from Granberg 1993, 70). Fundamental to this process is the manner by which individuals interact with political information. Today the common interaction occurs via the

¹This observation follows Kramer (1983), who argued that cross-sectional analyses are problematic because they seek to explain variation in perceptions of a constant.

media: People are exposed to information about candidates, parties, and institutions, which they use to form and update relevant impressions.

As to the character of these impressions, a standard assumption is that increasing exposure to political information increases the likelihood that perceptions will be informed and in sync with the real world across time. But partisans are perhaps the most attentive of all political observers. Surely they are more active in politics. So why might their political perceptions diverge from real conditions? To see this, one must consider how partisan motivations direct information acquisition and, in turn, the formation and updating of political perceptions.

2.1.1 Motivated Reasoning and Misperception

In their seminal study, Campbell et al. suggested that the party attachment “raises a perceptual screen through which the individual tends to see what is favorable to his party orientation” (1960, p. 133). Working from this contention, several political scientists have argued that political partisans are relatively more closed-minded political observers (Bartels, 2002; Lodge and Taber, 2000; Zaller, 1992). Social psychologists, too, have suggested that people’s partisan beliefs make them less willing to evaluate contrary information objectively (Lundgren and Prislun, 1998; Kunda, 1987; Lord, Ross and Lepper, 1979). Of late, scholars have termed this behavior “motivated reasoning” (Kunda, 1990).

For partisans, motivated reasoning involves two distinct processes: selective exposure to information and selective information processing.² Selective exposure says that partisans will seek out political information from like-minded sources (Sears and Freedman, 1967; Taber and Lodge, 2006). With regard to perceptions, selective exposure is

²Work on motivated reasoning tends to focus on selective information processing. However, as selective exposure results from the same partisan motivations, it is viewed here as the second horn of motivated partisan reasoning.

important because it promotes an unbalanced reading of the issues, which should in turn create misperceptions about political conditions.

Yet, even if partisans do attend to balanced sources, a second mental process, selective information processing, can keep them from seeing the world in an even-handed manner. Selective information processing says that partisans will process contrary political information using directional or “partisan” goals rather than accuracy goals (Kunda, 1990; Lodge and Taber, 2000). That is, when they are exposed to information that runs contrary to prior beliefs, partisans are more likely to defend these beliefs—by either ignoring the information or counterarguing it mentally—than to seek accurate understanding (Taber and Lodge, 2006). This defensive behavior should be especially pronounced among the well-informed, as these knowledgeable partisans have the necessary “ammunition” with which to counterargue belief-inconsistent news. The crucial point is that information discounting can lead partisans to maintain preferred beliefs irrespective of the evidence. Thus, like selective exposure, selective information processing predicts systematic misperception, or “bias,” in partisans’ perceptions.

Partisans attempt to avoid holding inconsistent beliefs because doing so creates cognitive “discomfort” (Krosnick, 1990, also see Festinger 1957). The magnitude of this discomfort becomes greater as individuals place greater importance on their beliefs (Petty and Krosnick, 1995; Eagly and Chaiken, 1993; Krosnick, 1990), so among strongly committed partisans one should observe the effects of these motives to reject contrary information. Coupled with the importance of information for counterarguing, then, strong partisans with high levels of political knowledge should be most likely to hold biased perceptions. On the flip side, non-partisans, who have no reason to discount information, should tend to report perceptions that are unbiased.

Now the crucial question: What are the implications of motivated partisan reasoning

for the process of perception aggregation? The systematic nature of individual partisans' errors suggests that measures of perception will be rife with the misperceptions of party identifiers. And thus, *systematic error will not cancel out*. If so, then partisan misperceptions should contribute to, indeed significantly bias, aggregated measures of public opinion.

2.1.2 A Constraint on Motivated Reasoning

Scholars have made a strong case for motivated partisan reasoning. Yet, in so doing, many have bypassed a critical caution: Rather than haphazardly reaching favorable outcomes, people who are motivated by directional goals “attempt to be rational...and construct a justification of their conclusion that would persuade a dispassionate observer” (Kunda, 1990, 482). In other words, real-world events and objective conditions can override the desire to reach preferred conclusions. As a result, partisans' perceptions should be “a compromise between the wish to reach a particular conclusion and the plausibility of that conclusion given the available data” (Ditto and Lopez, 1992, 569).

For two reasons, the potential for objective conditions to constrain motivated reasoning is of great consequence. First, if partisans encounter *objective* negative information about their party, then partisans' attempts to construct plausible counterarguments will be made more difficult. This implies that, over time, partisans will come to process disagreeable information. Second, partisans' biased tendencies ought to affect their across-time perceptions differently than objective conditions. The influence of party identification on perceptions should be roughly constant because partisanship is the most stable of political traits (Converse, 1964; Converse and Markus, 1979; Carsey and Layman, 2006). The influence of objective conditions, by contrast, should be ever-changing because real-world events and conditions are constantly in flux. These

dynamic considerations, which rest on responsiveness to real information, have been underexplored by motivated reasoning scholars. Yet, as will be seen, this role for reality is central to understanding partisans' temporal political perceptions.

2.2 The Character of Aggregate-Level Perception

In stark contrast to the individual-level case, aggregate-level scholars argue for the order and accuracy of political perceptions. And in fact, from changes in national tax policy and defense spending preferences (Page and Shapiro, 1992; Bartels, 1991) to shifting economic expectations (MacKuen, Erikson and Stimson, 1992; Durr, 1993) to movements in “public policy mood” (Stimson, 1998), the public, as a whole, seems to learn about real-world events and adjusts its perceptions (and subsequent preferences) accordingly. Fundamentally, then, “aggregate-level accuracy” refers to the collective’s objective, reasonable responses to real-world events and political phenomena.

But rather than behaving as objective observers, political partisans, especially strong identifiers, should perceive real-world conditions in ways that support their partisan beliefs. If so, then persistent directional differences will be evident in the across-time perceptions of Democrats and Republicans, differences which will endure in the aggregate. This expectation highlights an important shortcoming of the aggregate accuracy thesis: in large measure, scholars have not acknowledged the potential for systematic differences—that is, systematic *errors*—in aggregated perceptions. Of the few scholars who have analyzed but not found that partisan bias persists after aggregation (Page and Shapiro, 1992; Gerber and Green, 1999), none have contrasted these perceptions with a baseline measure of reality. Moreover, none have isolated the

sub-group patterns for *strong* partisans.³ As a result, these studies have failed to address the core of the individual-level critique—that *strong* partisans’ errors are likely to persist in the aggregate.

To summarize, both individual- and aggregate-level scholars have overstated their cases for political perceptions. At the individual level, scholars have not adequately acknowledged that objective conditions can constrain motivated partisan reasoning. And at the aggregate level, scholars have largely ignored the potential for systematic errors to persist post-aggregation. Taken together, these considerations bridge the extant gap between the individual- and aggregate-level arguments. Studying them simultaneously should thus help to resolve the paradoxical findings about political perceptions.

2.3 Economic Perceptions

A strong test of bias in perception requires selecting a perceptual domain that is central to American politics. Moreover, it requires looking at perceptions of an objectively-measured political object. Toward these ends, this study considers people’s perceptions of the United States economy. The economy is a prominent part of the American political debate and its standing matters for individual citizens. What is more, national economic performance is measured using objective indicators, which, taken together, offer a thorough and unambiguous reading of economic conditions. As such, these indicators can provide a sense of what an objective rating of the economy’s standing ought to be.

Presumably most Americans acquire information about the U.S. economy from

³Page and Shapiro (1992, 310–311) examine the across-time differences between Democrats’ and Republicans’ perceptions of the Vietnam War, and Gerber and Green Gerber and Green (1999) study the across-time differences in presidential approval for Democrats, Republicans, and Independents (also found in Green, Palmquist and Schickler, 2002, Chapter 5).

the media, which tend to focus on objective indicators of performance (Nadeau et al., 1999; but see Hetherington, 1996). For partisans and others, however, objective information is not all that is relevant. A complication arises in that many people hold the sitting president responsible for the economy's standing (Kinder and Mebane, 1983; Mondak, Mutz and Huckfeldt, 1996; Rudolph, 2003). This attribution implies that, when partisans evaluate the economy, they should look to draw conclusions which reflect favorably on their own political party (Evans and Andersen, 2006).

Specifically, party identifiers should give greater weight to economic information that supports their own beliefs and desires about the president. When they identify with the presidential in-party, these committed citizens should confront and process information that gives the economy a favorable assessment. This should in turn lead in-party members to adopt positively biased perceptions of economic conditions. When partisans belong to the presidential out-party, by contrast, they should be motivated to encounter and encode economic news that gives a negative assessment. Thus for out-party members, the expected result is negatively biased economic perceptions.

2.3.1 The Real Economy as Constraint

Because news about the economy is largely objective, partisans, in defending their beliefs, will be limited to making "plausible" counterarguments about its standing. In other words, partisans will find it difficult to discount unfavorable information, especially as the evidence mounts. As a result, as economic conditions change with time, partisans should adjust their perceptions so that they more accurately represent its actual state. If so, then, despite motivations to the contrary, partisans' across-time economic perceptions should track changes in the real economy.

2.4 Data and Methods

Unravelling the micro-macro paradox requires two complementary analyses. The first, individual-level analysis, finds three components to be crucial: measures of economic perceptions and partisanship, and a method for assessing individual-level perceptual bias. The second, aggregate-level analysis, requires two components: aggregate measures of economic perceptions disaggregated by party membership, and a baseline measure of economic conditions that can be used to assess whether partisan bias persists post-aggregation. The 1980–2004 American National Election Studies Cumulative Series provides data for all but the baseline measure of the economy, which can be constructed using prominent indicators of economic performance.

2.4.1 Individual-Level Data

The Cumulative Series offers a measure of *Individual Economic Perceptions* that asks respondents to rate the national economy’s performance over the previous year.⁴ Respondents have been asked for these retrospective economic evaluations in every two-year survey since 1980, so the individual-level analysis uses pooled 1980–2004 data. For interpretation purposes, the response categories have been recoded (“Much worse” = –2; “Somewhat worse” = –1; “Stayed the same” = 0; “Somewhat better” = 1; “Much Better” = 2).

With regard to party identification, I use the Cumulative Series’ familiar 7-point scale, which ranges from Strong Democrat to Strong Republican. Because the data are pooled across multiple years, however, the raw party identification measure fails to leverage expectations about the direction of bias in Democrats’ and Republicans’

⁴The two-part question reads as follows: “Would you say that over the past year the nation’s economy has gotten better, stayed (all years except 1984: about) the same or gotten worse? (If better:) Would you say much better or somewhat better? (If worse:) Would you say much worse or somewhat worse?”

economic perceptions. What is needed is an indicator that reflects whether, in a given year, Democratic or Republican identifiers were members of the presidential in-party or the presidential out-party. I create four party–membership dummy variables: *Strong and Other In-Party*, and *Strong and Other Out-Party*. The “Other” category collapses weak and leaning identifiers because these two levels of party commitment bring about similar political behavior (Keith et al., 1992).⁵ Independents are ignored, but not because these party-neutral citizens are unimportant. Rather, Independents serve as an excellent baseline category for comparison. Lacking partisan goals, Independents have no reason to engage in motivated partisan reasoning. Therefore, their economic evaluations are not likely to contain *systematic* errors.

The amount of political information people possess is essential to the act of updating perceptions across time. To account for respondents’ *Information Level* I draw on NES interviewers’ 5-point information rating scale.⁶ A straightforward expectation is that people with high levels of information should be more in touch with the actual status of the economy. But yet, if these people are also partisans, then information equips them with the means to reject belief-inconsistent information by mustering evidence against it. And so, increased information levels should accentuate partisans’ misperceptions of the economy’s standing, especially among those with the strongest party commitments. To test this possibility I create interactions between political information and each of the in- and out-party indicators, producing four *Party-Membership* by *Information* interactions in total.

⁵Equality of coefficients tests show that, in predicting economic evaluations, there are no statistically significant differences between the resultant weak and leaning in- or out-party coefficients.

⁶On these ratings interviewers rate respondents as having “Very Low,” “Fairly Low,” “Average,” “Fairly High,” or “Very High” levels of political information. Although this measure does not tap knowledge *per se*, it has nearly the same reliability as a scale constructed from a 15-item factual knowledge battery (see Bartels 1996, which cites a 1985 unpublished study by John Zaller that found that the scale reliability difference between interviewer ratings and a multi-item knowledge battery scale is a mere .04.)

Rounding out the model of individual economic perceptions are additional respondent attributes that researchers (Conover, Feldman and Knight, 1987; Conover and Feldman, 1986) have shown to influence economic perceptions. Specifically, control variables reflecting respondents' *Family Income*, *Education Level*, *Race* (Black = 1) and *Gender* (Male = 1) are added to the model. Finally, to control for year-specific factors not yet captured, *Year* dummy variables are created for every biennium (Baseline Year = 2004).

2.4.2 Aggregate-Level Data

Aggregate Economic Perceptions are obtained by calculating a weighted average of all respondents' retrospective economic evaluations for each biennium, 1980 through 2004.⁷ To examine partisan patterns, I create average evaluations series for the following four partisan groups: (1) *Strong In-Party, High Information* (2) *Strong In-Party, Low Information* (3) *Strong Out-Party, High Information* and (4) *Strong Out-Party, Low Information*. Two "non-partisan" series are also created: *Independent, High Information* and *Independent, Low Information*.⁸

Now an objective measure of economic conditions is needed. I develop such a measure, called the *Economic Performance Index*, using level and change scores for several prominent economic statistics: the Consumer Price Index, the Civilian Unemployment Rate, and the Indices of Leading, Lagging, and Coincident Indicators. To ensure that these statistics are in line with the annual character of the retrospective evaluations, summary scores are calculated that represent real changes in each indicator during the

⁷Because systematic asymmetries in evaluation are likely to be found for the party identification categories, the overall sample average is weighted by the proportion of respondents in each party identification category in each survey year.

⁸People who receive an interviewer information rating of "Fairly High" or "Very High" comprise the High Information category, while those who are perceived to have "Average", "Fairly Low" or "Very Low" levels of political information comprise the Low Information category.

previous year.⁹

The Economic Performance Index must be directly comparable to the aggregated partisan perceptions series, for it is this comparison that tests the accuracy of partisans' perceptions. Achieving this correspondence requires constructing the index in two steps. First, the weighted average retrospective evaluations series is regressed on the economic indicator summary scores. Then, from this regression, predicted values are obtained.¹⁰ These predicted values are the Economic Performance Index to be seen in Figures 2.1–2.3 below.¹¹ Importantly, the predicted values calibrate the objective economic indicators to the measurement system of the retrospective evaluations item, specifically to the 5–point response scale.

2.5 Individual-Level Results

The results of three ordered probit estimations are reported in Table 2.1. Clearly, party identification stands as a powerful determinant of people's economic evaluations. Looking first at the reduced model (Column 2), members of the presidential in-party are

⁹The Consumer Price Index average score is the average value of inflation over the previous year. The change score is obtained by calculating the total change in inflation over the previous year (November 1 of the previous year to October 31 of the survey year). For the unemployment rate score, I use the average unemployment level and also calculate the 12-month average in the Civilian Unemployment Rate (again, from November 1 of the previous year to October 31 of the survey year). Finally, for the Leading, Lagging, and Coincident Indicators scores, I calculate the change in each index during the second and third fiscal quarters of the survey year. The logic underlying these six-month time frame is that because the three business conditions indicators capture lags, concurrent, and future economic performance simultaneously, taken together, they should provide a rich summary of the year's business climate.

¹⁰This strategy is also used by Erikson, MacKuen, and Stimson 2002, Chapter 2, who use predicted scores to create a scaled measure of the economy's performance.

¹¹The Economic Performance Index has the following descriptive statistics: Mean: -0.38 ; Standard Deviation: 0.62 . As this is an exercise in prediction, potential collinearity problems are ignored and statistical significance tests are not of central interest. For the curious reader, the results of the regression are reported in the Appendix, Table 2.4.

Table 2.1: 5-Point Retrospective Economic Evaluations on In-Out Party, Information, and Demographics

Predictor	Model		
	Reduced	Interaction	Full
Strong In-Party	0.57 (0.03)	0.40 (0.07)	0.44 (0.07)
Other In-Party	0.30 (0.03)	0.23 (0.06)	0.25 (0.06)
Other Out-Party	-0.08 (0.03)	0.07 (0.06)	0.06 (0.06)
Strong Out-Party	-0.26 (0.03)	-0.05 (0.07)	-0.04 (0.06)
Political Information	0.09 (0.04)	0.16 (0.09)	0.34 (0.09)
Strong In-Party \times Information	—	0.25 (0.12)	0.20 (0.12)
Other In-Party \times Information	—	0.10 (0.11)	0.09 (0.11)
Other Out-Party \times Information	—	-0.28 (0.11)	-0.26 (0.11)
Strong Out-Party \times Information	—	-0.38 (0.12)	-0.40 (0.12)
Economic Performance Index (EPI)	—	—	0.90 (0.04)
EPI \times Information	—	—	0.57 (0.06)
Family Income	0.04 (0.01)	0.05 (0.01)	0.03 (0.01)
Education Level	0.03 (0.01)	0.03 (0.01)	0.03 (0.01)
Black	-0.16 (0.03)	-0.16 (0.03)	-0.16 (0.03)
Male	0.17 (0.02)	0.17 (0.02)	0.17 (0.01)
Year Dummy Variables	^a	^a	^a
τ_1	-1.54 (0.05)	-1.51 (0.06)	-1.01 (0.06)
τ_2	-0.62 (0.05)	-0.58 (0.06)	-0.09
τ_3	0.49 (0.05)	0.52 (0.06)	1.03 (0.06)
τ_4	1.68 (0.06)	1.71 (0.06)	2.22 (0.06)
Initial log-likelihood	-26550.3	-26550.6	-26550.32
Log-likelihood at Convergence	-23182.9	-23155.6	-23105.937
McFadden's Pseudo-R ²	.127	.128	.130
χ^2	6734.82***	6789.47***	6888.76***

Note: Ordered Probit Estimates, Standard Errors in Parentheses (N = 17,968)

†Year dummy coefficients (baseline = 1998) not reported but available upon request.

*** $p < .001$

significantly more likely to offer positive retrospective evaluations (relative to Independents). Strong in-party members find the largest bias effect with a coefficient of 0.57, and the coefficient for weak and leaning in-party partisans—“Other” at 0.30—indicates that the bias effect decreases with decreasing strength of party attachment. In short, in-party partisans, especially strong identifiers, cling to their preferred real-world state: they are consistently more likely to believe that economic conditions have improved under the watch of their party.¹²

Out-party partisans, by contrast, are more likely to report economic evaluations that are negatively biased. The strong out-party parameter of -0.26 , which is the larger of the out-party parameters, says that negatively-biased economic evaluations are most likely to be held by strong out-party identifiers. Leaning and weak out-party members also evaluate the economy with systematic negativity, but the smaller coefficient value of -0.08 indicates a weaker consistency effect.

Note that, in the reduced model, in-party members display stronger desires to defend their party’s handling of the economy. Relative to out-party membership, in-party status has nearly twice the biasing effect on economic perceptions. This asymmetry implies that the strong in- and strong out-party biases are not equally countervailing,

¹²The pooled cross-sectional results cannot rule out the possibility that, rather than party identification shaping citizens’ economic perceptions, these perceptions actually determine citizens’ party identification. To confirm that causality runs from party identification to economic perceptions and not the reverse, I estimate a simple cross-lagged structural model using data from the 1994 and 1996 waves of the 1992-94-96 American National Election Studies Panel Study. In this model ($N=287$), respondents’ education, family income, and race serve as exogenous control variables that influence party identification and economic evaluations in the same year (education level influences party identification only). More importantly, respondents’ lagged (1994) party identification (PID_{t-1}) and lagged retrospective economic evaluations ($Econ_{t-1}$) influence both their current (1996) party identification (PID_t) and their current retrospective evaluations ($Econ_t$). The maximum likelihood estimation fits the observed covariance matrix. The results of the estimation show that the unstandardized path coefficient from PID_{t-1} to $Econ_t$ is highly significant, at 0.10 (the standard error is 0.02). Therefore, 1994 values of party identification determine 1996 economic evaluations. The unstandardized path coefficient from $Econ_{t-1}$ to PID_t , on the other hand, is 0.10 (0.06). And thus, 1994 economic perceptions do not significantly determine 1996 party identification. For additional work showing that causality runs *from* party identification *to* economic perceptions, see DeBoef and Kellstedt (2004), Bartels (2002), and Erikson (2004).

and thus, not likely to cancel one another in the aggregate. Instead, in-party perceptions should disproportionately affect aggregate measures, which, with respect to economic perceptions, means that aggregated retrospections will consistently display undue optimism.

The interaction model (Column 3) provides confirmation that strong partisans discount information about the economy. To roughly the same degree, increasing levels of political information further increase strong partisans' propensities to report economic evaluations that favor their respective party. Thus those people who are most knowledgeable about politics are also least likely to agree about real economic conditions. Note that information enables out-party bias—the strong out-party coefficients are not significant in isolation.

It is possible that the strong effect of people's information levels is an artifact of failing to account for real-world economic information. The full model in Column 4 shows that this is not the case. Here both the biennial score for the Economic Performance Index (recall that this index is a scaled summary of objective economic change) and an interaction between the EPI and people's information levels are included. The results are again consistent with the notion that partisans selectively attend to and process information about the economy: Despite finding that information about the real economy has strong and significant effects on retrospections, the in-out bias coefficients remain large and significant.

To give a more descriptive account of the effects of partisan bias, I re-estimate the full model without the year dummy controls and transform the coefficients into predicted probabilities.¹³ These probabilities are reported in Table 2.2 and Table 2.3

¹³Excluding the year dummy controls has a trivial effect on the coefficient estimates and, because the model includes the Economic Performance Index, it controls for the conditions unique to each year, if not alternative period effects. Predicted probabilities are obtained using CLARIFY (Tomz, Wittenberg and King, 2003).

Table 2.2: Δ Probability of Evaluation Response: Independent to Strong In-Party

Economic Evaluation	Information Level	
	Lowest	Highest
Much Worse	-0.10	-0.14
Somewhat Worse	-0.05	-0.09
Stayed the Same	+0.07	+0.08
Somewhat Better	+0.07	+0.13
Much Better	+0.01	+0.02

as the change in the probability of response moving from Independents' evaluations to strong partisans' evaluations. Distinctions are once again made between respondents with high versus low political information.

Looking first at Table 2.2 we see that, relative to Independents, strong in-party members who have very low political information (Column 2) are 10-percent less likely to say that the economy got "Much Worse" over the previous year and 5-percent less likely to say that it turned out "Somewhat Worse." In total, then, these partisans are 15-percent less likely to give the economy a negative evaluation. At the other end of the evaluation scale, these in-party partisans are 7-percent more likely to say that the economy was "Somewhat better" over the past year and 1-percent more likely to say that it was "Much better," totaling an 8-percent increase in the likelihood of evaluating the economy favorably. Strong in-party members with high political information (Column 3) find a marked increase in the likelihood of perceptual bias: they are 23-percent less likely to give the economy a bad mark and 15-percent more likely to say that the economy has improved over the previous year.

Table 2.3 shows that strong out-party partisans' pattern of predicted change is opposite that of strong in-party partisans'. Low-information strong out-partisans behave

Table 2.3: Δ Probability of Evaluation Response: Independent to Strong Out-Party

Economic Evaluation	Information Level	
	Lowest	Highest
Much Worse	0.01	+0.16
Somewhat Worse	0.00	+0.01
Stayed the Same	-0.01	-0.11
Somewhat Better	-0.01	-0.06
Much Better	-0.01	-0.01

much like Pure Independents, being only slightly more likely to give the economy a “Worse” rating and 2-percent less likely to say that it has turned out “Better.” Out-party members with high information, however, are 17-percent more likely to give the economy a negative evaluation. At the same time, these knowledgeable out-partisans are 7-percent less likely to say that it was “Better.” Here the difference in probability change between the two political information categories is large, which confirms that with information comes a substantial increase in the likelihood of out-partisan perceptual bias.

On the whole, the individual-level analysis provides cogent evidence that motivated partisan reasoning creates biased perceptions. Most striking, in- and out-party partisans consistently report economic evaluations that are more likely to favor their own political party. What is more, having more information about politics only enhances the likelihood of this bias.¹⁴ That partisan bias is systematic implies that partisans’ perceptual errors will not cancel out in the aggregate. To see whether this is so, let us examine strong partisans’ and non-partisans’ subaggregate economic perceptions.

¹⁴This finding contradicts scholars’ claim that increased interest in politics generates higher levels of factual knowledge (see, e.g., Delli Carpini and Keeter 1996: Chapter 4).

2.6 Aggregate Consequences of Partisan Bias

We have seen that partisans' economic evaluations favor their preferred real-world states, which implies that the distribution of their economic evaluations will display small variance. And when an average is calculated from similarly biased responses, sample estimation logic predicts that this average will be biased as well. Therefore, as an estimator of economic reality, partisans' aggregate evaluations are not likely to coincide with actual economic conditions. In line with individual-level expectations, in-party partisans' subaggregate evaluations should be positively biased and out-party partisans' negatively biased.

As a point of contrast, consider the distribution of non-partisan Independents' economic evaluations, which also served as the reference point at the individual level. Independents tend to have lower levels of political knowledge, so their economic evaluations are likely to display wide-ranging errors. Using properties of estimators terminology, Independents' evaluations should be inefficient. But because these non-committed citizens have no reason to discount economic news, Independents' evaluations should nevertheless be unbiased. Averaging over inefficient but unbiased evaluations, sample estimation logic predicts an unbiased estimate of economic conditions. Therefore, Independents' subaggregate evaluations should fairly accurately represent the economy's actual state.

2.6.1 Subaggregate Economic Perceptions

To assess the aggregate consequences of partisan bias, Figure 2.1, Figure 2.2, and Figure 2.3 chart the 1980–2004 aggregate economic evaluations series for strong in-party, strong out-party, and Independent identifiers respectively. Each figure presents a separate series for respondents with high versus low political information. Also present in each figure is the Economic Performance Index, which, the reader will recall, reflects

an objective measure of economic performance scaled to the retrospections item. The difference between the perceptual series values and the Economic Performance Index values thus demonstrates the degree of bias (accuracy) in each of the perceptions series.

Looking first at Figure 2.1, in every year, strong in-party partisans' aggregate evaluations of the economy fall above the Economic Performance Index. In other words, these evaluations are consistently positively biased. To quantify this bias, I calculate the differences between the aggregate evaluation values and the performance index values. Then I obtain the average of these differences, called "average bias" scores. Strong in-party members with lower political interest find an average bias of 0.30, or 6-percent higher than the EPI. Among those with high political information, aggregate perceptions are markedly more positively biased, averaging 0.56 units (11.2 percent) above the performance index.

In Figure 2.2, systematic partisan bias again persists after aggregation. In this case, strong out-party partisans' aggregate perceptions are consistently negatively biased. For those with low knowledge, the average bias score is -0.32 . Among strong out-party members with high information, the average bias score increases slightly to -0.34 , or 6.8-percent below the EPI. Relative to in-party bias, then, out-party bias has a weaker displacement effect. This suggests that aggregate economic perceptions, overall, could display exaggerated optimism. I return to this question momentarily.

In contrast to the strong partisan series, the Independent series in Figure 2.3 align tightly with the Economic Performance Index.¹⁵ The average bias scores are smaller, too: -0.15 for Independents with low political information and -0.01 for those with high information. As the single-year deviations from the performance index fall above it in some years and below it in others, Independents' aggregate evaluations show no

¹⁵A difference in means test confirms that there is no statistically significant difference between the Economic Performance Index and the Independent, High Interest series. This result is not met for the low interest series, however.

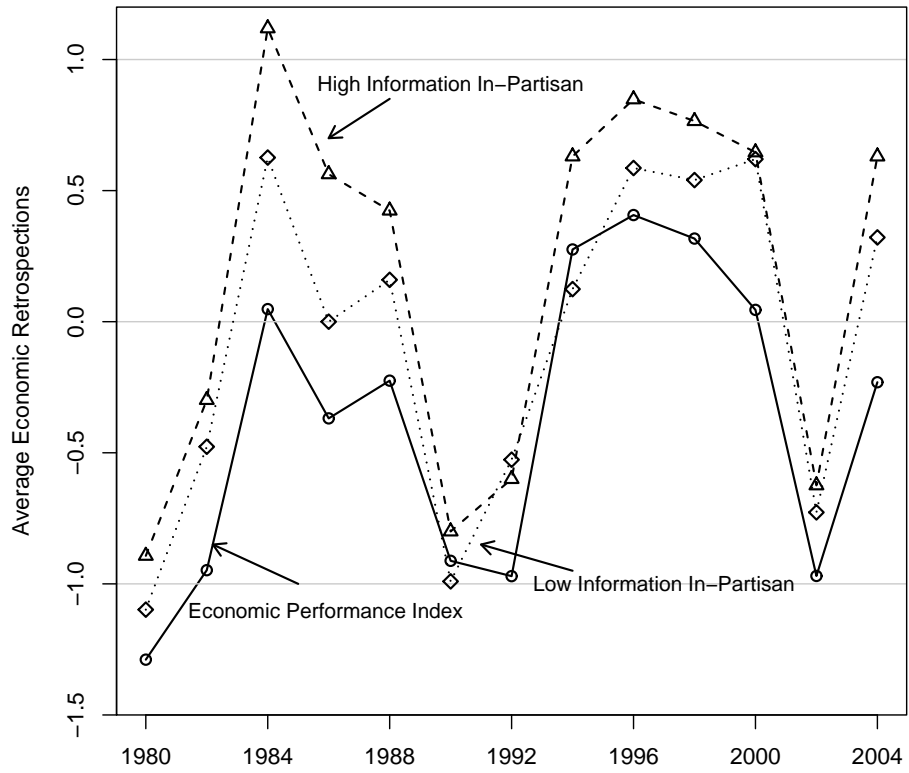


Figure 2.1: Strong In-Partisans' Average Retrospections and the Economic Performance Index, 1980–2004

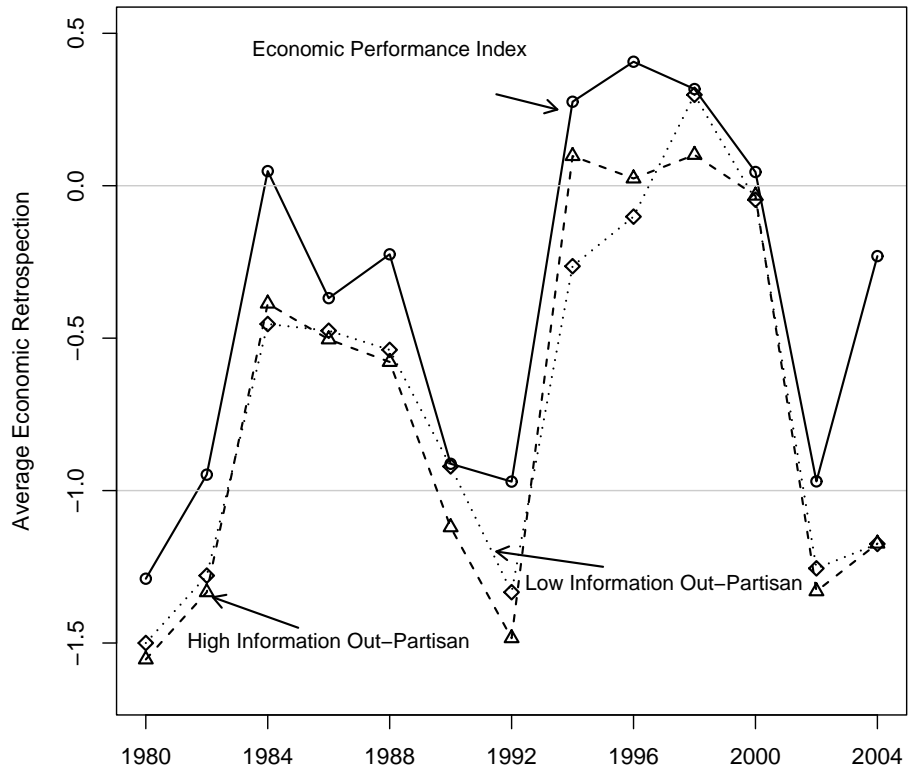


Figure 2.2: Strong Out-Partisans' Average Retrospections and the Economic Performance Index, 1980–2004

systematic error tendencies. The deviations appear to be random, resulting from Independents' lack of knowledge about economic conditions. This result provides empirical confirmation of macrolevel scholars' claims about statistical filtering under random error: upon aggregation, Independents' inefficient perceptions cancel out.

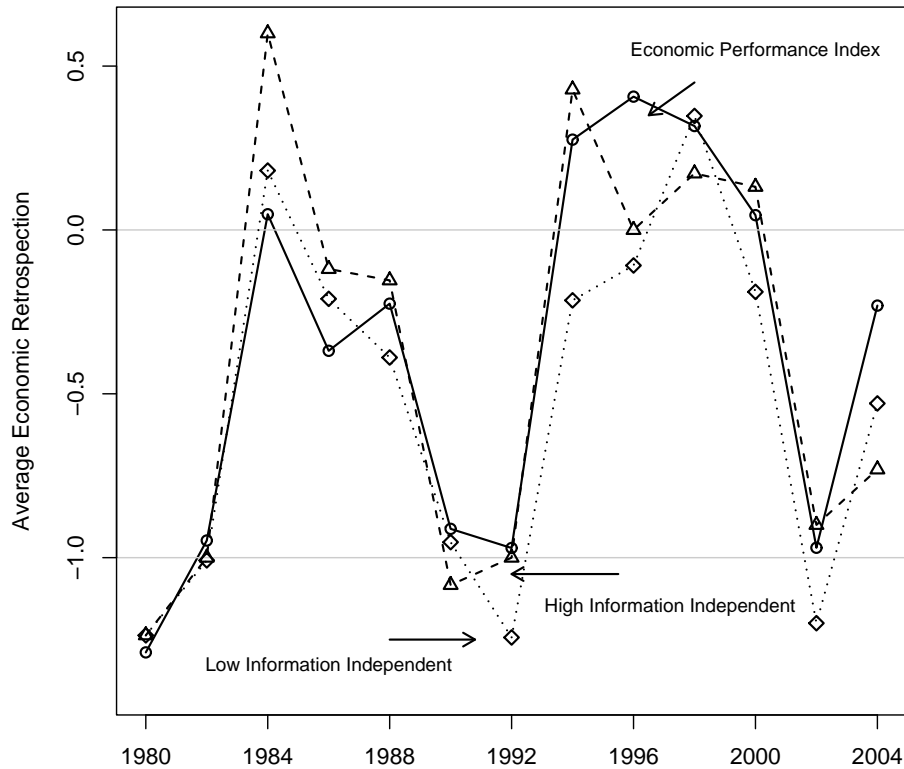


Figure 2.3: Independents' Average Retrospections and the Economic Performance Index, 1980–2004

2.6.2 Partisan Composition

We have seen that, at the sub-group level, partisans' evaluations are biased in the expected direction. But we have yet to see what this means for the overall aggregate

response in each year (i.e., for the overall levels). It is possible that in- and out-party displacement is countervailing, with the positively biased in-party levels being effectively cancelled out by negatively biased out-party levels. And although this does not seem to be the case on average—high-information strong in-partisans receive relatively larger average bias scores—this reading does not adjust for the partisan composition, which is to say, the proportion of each partisan group relative to the overall public.

To test for composition effects, two alternative bias (i.e. distance) measures are created for each of the four partisan groups for each year. Unlike before, the distance is not calculated relative to the Economic Performance Index, but instead as the distance between the “Baseline Public” retrospection—the average biennial retrospections averaged over everyone *except strong partisans*—and each of the strong partisan series. Importantly, the baseline public’s series corresponds closely with the EPI: both the correlation (Pearson’s $r = .98$) and the illustration in Figure 2.7 (see Appendix) make this clear. Equally important, the Baseline Public plus the four partisan sub-groups comprise the entire sample, which means that one can meaningfully weight the bias scores by the sub-group proportions.

Motivated bias scores (MBS) are created by adding the out-party bias—that is, the distance between the out-party mean and the Baseline Public mean retrospection—to the in-party bias via simple arithmetic: $(\text{In-Party}_t - \text{Baseline}_t) + (\text{Out-Party}_t - \text{Baseline}_t)$. This is done separately for each information class. These motivated bias values are then weighted by respective group proportions to produce the total bias scores (TBS) for each year. Figure 2.4 plots these bias scores for High-Information and Low-Information Strong Partisans. In Figure 2.4(a) panel (1), one can see that in its raw form, motivated in-party bias is not equalled by out-party displacement (were this the case, the point would fall on the x-axis). Panel (2) shows that in-party favoring persists after weighting the raw in-out distance scores by the proportion of knowledgeable strong in-

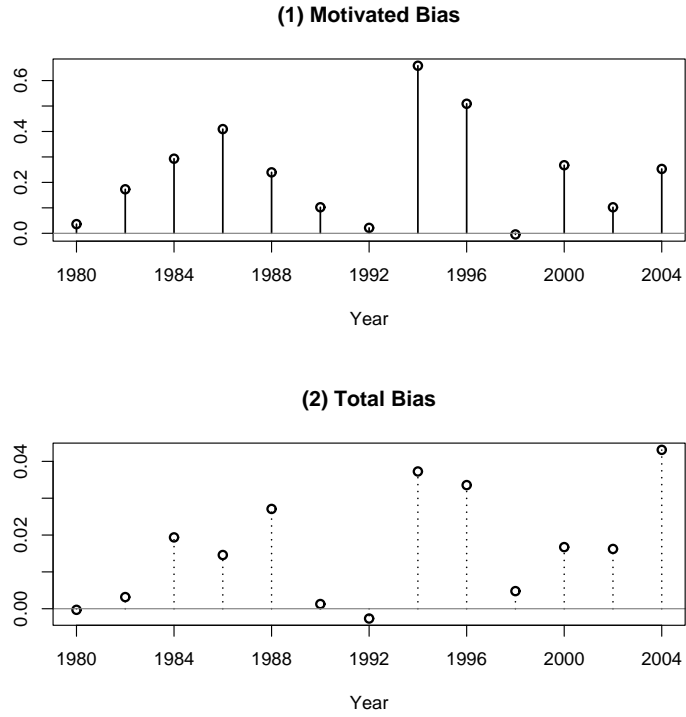
and out-partisans, respectively, although now the magnitude of the bias is diminished. By this weighted measure, informed in-party bias in overall retrospections was most pronounced in 2004.

The low-information scenario illustrated in Figure 2.4(b) tells a different story. Now there are substantial differences between what the motivated and total bias scores indicate about aggregating partisan bias. Although in-party bias is rooted in stronger motivations, its influence is tempered by the larger proportion of more weakly motivated out-partisans—especially in 1982 and 1988. Figure 2.5 combines the High- and Low-Information bias scores and shows that the overall impact of motivated reasoning is clear: a consistent in-party bias in aggregated economic perceptions. These figures demonstrate an important point about perception aggregation: in terms of shaping the levels of the aggregate measures, the strength of motivation coupled with the composition of the partisan electorate matter crucially for the bias in the levels.

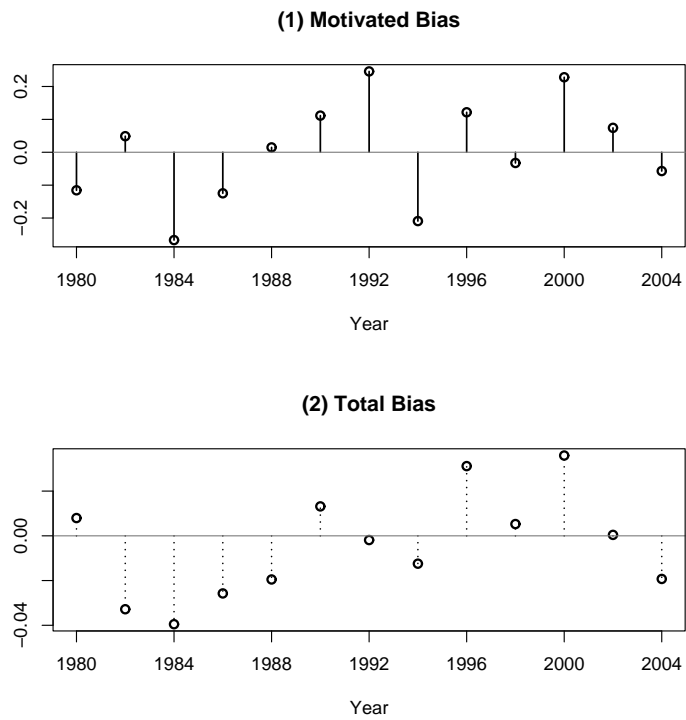
There is solid evidence that strong partisans' aggregate perceptions are systematically biased, whereas Independents' are not. What is more, as Figure 2.5 makes clear, the effect of perceptual distortion does not “balance out.” That errors persist in aggregate political perceptions should thus be acknowledged by scholars who argue for the overall accuracy of these perceptions. But of course, aggregate-level scholars tend to focus not on the character of single-year responses, but on response patterns *over time*. Having observed substantial aggregate bias in every year, is there reason to expect that partisans' aggregate perceptions will display such “longitudinal accuracy”?

2.6.3 Longitudinal Economic Perceptions

Recall that partisans' perceptions should be influenced by biased motivations *and* objective conditions, and that these two influences will affect perceptions differently over time. On the one hand, the influence of partisan bias should be constant from election



(a) High-Information Strong Partisans



(b) Low-Information Strong Partisans

Figure 2.4: Motivated and Total Bias in Aggregated Economic Perceptions: by Information Level, 1980–2004

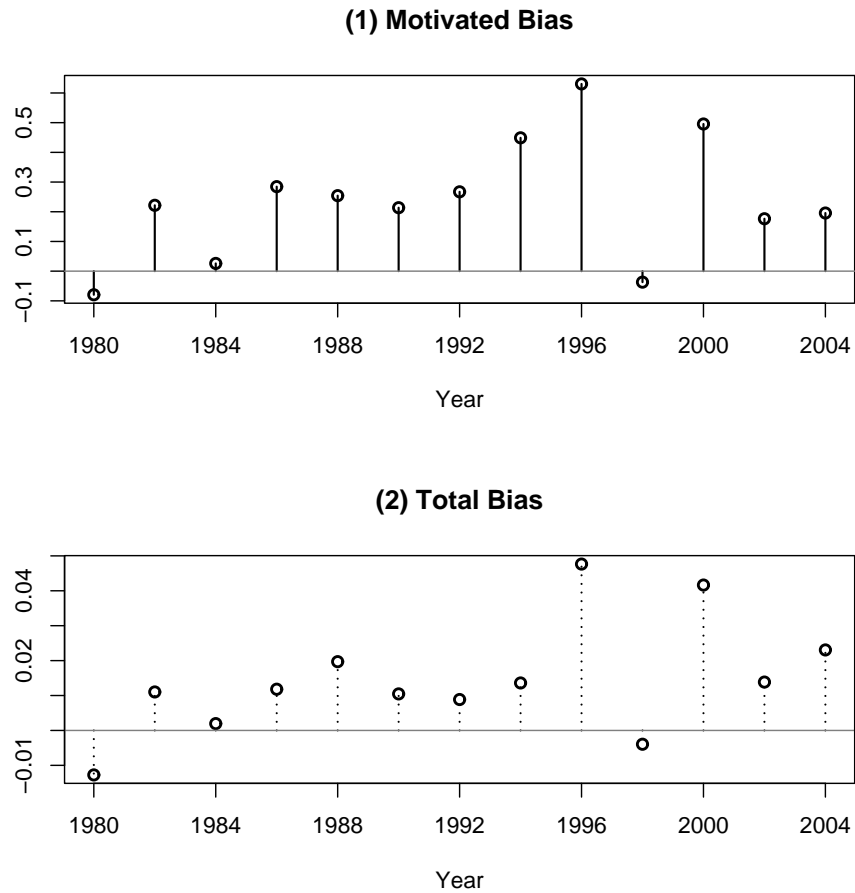


Figure 2.5: Motivated and Total Bias in Aggregated Economic Retrospections: All Strong Partisans, 1980–2004

to election. This means that bias will contribute trivial variation to across-time perceptions over the period in question, and will therefore be inconsequential in longitudinal analysis. On the other hand, because real-world conditions are constantly changing, the influence that they bring to bear on perceptions should change as well.¹⁶ As a result, real conditions should contribute most of the variation to across-time perceptions. Put differently, *changes* in partisans' aggregate perceptions should be driven by reality.

¹⁶A strong period of economic growth, for example, would be expected to shape people's economic perceptions in a manner far different than would a period characterized by high inflation and unemployment.

If so, then partisans' perceptions will be longitudinally accurate even though they are biased.

Looking once again at Figure 2.1 and Figure 2.2, we see illustrative evidence for longitudinal accuracy in strong partisans' perceptions. In both figures, strong partisans' aggregate perceptions move with the Economic Performance Index—that is, these perceptions track change in economic conditions. In Figure 2.3, Independents' aggregate perceptions also move in sync with the real economy. Across all years, therefore, the economic perceptions series display updating that is not only similar, but also sensible given actual conditions.

To test statistically for longitudinal accuracy, I correlate each of the aggregate perceptions series with the Economic Performance Index. Displayed graphically in Figure 2.6, each of the six correlations indicates a strong perceptions-reality relationship. Strong partisans' aggregated perceptions correlate with the performance index at from 0.91 to 0.96. Independents' aggregate perceptions, moreover, correlate with the performance index at from 0.92 to 0.95. So, for partisans and non-partisans alike, sub-group economic perceptions are closely connected to the real economy. Although the *levels* of strong partisans' aggregate perceptions are biased, *changes* in these perceptions are not.

2.7 Discussion

To conclude, scholars working at both the aggregate- and the individual-level of analysis have overlooked important facts about political perceptions. At the aggregate level, scholars have focused on the role of information updating in citizen understanding. But these scholars have not addressed the potential for systematic errors to emerge in collective measures of opinion. And, as we have seen, systematic partisan misperception not only exists, but also endures in the aggregate. Contrary to what many might

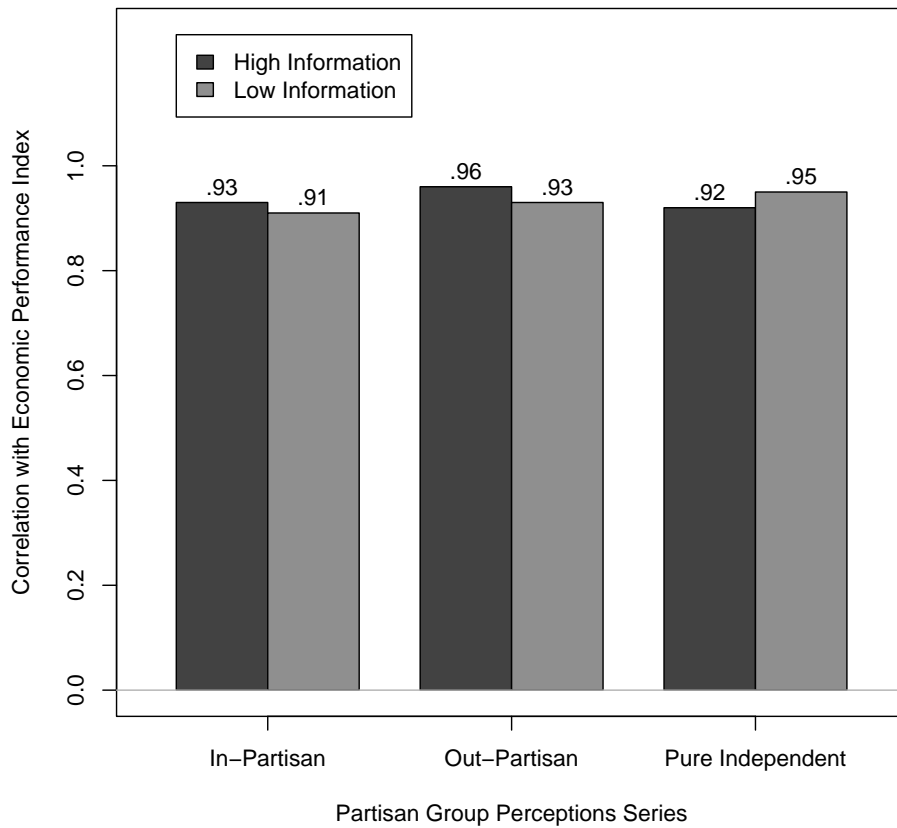


Figure 2.6: Correlations: Aggregate Perceptions with the Economic Performance Index

presume, this bias is enhanced by information. Its crucial consequence is to produce an incumbency advantage in economic perceptions, in which the aggregated measures are unduly inflated by the perceptions of presidential in-partisans.

But even so, across time, reality overrides partisans' motivations to distort information. The examination of partisans' across-time perceptions has shown that objective conditions drive perceptual change. The across-time perspective shows, moreover, that partisan bias is of little consequence to the accuracy of the aggregate perceptions studied here (i.e., perceptions of economics during general election campaigns). Longitudinal

analysis magnifies the influence of reality on perceptions, while at the same time minimizing the effects of bias. As a result, from election to election, the clear and consistent result is that aggregate perceptions change in ordered and accurate ways across time.

Taken together, these results present a compelling explanation of the discrepancy between micro- and macro-level political perceptions. The key point is that partisans' perceptions derive from both biased motivations *and* objective considerations. For this means that, despite their efforts to discount disagreeable information, partisans nevertheless look to real-world conditions when updating their political perceptions. As a result, their across-time perceptions react sensibly to real-world events and political phenomena. Having shown that perceptual accuracy emerges from the aggregation of biased political perceptions, the micro-macro paradox is hereby resolved.

2.8 Appendix

Table 2.4: Average Retrospective Evaluations on Economic Indicators

Economic Indicators	Parameter
Consumer Price Index, Annual Change	-0.11 (0.19)
Consumer Price Index, Annual Average	-0.004 (0.002)
Civilian Unemployment Rate, Annual Change	0.06 (0.10)
Civilian Unemployment Rate, Annual Average	-0.18* (0.06)
Δ Leading Index, 2 nd through 3 rd Quarter	0.41** (0.09)
Δ Coincident Index, 2 nd through 3 rd Quarter	0.11 (0.15)
Δ Lagging Index, 2 nd through 3 rd Quarter	0.43** (0.08)
Constant	1.23 (3.46)
F-Statistic	17.56**
Adjusted- R^2	0.91
N	13

Note: OLS Regression estimates. Standard Errors in parentheses. Two-tailed tests.
* $p < .05$; ** $p < .01$

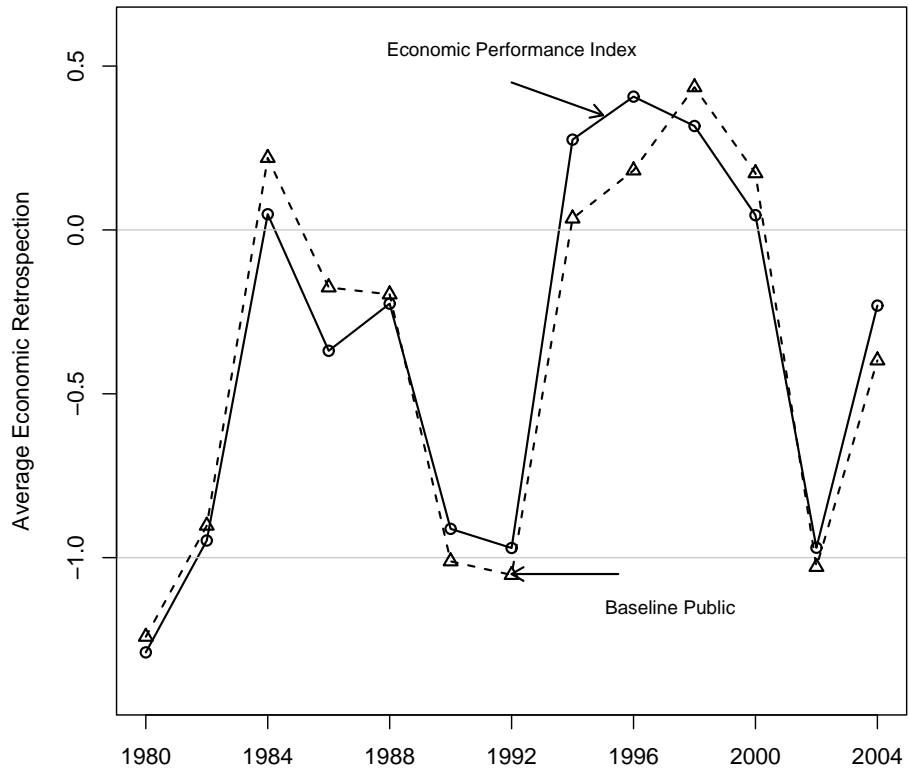


Figure 2.7: Baseline Public Average Economic Retrospections and the Economic Performance Index, 1980–2004

Chapter 3

When Perceptions Polarize: How Motives and Information Shape Partisan Inference

Political campaigns are designed to provide voters with information relevant to electoral choice. But does campaign information resonate? For more than four decades, students of American elections consistently argued that national campaigns have “minimal effects” on electoral behavior (Berelson, Lazarsfeld and McPhee, 1954; Patterson and McClure, 1976; Lewis-Beck and Rice, 1992; Finkel, 1993). But yet, more recently, several scholars have begun to grant campaigns a central determining role (e.g., Iyengar and Simon, 2000; Brady, Johnston and Sides, 2006).

What explains the shifting academic consensus? A leading impetus has been scholars’ claim that voters learn from campaigns. Two general findings comprise the burgeoning case for campaign learning. First, campaigns appear to increase the electoral significance of political-economic perceptions, which is to say that these perceptions become relatively stronger determinants of voter preference later in the campaign cycle (Gelman and King, 1993; Wlezien and Erikson, 2002). Second, campaigns reduce voter

uncertainty, in that exposure to campaign messages increases both the precision of people's candidate issue perceptions (Alvarez, 1997; Franklin, 1991; Conover and Feldman, 1989; Bartels, 1988) and the number of reasons people have for liking/disliking presidential candidates (Holbrook, 1999).

To be sure, the evidence that campaigns increase both the significance and the certainty of people's political perceptions could signal responsiveness to campaign information. But do these patterns signify that voters assimilate information about actual political-economic conditions? Do campaigns, as Gelman and King (1993) once put it, generate "enlightened" preferences? Because neither pattern speaks to the accuracy of people's perceptions, it is impossible to say. Consequently, scholars' case for campaign learning is problematic.

The fundamental difficulty is that nearly every study of presidential elections since the 1940s shows that campaigns activate and reinforce voter partisanship (Iyengar and Simon, 2000). And crucially, political partisans are not passive information-receptors. These committed citizens tend to ignore opposition arguments (Taber and Lodge, 2006; Sears and Freedman, 1967) and counterargue evidence that runs contrary to their preferred beliefs (Kruglanski, Webster and Klem, 1996; Kunda, 1987), especially if partisan attitudes are accessible (Fazio et al., 1995) and/or strong (Biek, Wood and Chaiken, 1996; Dawes, Singer and Lemons, 1972; Pomerantz, Chaiken and Tordesillas, 1995). Because campaigns increase both the accessibility and the strength of partisan attitudes, then, the implication for learning is clear: As campaign intensity builds over an election cycle, voters should have not only greater access to politically relevant information, but also greater motivation to resist it.

This tension complicates a theory of campaign learning considerably. Clearly campaign dynamics are important. The remaining question is whether information reception or resistance is more likely to shape voter understanding during the campaign. The

available evidence on partisan learning points not toward the answer, however, but to a second puzzle: In fact, *both* learning styles—termed here “objective information updating” and “motivated reasoning,” respectively—appear to characterize partisan learning and inference. Proponents of objective information updating have found that similar receptivity to *actual-world* conditions generates patterns of parallel group-level belief change across diverse partisan groups (Gerber and Green, 1998, 1999; Green, Palmquist and Schickler, 2002; Page and Shapiro, 1992, Chapter 10).¹ Proponents of motivated reasoning, however, have found that the importance of partisans’ *preferred-world* states generates information processing bias and belief polarization (Taber and Lodge, 2006; Fischle, 2000). In addition to asking how campaigns shape voter information, then, one must ask why these starkly different accounts of partisan learning both find empirical support.

In the pages that follow, I present an analysis that not only shows how campaigns affect voter understanding, but also elucidates why scholars have observed discrepant patterns of partisan inference. The analysis overcomes a conceptual limitation of much research on campaign effects by looking beyond voting to perceptions of two politically consequential domains: the economy and the (21st Century) Iraq War. It also overcomes a key shortcoming of work on partisan learning by crafting a research design that has the resolution to capture learning dynamics, on the one hand, and the temporal scope to capture the campaign’s relevance over the long term, on the other.

¹Gerber and Green (1999), push this evidence harder and argue that parallel patterns of opinion change are synonymous with *Bayesian* updating. Bartels (2002) provides compelling evidence that parallel updating does not adhere to Bayesian probability theory, but the point is irrelevant here. This study asks what inferences voters draw from information exposure. Parallel opinion change would occur when all voters reach the same conclusion post-exposure—for example, revising evaluations of economic conditions downward after learning of a spike in unemployment.

All told, this study contributes simultaneously to the partisan learning and campaign effects literatures. In demonstrating that learning is governed by dynamic mechanisms, it clarifies the role of “actual-world” and “preferred-world” considerations in shaping partisan inference across time. Equally important, the analysis produces straightforward survey-based evidence that shows how campaigns affect voter understanding. What is the campaign’s role? As will be seen, the influence of actual- versus preferred-world considerations is conditioned by whether there is an ongoing campaign or not. In the broadest sense, this study bolsters empirically an idea that scholars have often advocated but struggled to demonstrate: Campaigns play a crucial electoral role not so much because they transmit information (or “enlighten”), but because they organize and enhance political disagreement.²

3.1 Perspectives on Learning and Inference

National political campaigns have two essential features: they are high-information, highly-partisan events. However, campaign scholars have tended to overlook the joint influence of these two features. Outside of the campaign effects literature, one can observe two perspectives on learning that help to clarify the unique role of information or partisanship—information updating and motivated reasoning, respectively. However, it will turn out that in isolation, neither theory sufficiently captures the parameters that shape partisan inference.

²Indeed, Berelson, Lazarsfeld and McPhee (1954, 183) characterize presidential campaigns as “a system for organizing disagreements.”

3.1.1 The Logic of Information Updating

Information updating requires that people regularly access meaningful information about actual-world conditions. This information can come from a variety of sources, including the media, social networks, and daily experiences, and the actual-world conditions can be broad in scope, ranging from current economic trends like unemployment and inflation to an officeholder’s issue stands or foreign policy success. The crucial points are that the information is grounded by reality and that it has clear directional implications. The latter point is especially important because it suggests that, when viewed objectively, this information signifies the direction in which people should adjust relevant perceptions and judgments.

The crux of information updating theory is that diverse groups with competing interests draw the same inferences from information. It is worth emphasizing that this view does not require that different groups hold *identical* perceptions on average, but only that these groups respond to real-world information similarly. For example, if Democrats and Republicans encounter news that the United States’ annual Gross Domestic Product increased three-percent over the previous year’s reading, these groups need not agree on a summary evaluation of the year’s economic improvement, but post-exposure, both should revise their retrospective economic evaluations in the positive direction.

If diverse partisan groups draw the same conclusions from information, then these groups’ relevant political perceptions will display *parallel* temporal change. This expectation is illustrated in Figure 3.1, which tracks updating on a hypothetical dimension that ranges from “Worse” to “Better” (y-axis) over time (x-axis). For the sake of illustration, assume that we are looking at partisan updating on perceptions of the U.S. economy’s condition relative to one year ago. In absolute terms, each partisan group disagrees about the level of economic performance: Republicans are consistently the

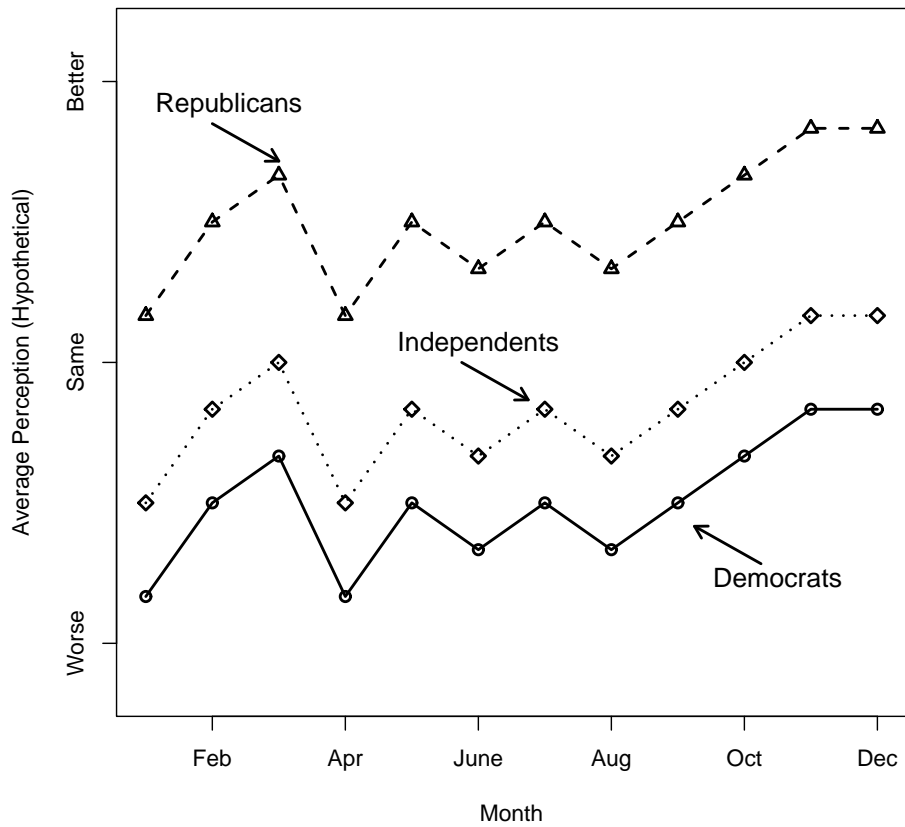


Figure 3.1: (Hypothetical) Illustration of Parallel Belief Change Produced by Objective Information Updating

optimists, Democrats the pessimists, and Independents somewhere in between. Nevertheless, as economic news gets disseminated over the 12-month period, Republicans, Independents, and Democrats all interpret its meaning in the same way. A key feature of parallel change is that it means *the distance between group-level perceptions remains constant across time*.

3.1.2 Evidence for Information Updating

The evidence that partisans draw the same inferences from actual-world conditions comes largely from a series of studies put forward by Donald Green and his colleagues. In brief, these studies demonstrate that Democrats', Republicans', and Independents' attitudes and beliefs change in parallel on a number of issues, including presidential approval (Gerber and Green, 1999), retrospective evaluations of economic performance (Gerber and Green, 1998), beliefs about political scandals (both Clinton's guilt in the Monica Lewinsky scandal and Nixon's role in Watergate), and evaluations of candidate performance in presidential debates (Green, Palmquist and Schickler, 2002). Further evidence can be found in Page and Shapiro's (1992) examination of Vietnam War perceptions, which shows that even during an especially contentious period in American politics, Democrats' and Republicans' evaluations of government success in Vietnam moved in parallel.³ Thus, on several consequential issues spanning several critical eras in American politics, scholars have consistently observed parallel changes in partisans' group-level political perceptions.

³The evidence for parallelism also holds across levels of political sophistication. In a series of studies, Enns (2007) has shown that members of various educational groupings display parallel changes in preferences for government spending programs.

3.1.3 The Logic of Motivated Reasoning

The evidence for information updating is compelling. But what about scholars' claim that partisans are "motivated reasoners"? Motivated reasoning theory eschews objective inference and says that, in fact, partisans do not accept the directional implications of information uncritically. Because these committed citizens are motivated by a desire to reach a conclusion about the world that benefits their party (i.e., to see their preferred world), their interactions with information are subject to bias. Specifically, these committed citizens tend to give excessive weight to belief-confirming evidence, termed the "confirmation bias," and to underweight or ignore that which runs contrary to preferred-world beliefs, termed the "disconfirmation bias" (Taber and Lodge, 2006).⁴

Of course, in a two-party system, directional political information benefits one party and hurts the other's standing. As a result, one partisan group (say, Republicans) will have an incentive to exaggerate the importance of this information while another (here Democrats) will have strong incentive to resist it. In the language of motivated reasoning, these Republicans will frequently succumb to the confirmation bias and these Democrats to the disconfirmation bias. If so, then partisans will consistently draw contradictory conclusions from the same information signals, in turn producing group-level beliefs that diverge in opposite directions from reality. More simply, group-level partisan perceptions will *polarize*.

A hypothetical account of such polarization is depicted in Figure 3.2. Continuing with the economic retrospections example, Figure 3.2 indicates that Independents, who have no reason to be biased, see that the economy improved slightly over the previous year. Republicans, however, perceive an improving economy and Democrats one that is

⁴To illustrate this idea with a concrete example, consider perceptions about the U.S. military's success regarding the Iraq War. Supporters of the Iraq War would discount or ignore news about U.S. troop casualties but accept Bush's rhetorical claims for a "mission accomplished" without scrutiny, perhaps even exaggerated their importance. Opponents of the War would do the opposite.

worsening. Under the logic of motivated reasoning, such polarization would be expected if the Republican Party benefits from an economic boom (which would be true under a Republican president) and the Democratic Party benefits from an economic bust. An important feature of such polarization is that it means *the perceptual gap between Republican and Democratic groups grows larger across time.*

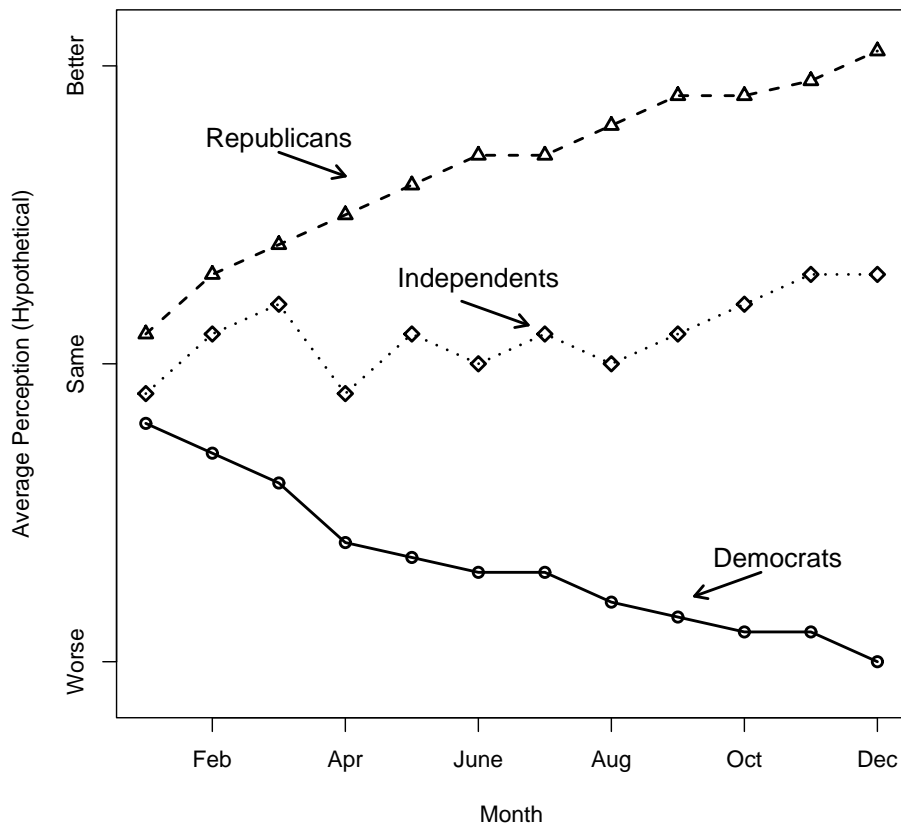


Figure 3.2: (Hypothetical) Illustration of Perception Polarization Produced by Motivated Reasoning

3.1.4 Evidence for Motivated Reasoning

What is the evidence for motivated reasoning? A long line of studies document that partisan attachments color political perceptions—beginning with the work of Berelson, Lazarsfeld and McPhee (1954) and Campbell et al. (1960) through Markus and Converse (1979), Markus (1982), and Finkel (1993), and to recent work by Fischle (2000) and Bartels (2002). Although most of these studies focus on party favoritism in political perception, not belief polarization, several experimental studies in social and political psychology demonstrate that exposure to belief-inconsistent information has a polarizing effect, especially among the strongly committed (Pomerantz, Chaiken and Tordesillas, 1995; Lord, Ross and Lepper, 1979; Taber and Lodge, 2006).

Is there reason to expect a similar pattern with regard to perceptions of political-economic conditions? Hetherington (2001) has shown that polarization at the elite level has increased the importance of parties for ordinary Americans, and Bartels (2000) has also documented the increasing importance of partisanship since the early 1980s. Crucially, where partisan attitudes are highly accessible and/or strong, learning and inference should be affected by the confirmation and disconfirmation biases that together predict belief polarization. Adding direct support to this expectation, Fischle (2000) has shown that Republicans' and Democrats' perceptions about Clinton's culpability in the Lewinsky scandal did indeed polarize.

3.1.5 Toward a Reconciliation

The question is why both the parallelism of Figure 3.1 *and* the polarization of Figure 3.2 find empirical support. The answer is not immediately obvious, but because both accounts find evidentiary support, the core component of each perspective likely plays a role in partisan updating. To move forward, then, the next section introduces a learning model that allows for the influence of both objective information updating

and motivated reasoning.

3.2 An Integrated Model of Partisan Inference

At a basic level, integrating these two perspectives is straightforward. What is needed is a model that simultaneously captures the influence of actual-world conditions, \mathbf{A} , and preferred-world states, \mathbf{P} , on people’s political-economic perceptions. In slightly more formal terms, political perceptions can be represented as follows: $\mathbf{Perception} = \mathbf{A} + \mathbf{P}$.

This formulation should incorporate the temporal character of each component because each varies with time. The changes in \mathbf{A} are a function of actual-world change. \mathbf{P} changes when a party suddenly benefits from an alternate world state. Perhaps the most visible change on this front occurs when the presidency changes from Republican to Democratic control (or vice versa). Because the Democratic and Republican Parties benefit from different world states, each partisan group, g , has a particular \mathbf{P} .

The model must also incorporate the parameters that govern the relative influence of \mathbf{A} and \mathbf{P} . These parameters, $\omega^{(a)}$ and $\omega^{(p)}$, represent motivation toward accuracy- and directionally-minded thinking, respectively. When $\omega^{(a)}$ is large and $\omega^{(p)}$ is small, one seeks accurate understanding; when the reverse is true, one is more strongly motivated to conclude that conditions are consistent with the preferred-world. Accounting for all of these features using subscript notation produces Equation 3.1:

$$\mathbf{Perception}_{t,g} = \omega^{(a)} \mathbf{A}_t + \omega^{(p)} \mathbf{P}_{t,g} \quad (3.1)$$

This basic model integrates information updating and motivated reasoning. It is similar in spirit to John Zaller’s (1991; 1992) “RAS” model of attitude change in that both Equation 3.1 and the RAS model rest on the joint influence of information- and

partisan-based considerations.⁵ Nevertheless, three differences are worth noting. First, Equation 3.1 draws on a single mental construct, psychological motivation, and its two horns, accuracy and directional goals, not on the separate constructs that structure the RAS model (i.e., political awareness and partisanship). Second, because the focus of Equation 3.1 is on the mechanisms that undergird *perceptions*, not attitudes, the model is better equipped to assess the quality of citizen updating. Perceptions involve the characteristics and positions of political parties, elected officeholders, and political conditions, all of which have real-world referents. Attitudes, on the other hand, are a “marriage” of political information and normative beliefs about the world (Zaller, 1992, 6), which makes a discussion of temporal-response “accuracy” nonsensical. Finally, in place of **A**, actual-world information, Zaller’s model hinges on elite rhetoric. But allowing for actual-world information should provide a more realistic test of objective learning. Information about actual conditions need not be disseminated from the “top-down,” which means that it should be widely available. Moreover, it could resonate relatively more forcefully because actual-world information often lacks the partisan cues that accompany elite rhetoric.

3.2.1 Learning Dynamics

Equation 3.1 says that the goals that govern learning (i.e., the ω 's) are fixed.⁶ But are people’s motives to be accurate and consistent in fact constant? Evidence from social psychology gives reason to suspect that this static conception is problematic because different environmental contexts have been found to trigger the different horns

⁵The model also reflects ideas put forward by MacKuen (1984).

⁶Note that this static conception also characterizes the RAS model, in which political awareness, a generally stable trait, works as *the* fundamental information assimilation mechanism.

of motivation (Kruglanski, Webster and Klem, 1996). That is to say, different political contexts should shift the balance of accuracy-minded versus directionally-minded thinking. What might engage such psychological dynamism and alter the influence of actual- and preferred-worlds on perceptions?

National Campaigns

The most important potential source of dynamics is the national political campaign. Because the campaign, or more accurately campaign intensity,⁷ activates and strengthens partisanship, partisans should be increasingly motivated by partisan concerns later in the election cycle. And, due to the upturn in media coverage, the politicians and pundits who emphasize the preferred world should be more visible in the campaign's later stages. For these reasons, partisans should place increasing emphasis on their preferred world as the campaign evolves, which, in terms of the dynamic-motives model, says that $\omega^{(p)}$ will increase over the election cycle.

Importantly, this argument about campaigns has a complementary prediction that involves the post-campaign “decompression.” As the intensity that surged during the run-up to the general election dissipates, the accessibility and strength of partisan attitudes should decline in turn. The weight that partisans place on \mathbf{P} should decline as well, and if so, then partisans will give greater weight to information about actual-world conditions. The possibility of an increase in the value of $\omega^{(a)}$ post-campaign intimates a third pattern of partisan updating—*belief convergence*—that political scientists have left largely unexplored.⁸

⁷Work by George Rabinowitz and Stuart MacDonald (e.g., Rabinowitz and Macdonald, 1989) points to the importance of intensity for shaping voter decision-making.

⁸The important exception is a study by Larry Bartels (2002), in which he argues that convergence across partisan groups is expected when partisan learning and inference obeys Bayesian probability theory.

Group Membership

A second source of dynamics involves partisan group-membership, specifically, whether partisans belong to the relevant “in-group” or the “out-group.” In-out group standing is important because, relative to out-groups, equally committed in-group partisans should be more strongly influenced by their preferred world (see Granberg, 1993). Because the present study defines the preferred world as the world state that benefits one’s party, and the party reference point is the party of the sitting president, partisans who belong to the president’s party are classified as the in-group (“in-partisans”) and partisans who do not as the out-group (“out-partisans”). Importantly, when in- and out-groups are defined as such, in-partisans’ perceptions do turn out to be influenced by their preferred-world state to a relatively greater extent (Parker-Stephen, 2006).

3.2.2 Dynamic Motives

To account for these sources of dynamics, time and group subscripts are added to the ω ’s. The integrated learning model is thus Equation 3.2. In words, the model says that temporal group-level perceptions are a weighted function of actual-world information and preferred-world beliefs. The influence of these two components changes as a function of time (whether there is an ongoing campaign or not is especially important) and in-out partisan group status. With the theoretical argument now captured by Equation 3.2, I turn first to a discussion of research design and data, and then to analyses of model implications.

$$\mathbf{Perception}_{t,g} = \omega_{t,g}^{(a)} \mathbf{A}_t + \omega_{t,g}^{(p)} \mathbf{P}_{t,g} \quad (3.2)$$

3.3 Design

To a great extent, studies of partisan learning are broad in temporal scope. At a minimum, these studies consider changes over intervals that are several months apart (e.g., Bartels, 2002; Fischle, 2000). More frequently, year-to-year changes are examined (e.g., Green, Palmquist and Schickler, 2002). Although this perspective is useful for evaluating learning over the long term, these studies lack the resolution to pick up on patterns that occur over relatively shorter time periods.

On the flip side, studies of campaign effects adopt a narrow temporal frame. Scholars' focus on the short-term influence of exposure to particular events and messages has shown, for example, that events like presidential debates alter voter preference (Hillygus and Jackman, 2003) and knowledge (Holbrook, 1999), and that (simulated) exposure to candidate rhetoric alters judgment (Lodge, Steenbergen and Brau, 1995) and decision making (Lau and Redlawsk, 2001). The problem, however, is that this short-term focus does not allow for changes that could occur over several months, not several days. In addition, short-term campaign exposures have been found to have transitory effects (Kuklinski et al., 2000; Druckman and Nelson, 2003).

To examine learning while allowing for campaign influence thus requires both long- and short-term temporal windows. Toward this end, this study employs an incremental analysis that considers group-level perception trends over a twenty-four year (1980–2004), five-year (2002–2006), three-year (2003–2005), and seven-month (2000) period. To preserve consistency, each analysis focuses on the central components of Equation 3.2 by examining the role that (1) actual-world information and (2) preferred-world beliefs have on (3) political-economic perceptions. This straightforward approach is in the spirit of Chris Achen's (2002) call for analytic simplicity (i.e., "A Rule of Three").

3.4 Data

3.4.1 Economic Perceptions

A major focus of this study is people's perceptions of national economic performance, which is advantageous for several reasons. Most important, questions about economic policy are an enduring part of the American political debate. Equally important, the economy's standing is often a prominent topic of discussion in national election campaigns. Its standing matters for individual citizens, too, which suggests that people have incentives to develop grounded perceptions. Finally, economic conditions themselves have objectively measured real-world referents, found in indicators like the unemployment and inflation rates, that are a regular emphasis of economic reporting. This makes it possible to identify the actual-world conditions that should inform perceptions.

Because this study examines economic perceptions over several different time intervals, the data must be drawn from several sources. In each case the perceptions variable taps evaluations of national economic conditions. In the analysis that spans 1980–2004, the perceptions data are drawn from the American National Election Studies (ANES) Cumulative Series, which has asked for respondents' economic retrospections in every two-year survey since 1980.⁹ In the analysis that spans the 2003–2005 period, I use data from the CBS News/*New York Times* opinion polls. In months where the CBS data are not available I draw on the ABC News/*Washington Post* organizations' monthly polling

⁹The two-part question reads as follows: "Would you say that over the past year the nation's economy has gotten better, stayed (all years except 1984: about) the same or gotten worse? (If better:) Would you say much better or somewhat better? (If worse:) Would you say much worse or somewhat worse?" The response categories have been recoded ("Much worse" = -2; "Somewhat worse" = -1; "Stayed the same" = 0; "Somewhat better" = 1; "Much Better" = 2)

data.¹⁰ The media polls' data are obtained from the Roper Center's *iPoll* archive. Finally, in the analysis of economic perceptions during the 2000 election, I use data from the 2000 National Annenberg Election Study (NAES).¹¹

3.4.2 The Iraq War: Saddam Hussein and 9/11

The second perceptual domain examined in this study involves perceptions related to the Iraq War, specifically, group-level beliefs about Saddam's role in the September 11th attacks on the World Trade Center and the Pentagon. Claims regarding this connection provided a crucial justification for the Iraq War, and people's perceptions about it have proven to be persistent and central determinants of support/opposition for the broader Iraq endeavor (Jacobson, 2007). Here I examine perceptions from 2002–2006. During this time, actual-world evidence increasingly indicated that Saddam was not involved in 9/11, but wishful thinking and the influence of preferred worlds could shape perceptions nonetheless. The reason is straightforward: the Republican Party benefits if Saddam was involved (by lending justification to the 2003 invasion), and the Democratic Party benefits if he was not (by challenging a central rationale for the invasion). The opinion data are drawn from Gallup and CBS News/*New York Times* opinion polls accessed via the Roper Center archive to produce an irregular time series that spans 2002–2006.¹²

¹⁰The CBS News/*New York Times* perceptions item reads: "How would you rate the condition of the national economy these days? Is it very good, fairly good, fairly bad or very bad?" The ABC News/*Washington Post* question reads: "Would you describe the state of the nation's economy these days as excellent, good, not so good or poor?" Because these categorical responses differ slightly, I reduce both response items to a dichotomous scale, which equals a 0 if economic conditions are perceived as being unfavorable and a 1 if conditions are perceived as favorable.

¹¹The Annenberg economic perceptions item reads: "Over the past year, would you say that the economic policies of the federal government have made the nation's economy better, worse, or haven't they made much difference either way?" The response categories have been recoded ("Worse" = -1; "No Difference" = 0; "Better" = 1)

¹²The question reads: "Do you think Saddam Hussein was personally involved in the September 11th terrorist attacks (against the World Trade Center and the Pentagon), or not?" Exact question wording changed slightly across the two surveys, which is reflected by what appears in parentheses.

3.5 Results

3.5.1 Economic Perceptions, 1980–2004

Let us begin with partisans' retrospective economic perceptions over the long term (1980–2004). This scope is similar to Alan Gerber and Donald Green's (1999) study of presidential approval from 1953–1988, which examines annual readings of presidential approval for Democrats, Republicans, and Independents. Here the focus is on biennial readings of economic perceptions, specifically the average economic perceptions for presidential in- and out-partisans. (Partisans are defined as either "Strong" or "Weak" Republicans and Democrats, but not leaners, because subsequent analyses require combining pure Independents and leaners into a single baseline category.) The guiding question is whether economic-perception patterns reveal information updating (Gerber and Green demonstrate parallelism using the approval ratings) or motivated reasoning.

Figure 3.3 presents in- and out-partisans' average perceptions from 1980–2004, and the pattern is stark—the two economic perceptions series immediately recall the parallel updating illustrated in Figure 3.1. The two series are correlated at .87, which further suggests that in- and out-partisan groups consistently attend to economic news and draw the same inferences from it. To test for this connection to reality, Table 3.1 presents the results of a regression model in which the in- and out-partisan average perceptions series are regressed on the annual percent change in unemployment and inflation.¹³ For both series, the annual change in unemployment significantly influences group-level perceptions. For a one-percent upturn in the unemployment rate, in-partisans' economic perceptions fall 8.4-percent on the retrospections scale—clearly

¹³Here the change is calculated as the average monthly percentage change from November 1st of the non-election year to the end of October 31st of the election year.

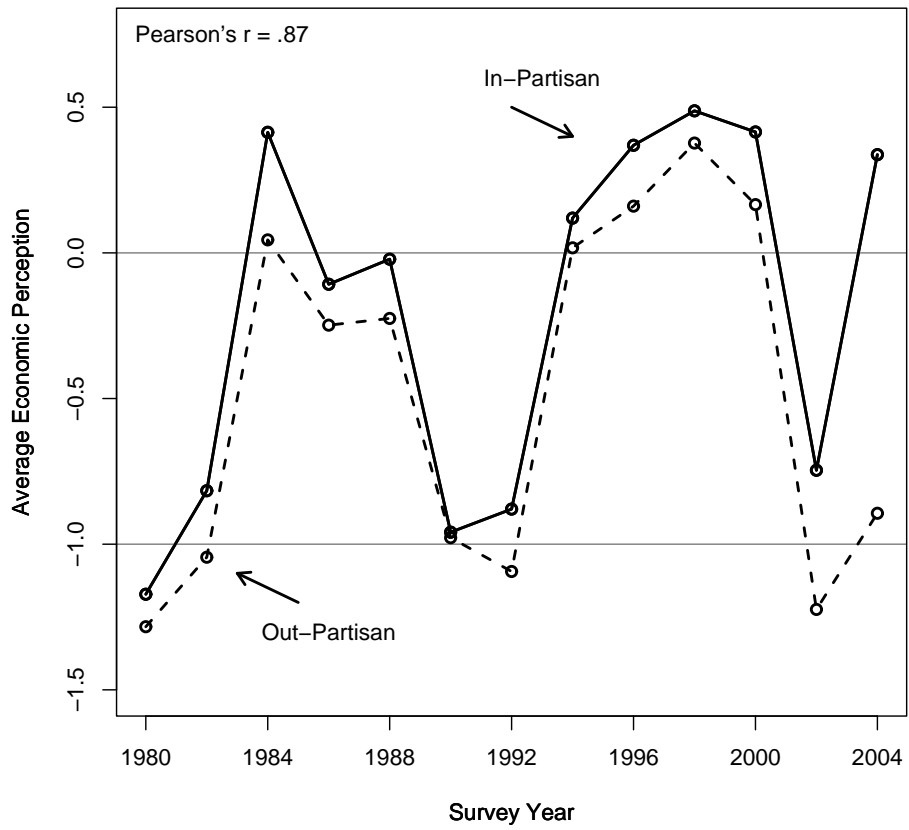


Figure 3.3: Average Economic Perceptions for Presidential In- and Out-partisans, 1980–2004

Table 3.1: Regression of In- and Out-Partisan Average Economic Perceptions on Annual Δ Unemployment and Annual Δ Inflation

Economic Indicators	Perceptions Series	
	In-Partisan	Out-Partisan
Δ Unemployment	-0.42** (0.10)	-0.35* (0.12)
Δ Inflation	-0.29 (0.31)	-0.30 (0.38)
Constant	-0.04 (0.16)	-0.33 (0.20)
Adjusted-R ²	.63	.43

OLS Regression, Standard Errors in Parentheses

* $p < .05$, ** $p < .01$; Two-tailed tests

In each model, N = 13

the correct directional response. Out-partisans’ perceptions significantly decline by a nearly equivalent 7-percent. And thus, economic information resonates similarly across the two partisan camps.

Accounting for Strength of Partisanship

This first-cut examination suggests that changes in unemployment are understood and appreciated by in- and out-partisans to a near equal degree. But of course, partisans’ preferred-world beliefs are most likely to be influential among the strongly committed. Scholars who advocate the information updating perspective have not accounted for partisan strength, but this is accomplished easily enough using the National Election Studies’ 7-point party identification item, in which “Strong” Democrats and Republicans comprise the scale endpoints.

Do strong partisans' perceptions polarize? Figure 3.4 charts the 1980–2004 economic retrospections for these in- and out-partisans and, contrasted against Figure 3.3, two differences are noteworthy. First, the distance between the two perceptions series, which indicates the magnitude of strong-partisan disagreement, is greater for strong partisans. Secondly, the correlation between the two series drops to a more modest .80, suggesting less similarity in the temporal trend. And so, considered in isolation, strong partisans' perceptions could be less connected to reality. However, when these perceptions are regressed on changes in unemployment and inflation as in Table 3.1, the significant effect of unemployment change is nearly identical, although the explanatory power as seen in the Adjusted-R²'s decreases in both regressions (results not reported). The evidence is once again consistent with the objective information updating, which leads one to wonder: Where is the motivated reasoning?

The Campaign Constant

By now the reader has perhaps recognized the difficulty in studying learning patterns from election to election: the campaign becomes a constant. That is, because the data offer a portrait of economic perceptions during election years only, and from only late August through the November general election campaign at that, the above analysis could be construed as one that holds the campaign environment constant. That this approach controls for campaign intensity indicates the central problem with studies that consider partisan learning patterns over long time intervals.

However, there is one important source of campaign variation in these NES readings: Seven capture partisans' perceptions in a year in which there was a presidential election campaign, while in the other six, only candidates running for Congress were on the campaign trail. Because the expectations for the campaign's influence on **A** and **P** are a function of intensity, this presidential-congressional election distinction is potentially

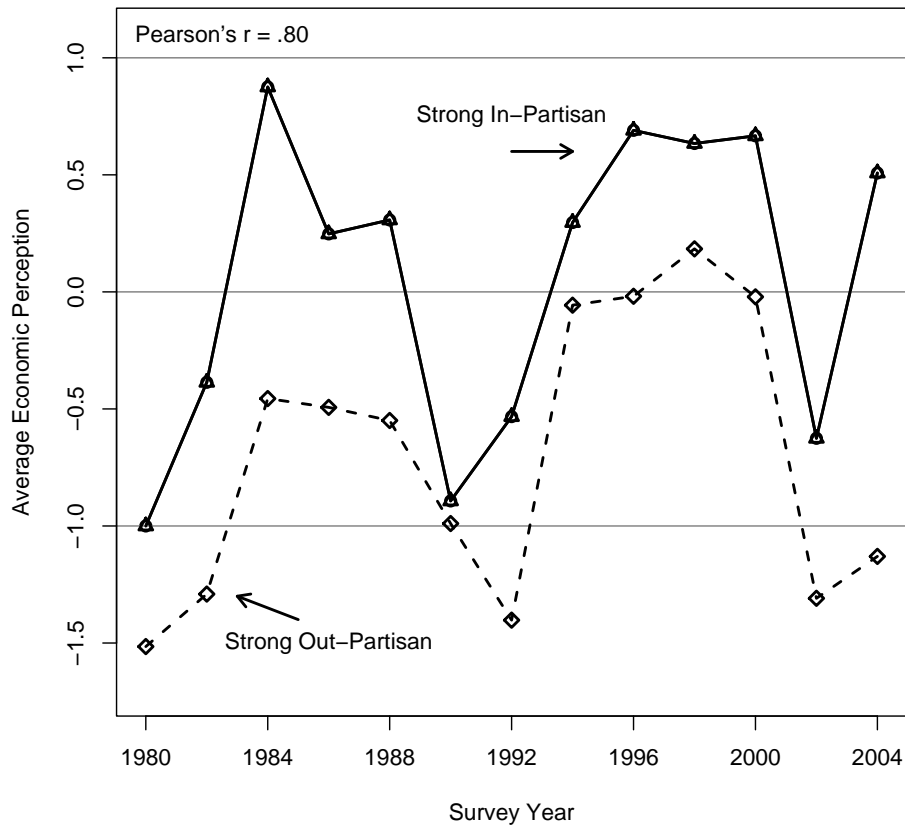


Figure 3.4: Average Economic Perceptions for Presidential In- and Out-partisans, 1980–2004

important. Without question, presidential campaigns are relatively more intense. If the weight partisans place on their preferred world is a function of campaign intensity, then there should be differences between in- and out-partisans' perceptions in presidential versus congressional election years.

A test for differential effects examines the distance between in- and out-partisans' average perceptions in presidential versus congressional election years. Figure 3.5 and Figure 3.6 plot the distance between in- and out-partisans economic perceptions at every two-year interval. Figure 3.5 illustrates the difference for in- and out-partisans generally, and Figure 3.6 for strong partisans. In the former there is a visible difference between presidential and congressional election-year disagreement. The mean distance for congressional election-years is 0.18. In presidential election-years, the mean rises to 0.37. This larger disagreement in presidential election-years is what one would expect if campaign intensity increases the importance of partisans' preferred worlds, but the effect is not overpowering. In fact, a difference in means test between the two election-type years is not statistically significant ($t = -1.12, p = .14$).

Figure 3.6 presents these perception distance measures for strong partisans only. Here the effect of campaign type is significant and strong. In congressional election-years, in-out disagreement is 0.54 units on average, or approximately 10-percent on the 5-point retrospections scale. However, in presidential election-years, this difference grows to 0.94 units (19-percent), a near doubling of the size of strong partisan disagreement. The difference in means is also statistically significant ($t = -2.06, p < .05$). And so, for the partisans who are most likely to be motivated reasoners, campaign intensity matters. Presidential election campaigns activate and reinforce the importance of partisans' preferred worlds to a greater degree than congressional campaigns, thereby increasing $\omega^{(p)}$ and enhancing partisan disagreement about the economy's standing.

This evidence certainly suggests that campaigns can generate polarized partisan

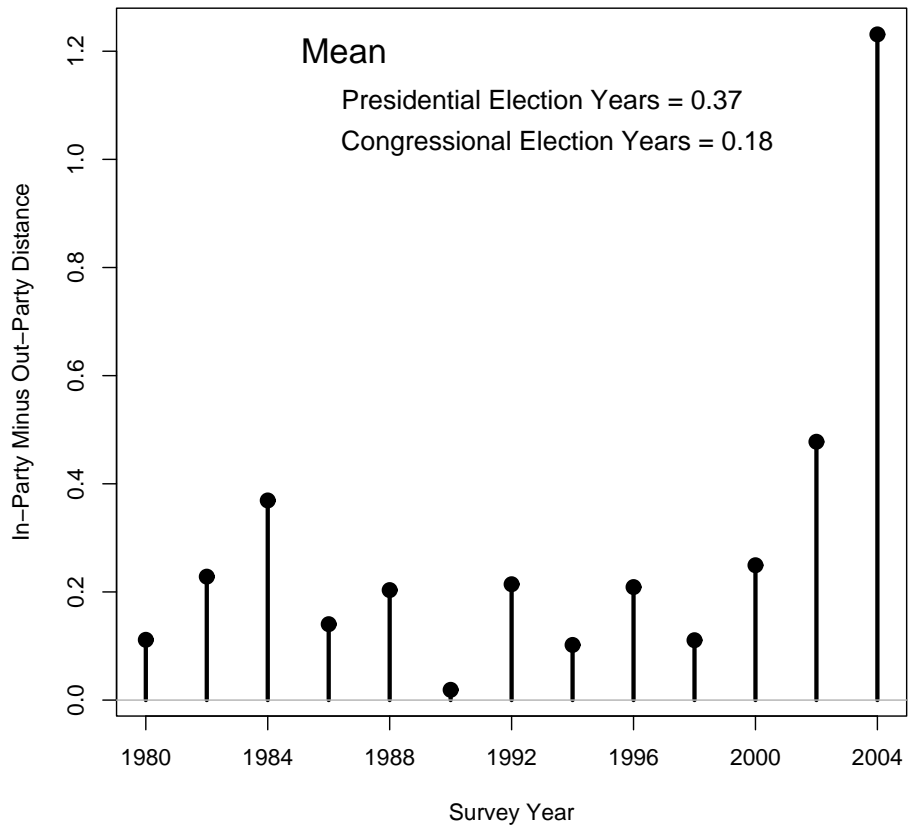


Figure 3.5: Distance between All In- and Out-partisans' Average Economic Perceptions, 1980–2004.

perceptions. The presidential- versus congressional-year differences lend support to the notion that the influence of preferred-worlds is triggered by campaign intensity, but solidifying the point requires data that have finer temporal resolution. Let us turn to examine what happens to perceptions over the course of a single election cycle (and then beyond).

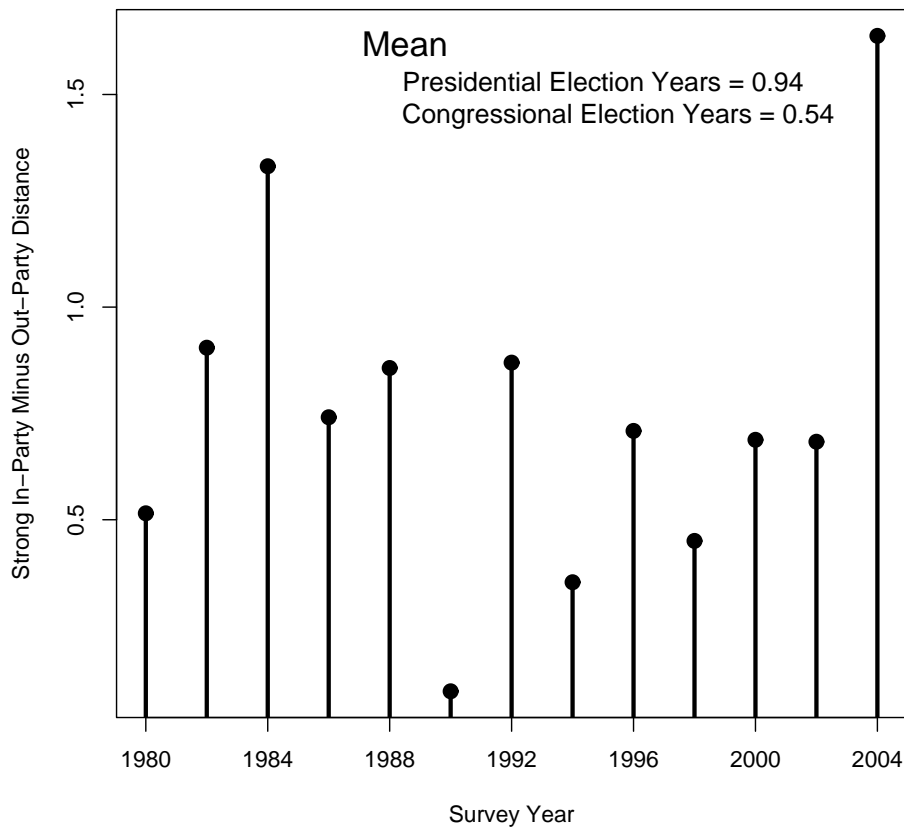


Figure 3.6: Distance between Strong In- and Out-partisans' Average Economic Perceptions, 1980–2004.

3.5.2 Economic Perceptions: 2003–2005

The second analysis considers economic perceptions from January 2003 through December 2005—that is, a full election cycle plus an additional year. If party identification takes on increasing importance during the 2003–2004 election cycle, then the campaign should produce an increase in the value of $\omega^{(p)}$, and this increase should be observable via increasing separation between Republicans’ and Democrats’ group-level economic perceptions. Of course, in the 2003–2004 election cycle, Republicans are the in-partisans and Democrats the out-partisans.

Figure 3.7 charts the proportion of Republicans and Democrats who perceive that economic conditions are favorable over not favorable.¹⁴ To begin, let us separate the election cycle into two halves—2003 versus 2004, where the gray line denotes the 2003–2004 split. Looking at these series for 2003 only, the pattern is moderately consistent with information updating. The correlation between the two series (in their raw form) is .72 over the 2003 period. In terms of their connection to the actual world economy, the Republican series is correlated with month-to-month change in the unemployment rate at $-.52$ in 2003 ($p < .10$, one-tailed), and the correlation for the Democrats’ series equals $-.26$ (but although it is signed correctly, it is not statistically significant).

With regard to 2004, however, the series slip apart. The series’ correlation between January and October ($r = .52$) indicates that less than 30-percent of the variance is shared. But it is not just that the series grow apart from one another: In 2004, neither Republicans’ nor Democrats’ perceptions are significantly related to real changes in unemployment (the same holds for changes in inflation).

Has the 2004 presidential election campaign enhanced the influence of **P**? Figure 3.8 plots the distance between Republican and Democrat economic perceptions for each

¹⁴Note that in this figure and the following illustrations, all economic perceptions series have been smoothed using a two-month moving average.

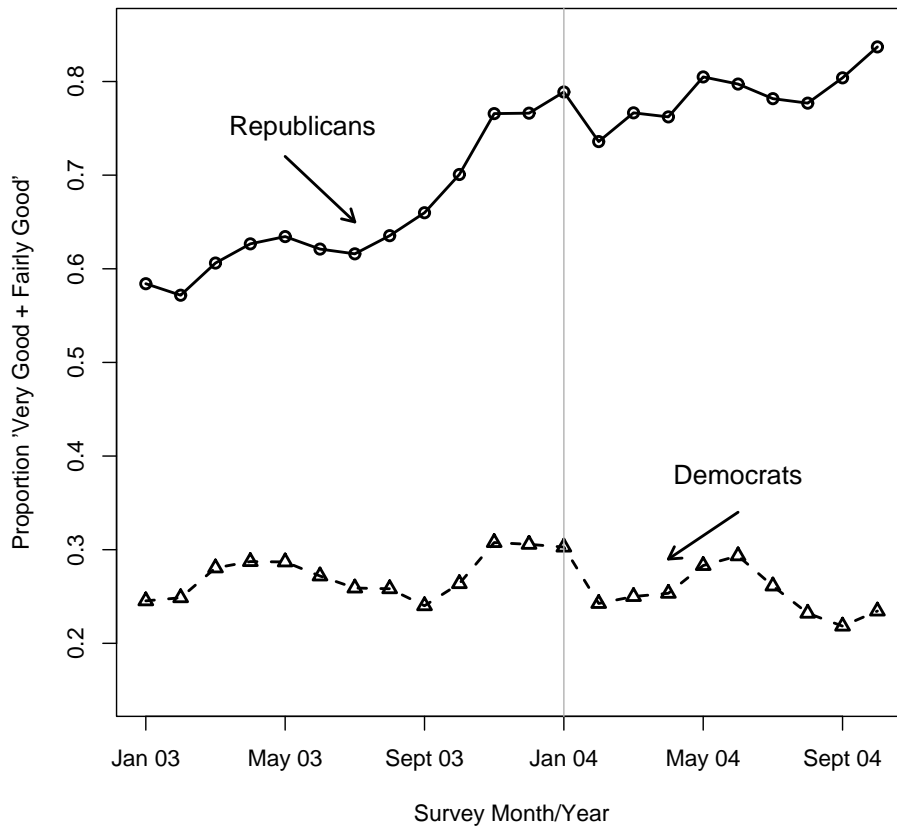


Figure 3.7: Average Economic Perception for Republican (Out-) and Democratic (In-) Party Identifiers, 2003–2004

monthly reading, and the figure reveals that the magnitude of Republican-Democrat disagreement increases as the election cycle evolves. Of course, this increase is consistent with the idea that the preferred world’s increasing importance generates perception polarization.

The Weight of the Preferred World

The focus on group-level mean perceptions in the 2003–2004 election cycle provides cogent evidence of the campaign’s effect on voter information. To examine systematically how partisan activation increases the importance of partisans’ preferred worlds,

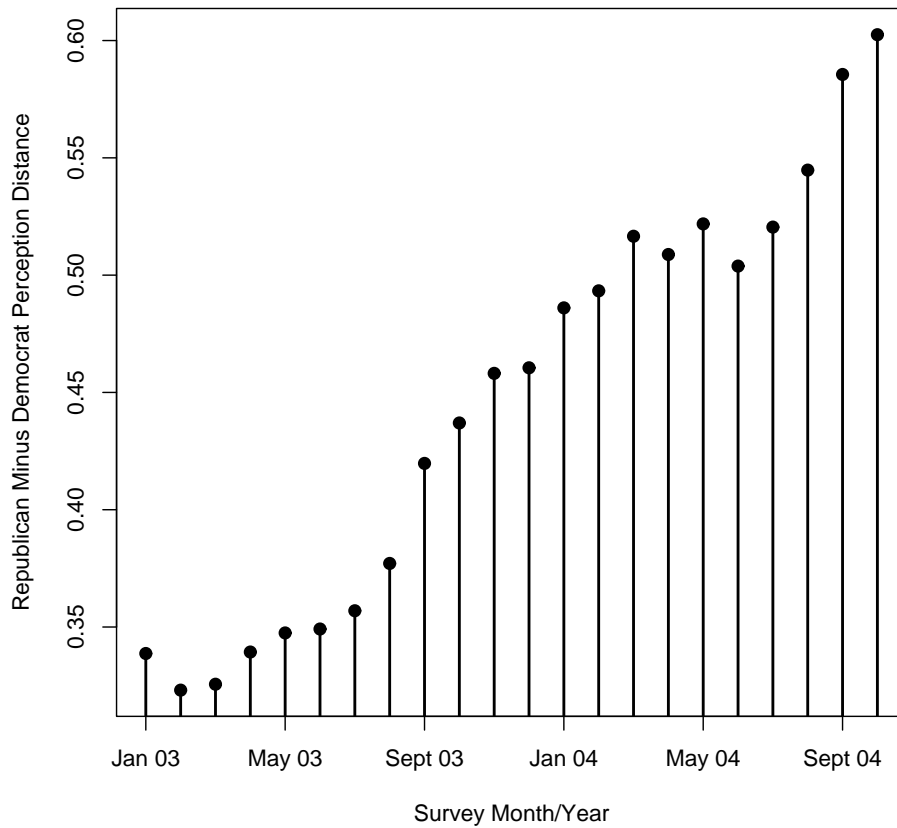


Figure 3.8: The Distance between the Average Monthly Economic Perceptions, Republican (In-) Minus Democratic (Out-) Identifiers, 2003–2004.

I estimate a series of binary probit models using the individual-level media polls’ data (from which the averages for the 2003–2004 period were created). In each monthly model people’s economic perceptions (the dependent variable) are scored a one if they perceived that the economy’s current standing was “very good” or “fairly good,” and a 0 if they saw it as “fairly bad” or “very bad.” The independent variables are two dichotomous party identification indicators, one that signifies Republican Party belonging and a second that signifies that the respondent is a Democrat. The baseline

category is Pure Independents plus leaners.¹⁵

The intent is to generate a statistical reflection of the changing value that Republicans and Democrats place on their respective preferred worlds and shed light on the across-time magnitude of $\omega^{(p)}$. In every estimation the relevant coefficients for the Republican and Democratic identifiers are statistically significant.¹⁶ The results of these monthly probit regressions are summarized in Figure 3.9 and Figure 3.10. In each figure, the plotted values represent the discrete change in the probability of seeing a favorable economy for that month—first for Republicans (**R**), and then for Democrats (**D**). In both figures a lowess curve is added to capture the trend.

Looking first at the discrete change in the probability of a favorable economic perception for a Republican in relation to an Independent/leaner, illustrated in Figure 3.9, one can see that Republican identification has an increasingly strong effect on economic perceptions as the election cycle evolves. Being a Republican identifier in January 2003 makes one about 15-percent more likely to see an economy that matches with the preferred world. By October of 2004, however, this probability nearly triples to 40-percent. And so, for in-partisan Republicans, **P** increases by approximately 25-percent over the 2003–2004 election cycle.

We see a similar pattern, albeit weaker, for the Democrats. Here the change in the probability of seeing a favorable economy diminishes as the campaign evolves. In January of 2003 Democrats are 12-percent less likely to view economic conditions in a favorable light, but by late 2004 their reliance on the preferred world more than doubles

¹⁵There is evidence that leaners behave more like weak partisans than pure Independents (Keith et al., 1992). Although this is a valid observation, its relevance here matters little. The concern is with the activation of partisanship, and so if these leaners are similar to partisans, it will only make statistical demonstrations of displacement from the baseline category more difficult.

¹⁶Models that control for additional individual attributes, including income, race, age, and education, have no effect on the significance of the party coefficients. Therefore, these additional variables are not included in the estimations presented below. This is important because these factors are not a part of the theory captured by Equation 3.2.

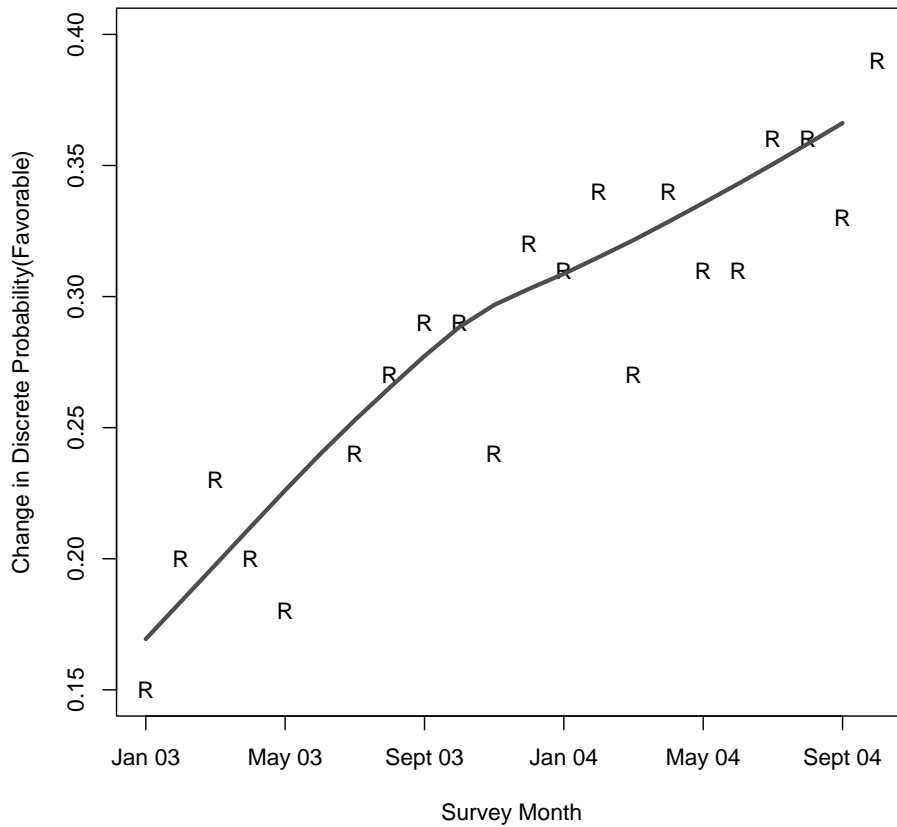


Figure 3.9: The Discrete Change in Probability of a Favorable Economic Perception: Independents/Leaners to Republican Party Identifiers

the probability of an unfavorable economic perception to approximately 27-percent. For out-partisans, then, the campaign ups the importance of **P** by approximately 15-percent. Note the expected asymmetry: for in-partisans the increase in $\omega^{(P)}$ (25-percent) is substantially larger than for out-partisans (15-percent).

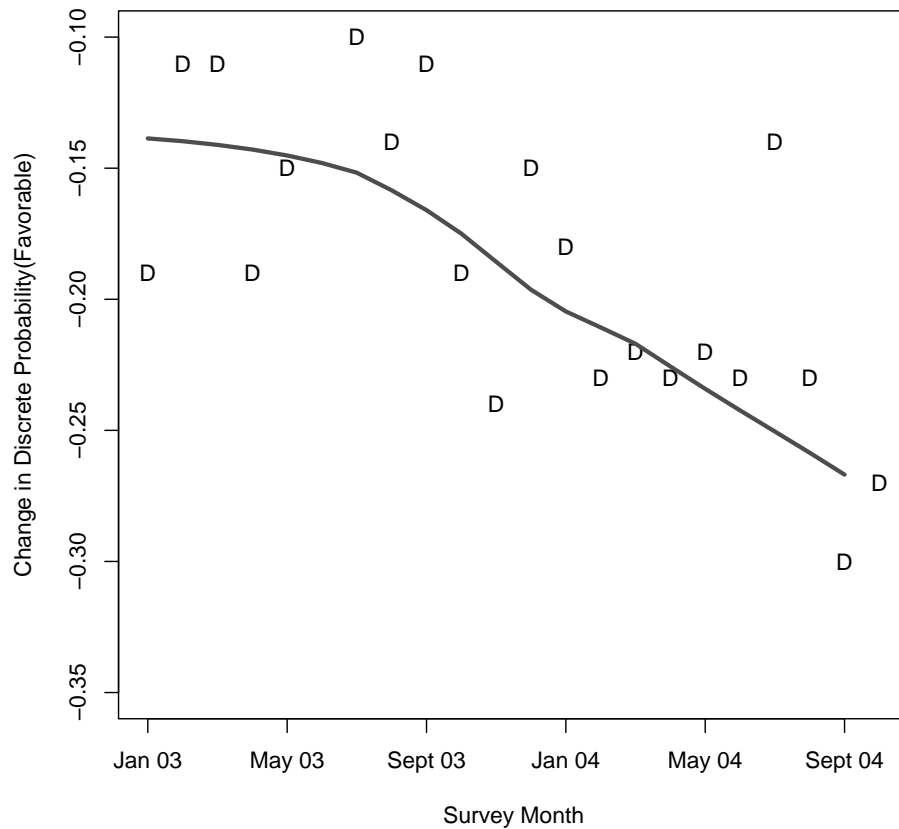


Figure 3.10: The Discrete Change in Probability of a Favorable Economic Perception: Independents/Leaners to Democratic Party Identifiers

Campaign Decompression

Clearly campaigns matter for economic perceptions. Their intensity alters the relative weight partisans give to **A** and **P**, in turn producing perception polarization. But

if this is truly a function of dynamic motives, then the absence of the campaign environment should also have discernable effect. Figure 3.11 illustrates the magnitude of disagreement on the same economic perceptions scale for the post-election period. The first observation is taken from a CBS News Poll conducted between 18-21 November 2004, and the subsequent readings follow from media polls conducted throughout 2005 (due to data limitations a monthly series is not available for 2005). Figure 3.11 shows that post-election decompression is indeed a real phenomenon—here, beliefs *converge*. Because the importance of the preferred world declines, Republican-Democrat disagreement decreases significantly following the November election.

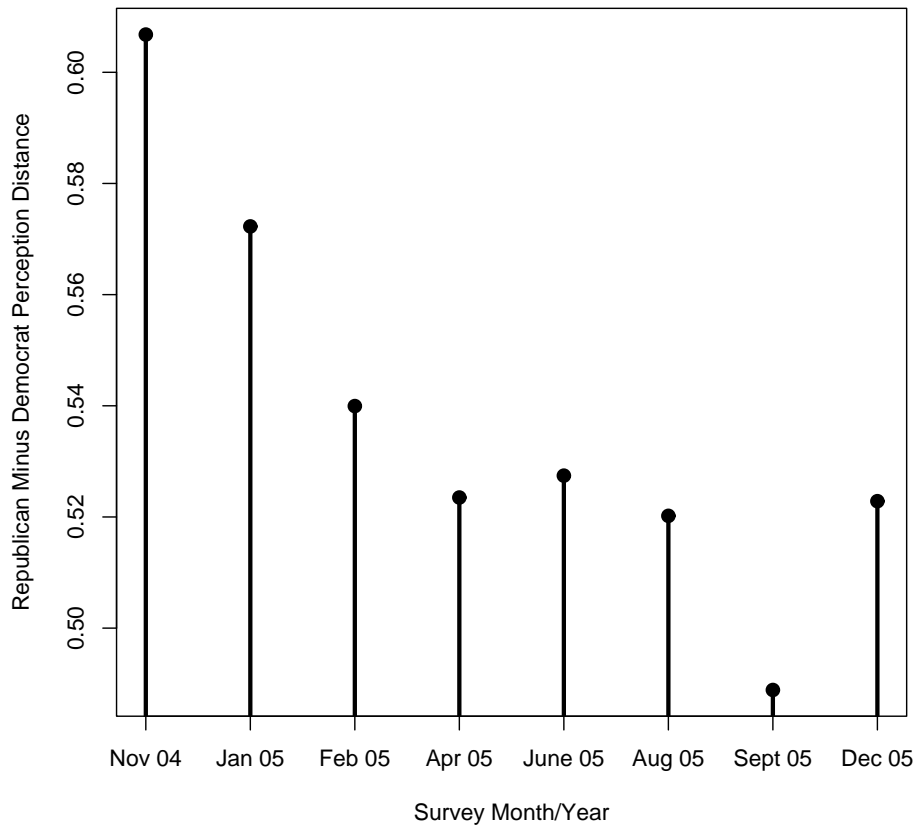


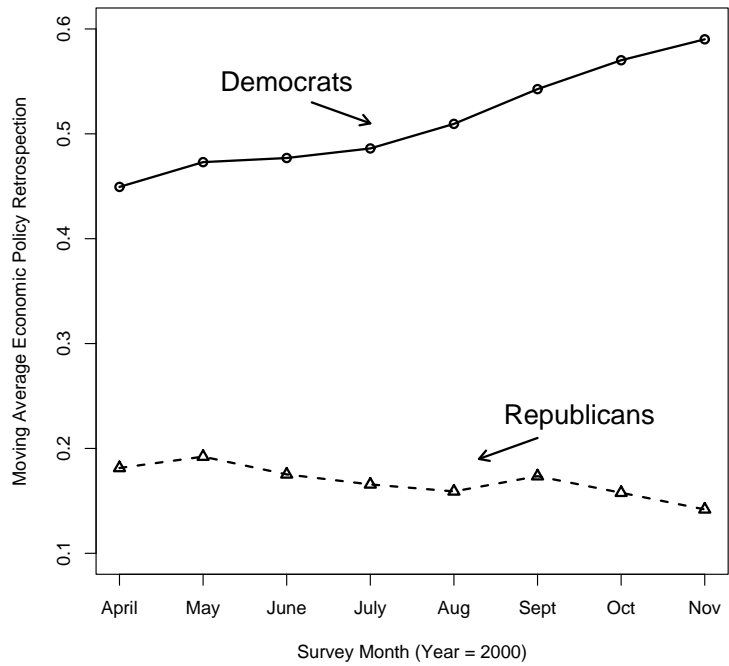
Figure 3.11: The Distance between Average Monthly Economic Perceptions, Republican (In-) Minus Democratic (Out-) Identifiers, November 2004–December 2005.

3.5.3 Economic Perceptions: 2000 Campaign

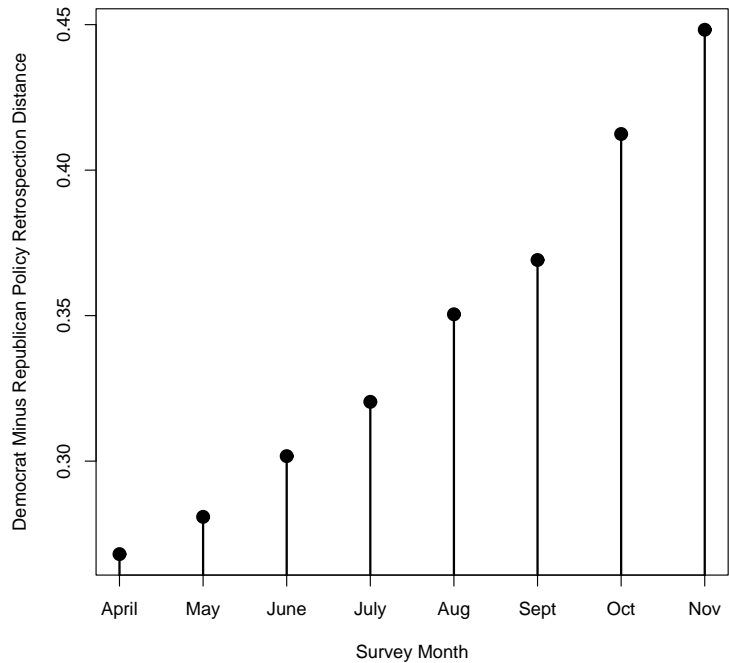
A final look at economic perceptions considers change during the 2000 campaign. This third analysis is useful not only because the in-out partisan designation is reversed, with Democrats now in-partisans and Republicans out-partisans, but also because the 2000 NAES data allow the comparison of updating across strong- and weak-partisan groups.

To begin, consider the familiar group-level perceptions trends, plotted in Figure 3.12(a). These series are the average group-level perceptions of the federal government's policy impact on economic conditions compared to one year ago. The average is calculated from a three-point retrospection scale ("Worse" = -1 ; "No Difference" = 0 ; "Better" = 1). Figure 3.12(b) plots the magnitude of Democrat-Republican disagreement, and once again, both patterns exemplify the influence of dynamic motives and campaign effects. As the campaign becomes increasingly prominent, so too does the preferred world in partisans' thinking. The effect is pronounced among the in-partisan Democrats, and the increase is especially strong following the 2000 Democratic Convention (note the change from August to September). The convention shock boosts $\omega^{(D)}$ and, in turn, Democrats' belief that federal economic policies produced a favorable upturn in economic conditions.

In the Republican case, the perceptions series resembles a flat line. It is possible that Republicans' perceptions were not affected by the 2000 campaign, but before drawing this conclusion, it is important to remember something shown previously: the influence of the campaign is most likely to influence *strong* partisans. Because the 2000 NAES asked identifiers to say whether they are strongly or weakly committed, the data allow a test of this possibility.



(a) Average Monthly Perceptions of Economic Policy's Effect: Democratic (In-) and Republican (Out-) Party Identifiers, April–November 2000



(b) Average Disagreement between Democratic (In-) and Republican (Out-) Party Identifiers, April–November 2000.

Strong versus Weak Partisans: Who Polarizes?

Figure 3.13 presents separate perceptions series for strong and weak Republicans and makes clear the difference between strong and weak partisans. Weak partisans are relatively more optimistic (recall that the scale is centered on “0”, so both series reflect a summary positive perception), and in terms of change, the series is flat. Strong Republicans’ perceptions, however, do trend downward, conforming to expectations where dynamic motives are in play.

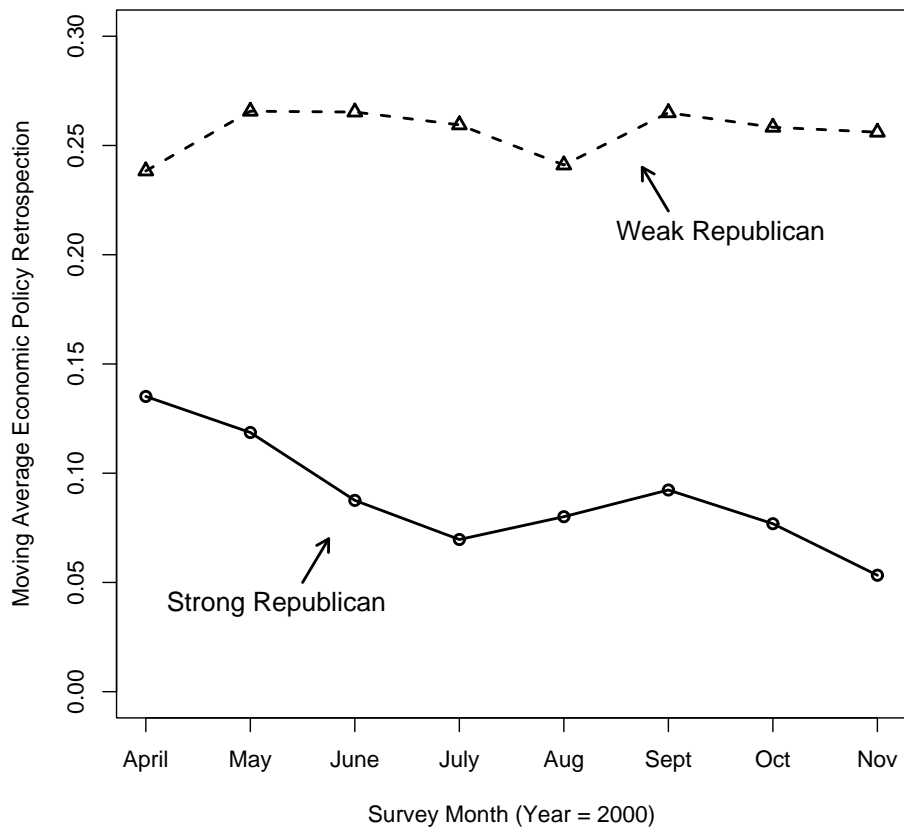


Figure 3.13: Average Monthly Perception of Economic Policy’s Effect: Strong and Weak Republican Party Identifiers, April–November 2000.

The fact that strong, but not weak, Republicans display the requisite perception

change for producing polarization raises an issue that has thus far been ignored: Perhaps the changes in perceptions among the strong partisans are a reflection of partisan “conversion”—that is, a shift from weak to strong identification—that in turn produces polarization as an artifact of the changing composition, not shifting learning motives. Rejecting this explanation for polarization requires observing patterns that indicate $\omega^{(p)}$ increases for both strong *and* weak partisans. This is not the case in terms of the Republican partisans, at least over the 7-month interval available in the Annenberg data, but of course, these Republicans are the out-partisans, and we have seen that the preferred-world has a consistently weaker influence on out-partisan perceptions. Is the case different for in-party Democrats?

Figure 3.14 answers in the affirmative. Here both strong and weak Democrats’ perceptions grow more optimistic over the 2000 election campaign. The effect for strong Democrats is especially pronounced—their perceptions jump 13-percent on average over a few short months. Weak Democrats’ perceptions increase by just over 5-percent. Given the actual economy’s health during the 2000 campaign (recall the well-publicized dot-com bust that occurred midway through 2000), this increasing optimism is almost certainly not a function of the actual-world. Instead, the campaign activates and reinforces the importance of **P** for both strong and weak Democrats. This is important because it shows that, although they hold tight to their “weakly-committed” status, campaigns make weak partisans think more like their strongly-committed counterparts. That campaigns make weaker partisans “more partisan” is the very model of a campaign organizing disagreement.

3.5.4 Saddam Hussein and September 11th

The examination of economic perceptions has produced results consistent with the motivation-based learning model. I now turn quickly to a second perceptual domain to

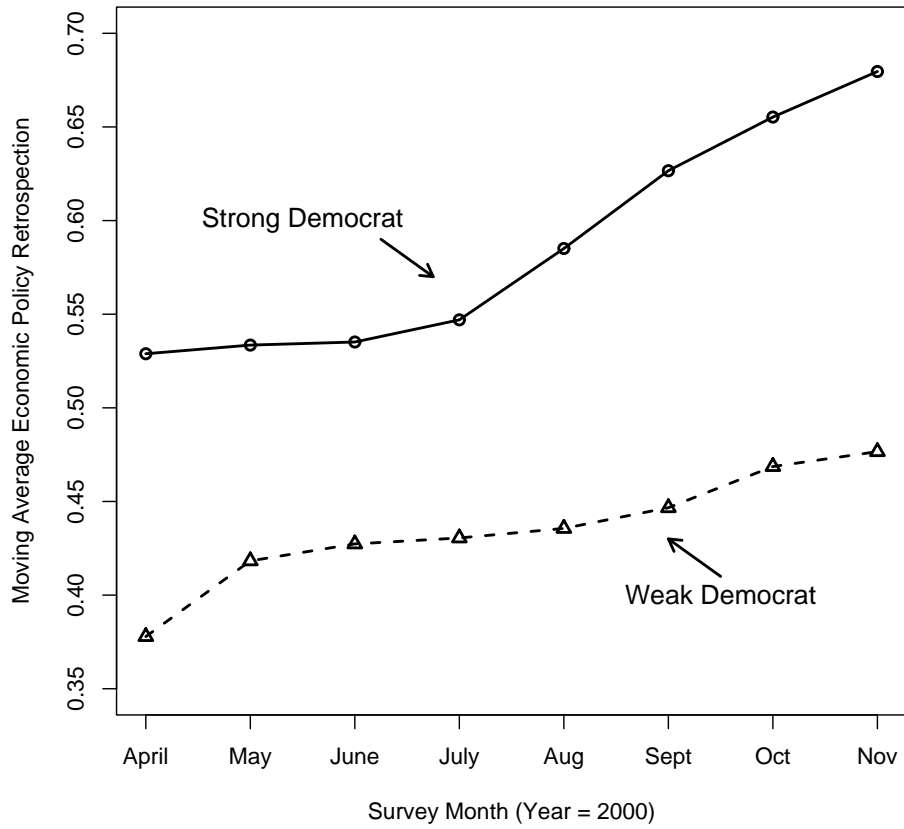


Figure 3.14: Average Monthly Perception of Economic Policy's Effect: Strong and Weak Democratic Party Identifiers, April–November 2000.

assess the model's broader applicability. Here expectations and methods mirror those shown previously, and so attention turns directly to group-level perceptions of Saddam Hussein's role in 9/11.

Figure 3.15 illustrates the proportion of Republicans and Democrats agreeing that Saddam was involved in planning the September 11th terrorist attacks. For the assessment of dynamic learning, three temporal periods are important: the lead up to the 2004 campaign, the campaign itself, and the post-election period. The first period, which spans August 2002 through April 2004, finds Republicans and Democrats displaying similar responsiveness to events. Following Colin Powell's United Nations speech, for example, both Republicans and Democrats became more likely to connect Saddam to 9/11. Moreover, after Saddam's capture in December of 2003, which was accompanied by the discovery of personal documents that revealed Saddam viewed Al Qaeda more as an antagonist than an ally, both groups grew skeptical about Saddam's role in the attacks. Crucially, these and other pre-campaign trends reflect the directional implications of the available actual-world information.

In early April of 2004, however, the two series begin to slip apart. Although by this point there was a general consensus among experts like David Kay that Saddam played no role in planning 9/11, Republicans nevertheless became more likely to see this connection. Indeed, these partisans continued to resist the evidence through October of 2004. Democrats, on the other hand, became consistently more likely to perceive no connection between Iraq's dictator and the 9/11 hijackers. As with economic perceptions, then, such perception divergence is observed because people's preferred worlds crystallize and in turn generate relatively stronger effects on perceptions.

Finally, in the two readings taken after the 2004 campaign, one can observe the third expected pattern—belief convergence. By this time the elite-level consensus outside of the administration, including the findings released by the 9/11 commission, fell firmly

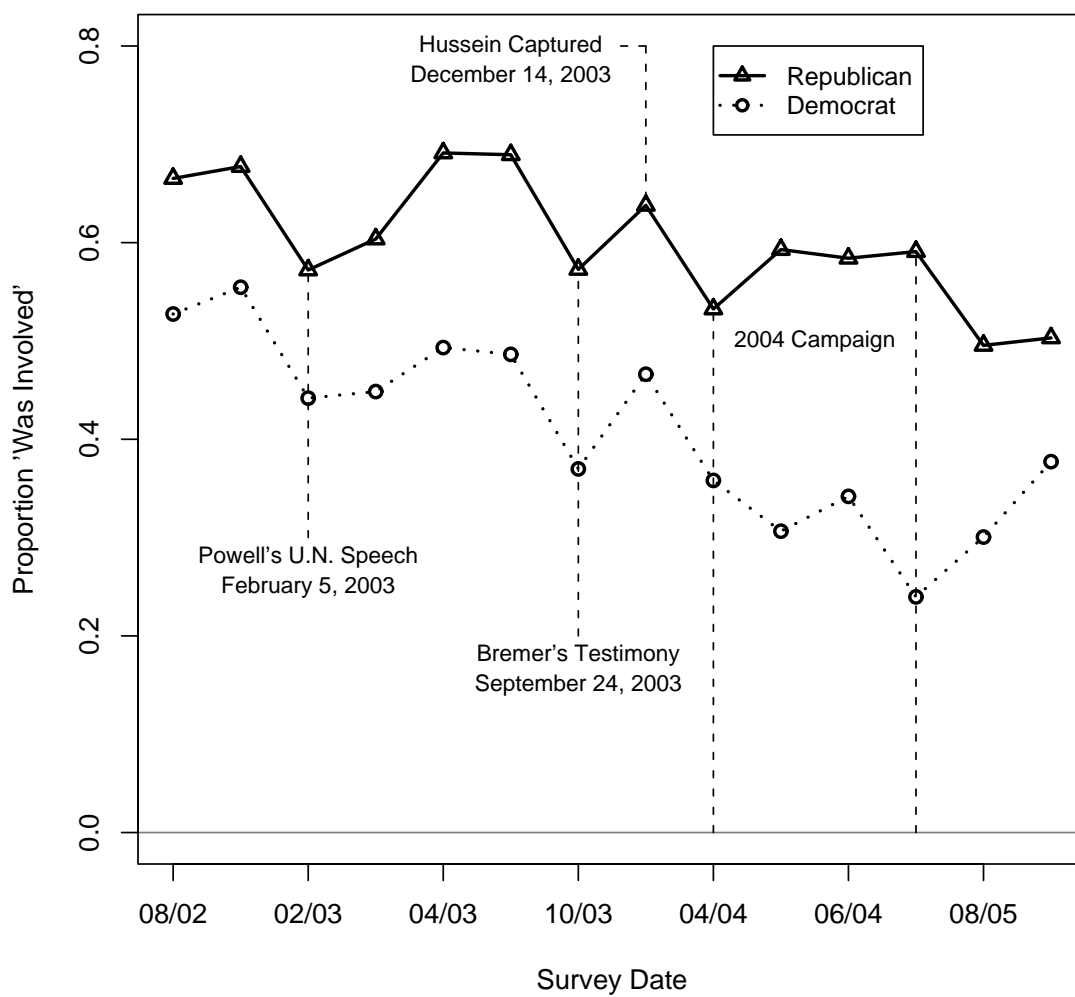


Figure 3.15: Proportion Agreeing that Saddam Was Involved in September 11th Terrorist Attacks: by Partisanship, 2002–2006

on the notion that Saddam had no party in planning the attacks of September 11th. This being the case, why would Democrats grow more likely to see a connection between Saddam and 9/11 in 2005 and 2006? The answer, it would seem, is that this shift was a consequence of Democrats' placing less importance on **P** following the 2004 election.

3.6 Conclusion

This study has now come full circle. What began as a question about the campaign's role in shaping voter information quickly turned to the importance of partisan learning and inference more generally. But to make sense of the contradictory conclusions from the literature on partisan learning, it was necessary to clarify the role of political campaigns in shaping partisan inference. The fusion of these two disparate literatures has resulted in a unified perspective on campaigns and learning, which shows convincingly the importance of the campaign context for understanding updating, and of studying campaign effects through the lens of partisan learning and inference.

The demonstration of learning dynamics reveals the utility of integrating the role of actual-world conditions for information updating with the role of preferred-world states for motivated reasoning. The integrated model presented in Equation 3.2 does this, and the incremental analyses presented throughout give this model strong and consistent support. In the economic realm, which is both objectively-oriented and an enduring feature of American politics, partisans' perceptions are influenced by actual-world conditions and preferred-world beliefs. And in terms of the Iraq War, the effect of dynamic motives are visible yet again. There is every reason to believe that these patterns would arise across perceptual domains.

The crucial points about partisan learning are thus twofold. First, the relative influence of reality and preferred beliefs on learning and inference is not fixed. Second, because scholars have not appreciated these dynamics, studies of learning and inference

have heretofore arrived at contradictory conclusions. If one examines learning patterns over long-term periods, say, from election-to-election or even year-to-year, the effect of actual-world conditions is magnified because the preferred-world's impact is minimized. In looking over the short-term, on the other hand, an unchanging reality masks its importance and gives the appearance of bias and even polarization.

In finding clear and consistent evidence of the campaign's role in affecting learning dynamics, this study presents cogent evidence that campaigns matter. For too long, the literature on campaign relevance has been focused on the ability of campaign events and messages to persuade. But given the evidence presented in this study, as well findings presented as ongoing work (see Brady and Johnston 2006), it is now clear this focus is unlikely to bear fruit. The campaign activates preexisting loyalties and accentuates their role in shaping voter thinking, and in so doing, plays an organizing role, not an enlightening or a persuasive one. Few studies have presented clear-cut evidence of the campaign's organizing influence; this study does exactly that.

Campaigns, especially presidential campaigns, have substantial effects on how partisans see the world. By looking at perceptions, not attitudes or vote intentions, we see how and why campaigns matter. Of course, their influence is paradoxical: At a time when political information is most readily available, when the media are engrossed in political discussion, and when politicians make their strongest case to voters, many citizens are least likely to consider information in an even-handed way. As a result, partisan disagreement about actual-world conditions grows until polarization reaches its height as voters head to the polls on election day. This could be reason for concern, but one must also remember the evidence in broader perspective, in terms of what happens after the intensity subsides: Elections are decided, preferred worlds recede from public consciousness, and voters and their perceptions are shaped once more by the real-world changes that guide collective desires.

Bibliography

- Achen, Christopher H. 2002. "Toward a New Political Methodology: Microfoundations and ART." *Annual Review of Political Science* 5:423–450.
- Althaus, Scott L. 1998. "Information Effects in Collective Preferences." *American Political Science Review* 92(3):545–558.
- Althaus, Scott L. 2003. *Collective Preferences in Democratic Politics*. New York: Cambridge University Press.
- Alvarez, R. Michael. 1997. *Information and Elections*. Ann Arbor: University of Michigan Press.
- Bartels, Larry M. 1988. *Presidential Primaries and the Dynamics of Public Choice*. Princeton: Princeton University Press.
- Bartels, Larry M. 1991. "Constituency Opinion and Congressional Policy Making: The Reagan Defense Buildup." *American Political Science Review* 85(2):457–474.
- Bartels, Larry M. 1996. "Uninformed Voters: Information Effects in Presidential Elections." *American Journal of Political Science* 40(1):194–230.
- Bartels, Larry M. 2000. "Partisanship and Voting Behavior, 1952-1996." *American Journal of Political Science* 44(1):35–30.
- Bartels, Larry M. 2002. "Beyond the Running Tally: Partisan Bias in Political Perceptions." *Political Behavior* 24(2):117–150.
- Bennett, Stephen Earl. 1988. "Know-Nothings Revisited: The Meaning of Political Ignorance Today." *Social Science Quarterly* 17:476–490.
- Berelson, Bernard R., Paul F. Lazarsfeld and William N. McPhee. 1954. *Voting: A Study of Opinion Formation in a Presidential Campaign*. Chicago: University of Chicago Press.
- Biek, Michael, Wendy Wood and Shelly Chaiken. 1996. "Working Knowledge, Cognitive Processing, and Attitudes: On the Determinants of Bias." *Personality and Social Psychology Bulletin* 22(6):547–556.
- Brady, Henry E. and Paul M. Sniderman. 1985. "Attitude Attribution: A Group Basis for Political Reasoning." *American Political Science Review* 79(4):1061–1078.
- Brady, Henry E., Richard Johnston and John Sides. 2006. The Study of Political Campaigns. In *Capturing Campaign Effects*, ed. Henry E. Brady and Richard Johnston. 1 ed. Ann Arbor: University of Michigan Press pp. 1–28.

- Budge, Ian, Hans-Dieter Klingeman, Andrea Volkens, Judith Bara and Eric Tanenbaum. 2001. *Mapping Policy Preferences: Estimates for Parties, Electors, and Governments 1945-1998*. Oxford: Oxford University Press.
- Campbell, Angus, Philip E. Converse, Warren E. Miller and Donald E. Stokes. 1960. *The American Voter*. New York: Wiley.
- Carsey, Thomas M. and Geoffrey C. Layman. 2006. "Changing Sides or Changing Minds? Party Identification and Policy Preferences in the American Electorate." *American Journal of Political Science* 50(2):464–77.
- Conover, Pamela J. and Stanley Feldman. 1989. "Candidate Perception in an Ambiguous World: Campaigns, Cues, and Inference Processes." *American Political Science Review* 33(4):912–940.
- Conover, Pamela Johnston and Stanley Feldman. 1986. "Emotional Reactions to the Economy: I'm Mad as Hell and I'm Not Going To Take It Anymore." *American Journal of Political Science* 30:50–78.
- Conover, Pamela Johnston, Stanley Feldman and Kathleen Knight. 1987. "The Personal and Political Underpinnings of Economic Forecasts." *American Journal of Political Science* 31(3):559–583.
- Converse, Philip E. 1964. The Nature of Belief Systems in Mass Publics. In *Ideology and Discontent*, ed. David E. Apter. Ann Arbor: University of Michigan Press.
- Converse, Philip E. 1990. Popular Representation and the Distribution of Information. In *Information and Democratic Processes*, ed. John A. Ferejohn and James H. Kuklinski. Chicago: University of Illinois Press chapter 16, pp. 369–388.
- Converse, Philip E. and Gregory B. Markus. 1979. "Plus ça Change..The New CPS Election Study Panel." *American Political Science Review* 73(1):32–49.
- Dawes, R. M., D. Singer and F. Lemons. 1972. "An Experimental Analysis of the Contrast Effect and Its Implications for Intergroup Communication and the Indirect Assessment of Attitude." *Journal of Personality and Social Psychology* 21:281–295.
- DeBoef, Suzanna and Paul Kellstedt. 2004. "The Political (and Economic) Origins of Consumer Confidence." *American Journal of Political Science* 48(4):633–649.
- Delli Carpini, Michael X. and Scott Keeter. 1996. *What Americans Know About Politics and Why it Matters*. New Haven: Yale University Press.
- Ditto, Peter H. and David F. Lopez. 1992. "Motivated Skepticism: Use of Differential Decision Criteria for Preferred and Nonpreferred Conclusions." *Journal of Personality and Social Psychology* 63(4):568–584.

- Downs, Anthony. 1957. *An Economic Theory of Democracy*. New York: Harper and Row.
- Druckman, James N. and K. R. Nelson. 2003. "Framing and Deliberation: How Citizens' Conversations Limit Elite Influence." *American Journal of Political Science* 47:729–745.
- Duch, Raymond M., Harvey D. Palmer and Christopher Anderson. 2000. "Heterogeneity in Perceptions of National Economic Conditions." *American Journal of Political Science* 44(4):635–652.
- Durr, Robert H. 1993. "What Moves Policy Sentiment?" *American Political Science Review* 87(1):158–170.
- Eagly, Alice H. and Shelly Chaiken. 1993. *Process Theories of Attitude Formation and Change: The Elaboration Likelihood and Heuristic-Systematic Models*. Harcourt Brace Javanovich.
- Enns, Peter. 2007. The Uniform Nature of Mass Opinion. Phd dissertation. The University of North Carolina at Chapel Hill.
- Erikson, Robert S. 2004. "Macro vs. Micro-level Perspectives on Economic Voting: Is the Micro-level Evidence Endogenously Induced?" Paper presented at the 2004 Political Methodology Meeting, July 29–31, 2004.
- Erikson, Robert S., Michael B. MacKuen and James A. Stimson. 2002. *The Macro Polity*. New York: Cambridge University Press.
- Evans, Geoffrey and Robert Andersen. 2006. "The Political Conditioning of Economic Perceptions." *Journal of Politics* 68(1):194–207.
- Fazio, R.H., J.R. Jackson, B.C. Dunton and C.J. Williams. 1995. "Variability in Automatic Activation as an Unobtrusive Measure of Racial Attitudes: A Bona Fide Pipeline?" *Journal of Personality and Social Psychology* 69(6):1013–1027.
- Festinger, Leon. 1957. *A Theory of Cognitive Dissonance*. Stanford: Stanford University Press.
- Finkel, Steven E. 1993. "Reexamining the 'Minimal Effects' Model in Recent Presidential Campaigns." *Journal of Politics* 55(4):1–21.
- Fiorina, Morris P. 1981. *Retrospective Voting in American National Elections*. New Haven: Yale University Press.
- Fischle, Mark. 2000. "Mass Response to the Lewinsky Scandal: Motivated Reasoning or Bayesian Updating?" *Political Psychology* 21(1):135–159.

- Franklin, Charles H. 1991. "Eschewing Obfuscation? Campaigns and the Perception of U S Senate Incumbents." *American Political Science Review* 858:1193–1214.
- Gelman, Andrew and Gary King. 1993. "Why Are American Presidential Election Campaign Polls So Variable When Votes are So Predictable?" *British Journal of Political Science* 23:409–451.
- Gerber, Alan and Donald P. Green. 1998. "Rational Learning and Partisan Attitudes." *American Journal of Political Science* 42(3):794–818.
- Gerber, Alan and Donald P. Green. 1999. "Misperceptions about Perceptual Bias." *Annual Review of Political Science* 2:189–210.
- Granberg, Donald. 1993. Political Perception. In *Explorations in Political Psychology*, ed. Shanto Iyengar and William J. McGuire. Durham: Duke University Press chapter 4, pp. 70–112.
- Green, Donald, Bradley Palmquist and Eric Schickler. 2002. *Partisan Hearts and Minds*. New Haven: Yale University Press.
- Hetherington, Marc J. 1996. "The Media's Role in Forming Voter's National Economic Evaluations in 1992." *American Journal of Political Science* 40:372–395.
- Hetherington, Marc J. 2001. "Resurgent Mass Partisanship: The Role of Elite Polarization." *American Political Science Review* 95:619–631.
- Hibbs, Douglas A., Douglas Rivers and Nicholas Vasilatos. 1982. "The Dynamics of Political Support for American Presidents Among Occupational and Partisan Groups." *American Journal of Political Science* 26:312–323.
- Hillygus, D. Sunshine and Simon Jackman. 2003. "Voter Decision Making in Election 2000: Campaign Effects, Partisan Activation, and the Clinton Legacy."
- Holbrook, Thomas M. 1999. "Political Learning from Presidential Debates." *Political Behavior* 21(1):67–89.
- Iyengar, Shanto and Adam F. Simon. 2000. "New Perspectives and Evidence on Political Communication and Campaign Effects." *Annual Review of Psychology* 51:149–169.
- Jacobson, Gary C. 2007. *A Divider, Not a Uniter: George W. Bush and the American People*. New York: Pearson Longman.
- Jerit, Jennifer, Jason Barabas and Toby Bolsen. 2006. "Citizens, Knowledge, and the Information Environment." *American Journal of Political Science* 50(2):266–282.
- Johansson, Bunnar, Claes von Hofsten and Gunnar Jansson. 1980. "Event Perception." *Annual Review of Psychology* 31:27–63.

- Keith, Bruce E., David B. Magelby, Candice J. Nelson, Elizabeth Orr, Mark C. Westlye and Raymond E. Wolfinger. 1992. *The Myth of the Independent Voter*. Berkeley: University of California Press.
- Kinder, Donald R. and Walter Mebane. 1983. *The Political Process and Economic Change*. New York: Agathon.
- Kramer, Gerald H. 1971. "Short-Term Fluctuations in U.S. Voting Behavior, 1896-1964." *The American Political Science Review* 65:131-143.
- Kramer, Gerald H. 1983. "The Ecological Fallacy Revisited: Aggregate- versus Individual-level Findings on Economics and Elections and Sociotropic Voting." *American Political Science Review* 77(1):92-111.
- Krause, George A. 1997. "Voters, Information Heterogeneity, and the Dynamics of Aggregate Economic Expectations." *American Journal of Political Science* 41:1170-1200.
- Krause, George A. and Jim Granato. 1998. "Fooling Some of the People Some of the Time? A Test of Weak Rationality with Heterogeneous Information Levels." *Public Opinion Quarterly* 62:135-151.
- Krosnick, Jon A. 1990. "Americans' Perceptions of Presidential Candidates: A Test of the Projection Hypothesis." *Journal of Social Issues* 42(2):159-182.
- Kruglanski, Arie W., Donna M. Webster and Adena Klem. 1996. "Motivated Resistance and Openness to Persuasion in the Presence or Absence of Prior Information." *Journal of Personality and Social Psychology* 65(5):861-876.
- Kuklinski, James H., Paul J. Quirk, Jennifer Jerit, David Schweider and Robert F. Rich. 2000. "Misinformation and the Currency of Democratic Citizenship." *Journal of Politics* 62(3):790-816.
- Kunda, Ziva. 1987. "Motivated Inference: Self-serving Generation and Evaluation of Causal Theories." *Journal of Personality and Social Psychology* 53(4):636-647.
- Kunda, Ziva. 1990. "The Case for Motivated Reasoning." *Psychological Bulletin* 108(3):480-498.
- Lau, Richard R. and David P. Redlawsk. 2001. "Advantages and Disadvantages of Cognitive Heuristics in Political Decision Making." *American Journal of Political Science* 45(4):951.
- Lewis-Beck, Michael S. and Tom W. Rice. 1992. *Forecasting Elections*. Washington, DC: Congressional Quarterly Press.

- Lodge, Milton and Charles Taber. 2000. Three Steps Toward a Theory of Motivated Reasoning. In *Elements of Reason*, ed. Matthew D. McCubbins Arthur Lupia and Samuel L. Popkin. Cambridge: Cambridge University Press pp. 183–213.
- Lodge, Milton, Marco R. Steenbergen and Shawn Brau. 1995. “The Responsive Voter: Campaign Information and the Dynamics of Candidate Evaluation.” *American Political Science Review* 89:309–326.
- Lord, Charles S., Lee Ross and Mark R. Lepper. 1979. “Biased Assimilation and Attitude Polarization: The Effects of Prior Theories on Subsequently Considered Evidence.” *Journal of Personality and Social Psychology* 37(11):2098–2109.
- Lundgren, Sharon R. and Radmila Prislín. 1998. “Motivated Cognitive Processing and Attitude Change.” *Personality and Social Psychology Bulletin* 24(7):715–726.
- Luskin, Robert C. 1987. “Measuring Political Sophistication.” *American Journal of Political Science* 31:856–899.
- Luskin, Robert C. 2002. From Denial to Extenuation (and Finally Beyond): Political Sophistication and Citizen Performance. In *Thinking about Political Psychology*, ed. James H. Kuklinski. New York: Cambridge pp. 217–250.
- MacKuen, Michael B. 1984. “Exposure to Information, Belief Integration, and Individual Responsiveness to Agenda Change.” *American Political Science Review* 78(2):372–391.
- MacKuen, Michael B. and Evan Parker-Stephen. 2006. “The Left Shift in American Politics.” Paper presented at the 2006 Midwest Political Science Association Conference.
- MacKuen, Michael B. Robert S. Erikson and James A. Stimson. 1989. “Macropartisanship.” *American Political Science Review* 83:1125–1142.
- MacKuen, Michael B., Robert S. Erikson and James A. Stimson. 1992. “Peasants or Bankers: The American Electorate and the U.S. Economy.” *American Political Science Review* 86(3):597–611.
- Markus, Gregory B. 1982. “Political Attitudes during and Election Year: A Report on the 1980 NES Panel Study.” *American Political Science Review* 76:538–560.
- Markus, Gregory B. and Philip E. Converse. 1979. “A Dynamic Simultaneous Equation Model of Electoral Choice.” *American Political Science Review* 73:1055–1070.
- Mondak, Jeffrey J., Diana Mutz and R. Robert Huckfeldt. 1996. Persuasion in Context: The Multi-level Structure of Economic Evaluations. In *Political Persuasion and Attitude Change*, ed. Diana Mutz, Henry Brady and Paul Sniderman. Ann Arbor: University of Michigan Press.

- Nadeau, Richard, Richard G. Niemi, David P. Fan and Timothy Amato. 1999. "Elite Economic Forecasts, Economic News, Mass Economic Judgments, and Presidential Approval." *Journal of Politics* 61(1):109–135.
- Neuman, W. Russell. 1986. *The Paradox of Mass Politics: Knowledge and Opinion in the American Electorate*. Cambridge: Harvard University Press.
- Page, Benjamin I. and Robert Y. Shapiro. 1992. *The Rational Public: Fifty Years of Trends in Americans' Policy Preferences*. Chicago: University of Chicago Press.
- Parker-Stephen, Evan. 2006. "Perception Aggregation." Manuscript.
- Patterson, Thomas E. and Robert D. McClure. 1976. *The Unseeing Eye: The Myth of Television Power in National Elections*. New York: Columbia University Press.
- Petty, Richard E. and Jon A. Krosnick. 1995. *Attitude Strength: Antecedents and Consequences*. Mahwah, New Jersey: Erlbaum.
- Pomerantz, E.M., S. Chaiken and R.S. Tordesillas. 1995. "Attitude Strength and Resistance Processes." *Journal of Personality and Social Psychology* 69(3):408–419.
- Poole, Keith T. and Howard Rosenthal. 1997. *Congress: A Political-Economic History of Roll Call Voting*. New York: Oxford University Press.
- Rabinowitz, George and Stuart Elaine Macdonald. 1989. "A Directional Theory of Issue Voting." *American Political Science Review* 83:93–121.
- Rudolph, Thomas J. 2003. "Who's Responsible for the Economy? The Formation and Consequences of Responsibility Attributions." *American Journal of Political Science* 47(4):698–713.
- Sears, David O. and Jonathan L. Freedman. 1967. "Selective Exposure to Information: A Critical Review." *The Public Opinion Quarterly* 31(2):194–213.
- Stimson, James A. 1998. *Public Opinion in America: Moods, Cycles, and Swings*. 2nd ed. Boulder, CO: Westview Press, 1998.
- Stimson, James A., Michael B. MacKuen and Robert S. Erikson. 1995. "Dynamic Representation." *American Political Science Review* 89:543–565.
- Taber, Charles S. 2003. Information Processing and Public Opinion. In *Oxford Handbook of Political Psychology*, ed. Leonie Huddy David O. Sears and Robert Jervis. Oxford: Oxford University Press pp. 433–476.
- Taber, Charles S. and Milton Lodge. 2006. "Motivated Skepticism in the Evaluation of Political Beliefs." *American Journal of Political Science* 50(3):755–769.

- Tomz, Michael, Jason Wittenberg and Gary King. 2003. "Clarify: Software for Interpreting and Presenting Statistical Results.". <http://gking.harvard.edu/clarify/docs/clarify.html> (October 26, 2004).
- Wlezien, Christopher. 1995. "The Public as Thermostat: Dynamics of Preferences for Spending." *American Journal of Political Science* 39(4):981–1000.
- Wlezien, Christopher and Robert S. Erikson. 2002. "The Timeline of Presidential Election Campaigns." *Journal of Politics* 64(4):969–993.
- Zaller, John. 1991. "Information, Values, and Opinion." *American Political Science Review* 85:1215–1237.
- Zaller, John R. 1992. *The Nature and Origins of Mass Opinion*. New York: Cambridge University Press.