

Same Facts, Different Interpretations: Partisan Motivation and Opinion on Iraq

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Scholars assume that citizens perform better when they know pertinent facts. Factual beliefs, however, become relevant for political judgments only when people interpret them. Interpretations provide opportunities for partisans to rationalize their existing opinions. Using panel studies, we examine whether and how partisans updated factual beliefs, interpretations of beliefs, and opinions about the handling of the Iraq war as real-world conditions changed. Most respondents held similar, fairly accurate beliefs about facts. But interpretations varied across partisan groups in predictable ways. In turn, interpretations, not beliefs, drove opinions. Perversely, the better informed more effectively used interpretations to buttress their existing partisan views.

Imagine a row of tombstones marking the graves of late, great public opinion scholars. On each tombstone is an epitaph, all beginning: “If only citizens were better informed. . . .” Each epitaph ends differently—“then they would perform more effectively;” “then they would make well-grounded political judgments;” or “then democratic practices would be more secure”—but the essential message is the same.

The concern that citizens ought to be better informed reflects 40 years of research demonstrating that most people possess very limited political knowledge (Delli Carpini and Keeter 1996; Gilens 2001). “The political ignorance of the American voter,” Bartels writes, “is one of the best-documented features of contemporary politics . . .” (1996, 194). The various expectations about the benefits of information, meanwhile, rest on a common, unstated assumption: facts speak for themselves, leading people reliably to the right choices.

In politics, facts do not speak for themselves. And factual accuracy in itself might not matter very much. Assuming that people hold accurate factual beliefs, they must still interpret them, that is, determine the significance of these facts for political judgments. Does a 1% decrease in the unemployment rate

indicate that the president’s economic policies are working? Do an additional 200 troop casualties represent a big, moderate, or small increase? Why did the United States not find weapons of mass destruction (WMD) in Iraq? Only when people interpret facts can those facts influence their political opinions.

If interpretations mediate between factual beliefs and opinions, then holding accurate beliefs might not significantly constrain opinions. In particular, partisanship could color interpretations. Democrats and Republicans could accurately perceive the same fact and yet make different judgments about its meaning. They might choose interpretations that rationalize existing opinions or justify party policies.

Partisan-motivated interpretations have implications for the nature of policy change. If partisans interpret their factual beliefs in ways that maintain their opinions, any signal of public desire for change must come from independents, a relatively small and unrepresentative subset of citizens. Even if only strong partisans use interpretations to maintain opinions, then the signal will come only from independents and weak partisans—people who pay less attention to news, know fewer policy-relevant facts, and so on.

Using panel data collected over the duration of the Iraq war, we show that Democrats and Republicans updated their factual beliefs as conditions changed, but interpreted the same factual beliefs quite differently. Democrats consistently interpreted a given level of troop casualties as higher than Republicans did. Whereas nearly all Democrats interpreted the failure to find WMD in Iraq as evidence that they never existed, many Republicans inferred that Iraq had moved, destroyed, or hidden the weapons. Because most of the emerging evidence changed in a direction that reinforced existing opinions for Democrats and challenged them for Republicans, Democrats used interpretations to facilitate, and Republicans to resist, opinion updating.

Both the circumstances of the war and the panel data serve our research goals well. The invasion produced increasingly intense partisan acrimony, with potential to induce partisan responses to new information. At the same time, two developments—the rise in troop casualties and the failure to find WMD—received extensive news coverage throughout the period under study. The media presented massive amounts of information and commentary on both matters, ensuring their salience to most Americans. With respect to the data, and unlike cross-sectional national survey data collected during this period, the panels track opinion change and stability. They provide a unique opportunity to compare the mental processes of different partisan groups as they watched the same events unfold. More generally, citizens' responses to this highly partisan issue provide a window into the mental processes of polarized politics.

The article proceeds as follows. First, we briefly review prior debate about belief and opinion updating and locate our research with respect to it. We then outline several simple, alternative models of the relations among facts, factual beliefs, interpretations of factual beliefs, and opinions. The next three sections, respectively, discuss data, present analysis of partisan groups, and present analysis of individual-level data. We then consider and reject an alternative interpretation of our findings. In concluding, we discuss some qualifications and raise some questions that remain.

On Updating Beliefs and Opinions

One of the citizenry's tasks is forming and expressing opinions for or against current and proposed policies. In current-policy mode, citizens convey to policymakers whether they like what they see. More manageable

than judging possible policies prospectively, this task is most important when a policy produces negative consequences. At minimum, it requires that people's factual beliefs change as facts change.

Whether people update, and what it means to update, are matters of dispute. One strand of debate saw Gerber and Green (1998, 1999) generalize Achen's Bayesian model of political learning (1992) to derive a conclusion that people of all partisan stripes can objectively use recent information to update their evaluations of political performance. The formal analysis implied significant responsiveness in partisan attitudes. In support of this expectation, they presented longitudinal survey data showing that Democrats and Republicans move in parallel in their assessments of the economy, approval ratings of presidents, and conclusions about who won presidential debates (also see Green, Palmquist, and Schickler 2002, 109–39).¹ To be sure, Democrats and Republicans differ in their evaluations at any point in time, but they move in the same directions and at nearly identical rates. These trends, the authors argued, imply objective learning and rational updating.²

Bartels (2002) challenged this interpretation. If Democrats and Republicans assess new information in an unbiased manner, he argued, their beliefs should converge, not move in parallel. The more powerful the evidence, moreover, the faster the convergence should occur (see also Shani 2006). Thus a lack of convergence in the presence of new information implies biased updating, even when trends in the two groups' assessments look similar. Bartels also criticized Green and colleagues' reliance on cross-sections, rather than panels, to assess individual change.

Most recently, Taber and Lodge (2006) used experiments to demonstrate strength of partisan identification as a significant predictor of opinion updat-

¹This conclusion challenged a literature going back at least to *The American Voter* (1960) that views partisanship as a biasing perceptual screen through which people understand politics.

²Achen (1992) showed that his model generates stable partisanship as one of its empirical implications as long as the two parties' general policy performances—on, say, inflation and unemployment—remain constant over time. Once people come to know the general party differentials, they pay scant attention to recent performance evidence, which adds little to what they already know. Gerber and Green (1998, 1999) argued that the parties' characters and performances do change, which implies that people will use recent information to update their performance evaluations. For two reasons—they acquire images of Democrats and Republicans and their beliefs about the underlying party differentials nevertheless change little—people rarely change partisan identifications; but they do update their evaluations of the parties' performances.

ing. Strong partisans, they found, make every effort to maintain their existing opinions by seeking out confirming evidence, counterarguing information that does not fit their preexisting conceptions, and attributing more strength to arguments that match their opinions. Despite the authors' "best efforts to promote the evenhanded treatment of policy arguments," they uncovered "consistent evidence of directional partisan bias." Their participants "found it impossible to be fair-minded" (2006, 767). The affect and feelings arising from strongly held partisan attachments, Taber and Lodge infer, drive these mental gymnastics; the political sophistication associated with such attachments, instead of promoting learning, provides skill in resisting unwanted information.

These experimental findings raise an additional question about the Green, Palmquist, and Schickler (2002) analyses. Because Green, Palmquist, and Schickler do not account for differences in strength of partisanship, their survey data might average together die-hard partisans who do not change and weaker ones who do. Such averaging would mask polarized responses among the strongly partisan and fail to identify weak partisans as the source of nearly all movement. On the other hand, the Taber-Lodge experiments might overestimate how firmly strong partisans maintain their preferences. Subjects choosing information from a search board can largely avoid contrary information, so the Taber-Lodge research design probably exaggerates how easily partisans can avoid information about the consequences of major policies in the real world.

In short, the questions of who updates in real-world settings, what they update, and with what effects remain unsettled. Survey-based research has not adequately answered these questions, if only because analyses have often failed to consider strength of partisanship. In addition, few survey-based studies use panel data, and existing panel studies were not designed to measure citizens' reactions to a particular policy as its consequences unfolded. Experimental research has demonstrated that strong and weak partisans react differently to challenging information, but the experiments cannot replicate a politically charged environment in which people observe a policy's consequences while supporters and opponents debate its wisdom.

In addition to their design limitations, these studies, in our view, adopt a limited conception of updating. They all focus on a single belief or assessment, and track changes in it over time. In the real world, updating about politics or policy is usually more complicated, as people revise—or not—a set of

logically connected cognitive elements. People might update in a minimal way merely by acknowledging new facts about policy consequences, economic conditions, or the like. But the signals they send to policymakers depend on whether, in addition, they change their opinions about the relevant policies.

We argue, moreover, that research has overlooked a crucial link in such updating: interpretations of factual beliefs. Such interpretations can take various forms, including evaluations ("the death of 35 U.S. troops last month represents a modest loss"), explanations ("the U.S. did not find WMD in Iraq because they never existed"), or inferences ("high spending on the war means that domestic needs are being ignored"). Whatever form interpretations might take, citizens can often choose from a wide range of alternatives. In the examples above, substitute "tiny" or "huge" for "modest" loss, or "the Iraqis destroyed the WMD" for "they never existed."³

Interpretations are important mediators for many reasons. First, politics does not provide common standards or criteria by which citizens can attribute meaning to given facts. People cannot turn to a manual to determine if an additional 50 troop casualties during the past month represents a big, moderate, or small loss. They either make the interpretations themselves or let others—partisan politicians, for instance—do it for them. Second, factual beliefs generally require interpretation before they have any bearing on policy opinions. Supporters of a war will more likely rethink their support and become opponents if they regard a casualty figure as high. Conversely, opponents of a war will more likely become supporters if they view the same figure as low.

Third, interpretations afford individuals leeway to align factual beliefs with undeniable realities and yet continue to justify partisan preferences. As events unfold, an onslaught of hard evidence—casualty figures recited daily on the network news, for example—can trump partisan motivation with respect to factual beliefs. "Motivation can color our judgments, but we are not at liberty to conclude whatever we want to conclude simply because we want to. Even when we are motivated to arrive at a particular conclusion, we are also motivated to be rational" (Kunda 1999, 224). Yet a committed partisan will generally have little difficulty finding an interpretation that nullifies unwanted implications of the new facts. Interpretation is thus a license to rationalize.

³An interpretation can also take the form of an inference from a factual belief to the future: "If 40 U.S. troops died last month, there will be more than 100 casualties next month."

Models of Complete and Incomplete Updating

If, as we have proposed, interpretations lie between factual beliefs and policy opinions, then the mental chain running from reality to beliefs to interpretations to opinions provides citizens a variety of mental strategies they can use either to update or to refrain from updating. As a heuristic device, the four models in Figure 1 distinguish some alternative updating processes. Arrows indicate connections between two cognitive elements; vertical lines indicate lack of connection.

FIGURE 1 Models of Complete and Incomplete Updating Processes

- a. **Complete Updating**
reality → beliefs → interpretations → opinions
- b. **Fact Avoidance**
reality || beliefs → interpretations → opinions
- c. **Meaning Avoidance**
reality → beliefs || interpretations → opinions
- d. **Opinion Disconnect**
reality → beliefs → interpretations || opinions

Model **a** represents *complete updating*. As reality changes, people change their factual beliefs, maintaining reasonable accuracy; in turn, they alter their interpretations in the corresponding direction; and finally, they then update their opinions on the basis of the new interpretations. The remaining models represent cases where complete updating does not occur. In Model **b**, *fact avoidance*, individuals do not change their factual beliefs when the facts change. Such a break might arise from willful or accidental ignorance. If changing conditions create mental discomfort, for example, people might simply pay less attention to reports of the changes.

In Model **c**, *meaning avoidance*, people update their beliefs as reality changes, but then decline to change their interpretations, leaving their initial opinions intact. In an extreme example, someone might recognize that the number of U.S. troop casualties had increased tenfold in a few months and yet continue to interpret the number as low. In Model **d**, *opinion disconnect*, the break occurs at the last stage: individuals update their beliefs and interpretations, but hold fast to their opinions, disconnecting them from interpretations. This model might apply when the political environment provides such a compelling stream of

information, and such a widely shared interpretation of it, that partisans have no way to escape unpleasant facts and interpretations, yet intense partisan loyalty anchors them to a fixed opinion.

In the models, a connection between cognitive elements either exists or does not. In reality, connections vary continuously from weak to strong. Furthermore, in the models, factual beliefs affect opinions only through interpretations, not directly. We test that assumption below.

Data and Methodological Assumptions

Our data were collected in four panel studies conducted over the period from October 2003, about six months after the American invasion of Iraq, to December 2004, shortly after the turnover of authority to the Iraqi Provisional Government. Each panel featured three waves spanning two to three months. Each wave saw between 315 and 478 respondents complete computer-based surveys in a laboratory setting. Respondents were University of Illinois students who each participated in a single panel for course credit. As with any research using student respondents, we cannot be certain that our inferences extend to the general public. As we note below, however, the broad trends of partisan opinion in these data comport with those in national polls. In any case, we are comfortable assuming that students and other citizens use similar mental processes.

Two methodological assumptions underlie our data collection, analysis, and presentation. First, an analysis of belief and opinion updating requires repeated measures. Ideally, we would have data from a long series of national panel studies; such data, however, do not exist. In their absence, nonrandom panel studies such as those we analyze below better serve our needs than would either a cross-sectional national survey or a one-shot experiment. Second, and closely related, the research question should determine the proper balance between realism and internal validity. When the goal is to identify how partisans react to unfolding real-world events, sacrificing some experimental control makes good sense. No experimental treatment can simulate growing U.S. troop casualties, the passage of time without any discovery of large WMD caches, or nonstop partisan charges and countercharges surrounding these issues.

In analyzing our data, we aim to heed the advice of Achen (2000, 2002), who lauds transparency. He advocates keeping the number of variables to a minimum,

to make patterns more readily discernable. He also recommends analyzing data by relevant groups, noting that group differences can reveal much about mass politics. We have followed his advice on both counts.

The analyses reported below center on two of the most enduring and observable aspects of the Iraq conflict: troop casualties and the search for WMD.⁴ Throughout the period of study, the media provided copious information on both matters, while politicians debated the meanings of the developments. We measured respondents' factual beliefs, their interpretations of those beliefs, and their opinions about the war. Appendix A provides exact question wordings.⁵

Partisan Group Trends

Our analysis takes two forms. This section compares partisan groups, defined by affiliation and strength of that affiliation, over the entire 19-month period of the study. It shows partisan-group trends in factual beliefs, interpretations, and opinions toward the Iraq war. The next section's individual-level analysis identifies connections among these elements within the various partisan groups.

Here, we treat the data as a single (macro) panel of partisan groups. By aggregation, we construct a pseudo-panel of five partisan groups, each observed at 12 different time points, and then estimate simple quadratic functions, one per group:

$$y = \sum_i (a_i P_i + b_i P_i T + c_i P_i T^2 + u_i)$$

⁴One facet of interpretation is evaluating *which* particular facts bear on a given attitude. Our maintained hypothesis about the present case is that casualty levels and the status of Saddam's armory were (are) both so highly salient that it is unlikely that many informed citizens would define them out of the equation of assessing the situation in Iraq. We do not assert that these are the only two aspects of the situation in Iraq that should determine support or opposition of policy. The controversy over Iraq's possession of WMD is less about policy consequences than rationale for the policy. Interpretations take many forms.

⁵We measured attitudes toward the Iraq invasion and war with multiple items, as shown in Appendix A. We focus on the presidential-approval item because it allows us to compare our results with national survey data, and because much discussion of the war turned on the administration's performance rather than on whether the United States should ever have invaded Iraq. Of course, the item refers to George Bush, which could magnify partisan differences. Analyses using the alternative item, however, are similar, and are available from the authors.

where the P_i terms are partisan group indicators (for strong Democrats, weak Democrats, independents⁶, weak Republicans, and strong Republicans), T is a time counter of the number of days from the first interview date, and u is a conventional error term.⁷

Beliefs and Opinions

Concerning factual beliefs, we ask: Did the various partisan groups hold accurate factual beliefs? Did they update those beliefs as conditions in Iraq changed? The most interesting case, analytically, is that of strong Republicans. On the one hand, they had powerful motivations to ignore or distort bad news about U.S. casualties and missing WMD. On the other hand, the realities of these matters were obtrusive. New information often took the form of headlines in the national media. Considering that these strong Republicans had the highest self-reported news consumption, they should have had difficulty ignoring these reports.⁸ Thus, the first question is whether strong Republicans, as in Model **b**, shut out or distorted bad news about the war.

They did not. All partisan groups, strong Republicans included, held reasonably accurate beliefs and seem to have updated them as circumstances changed. Figure 2 shows how respondents fared at keeping track of casualties. Actual casualties are marked by the solid line.⁹ Our survey item asked respondents to choose an interval containing the correct number of deaths from a set of intervals, and the options offered rose from one panel to the next with the actual casualty totals.

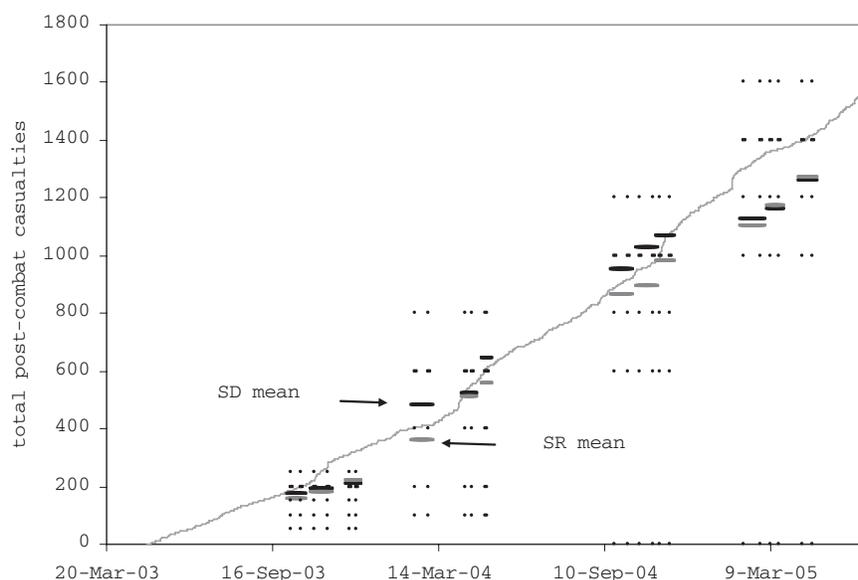
⁶Throughout, the category "independents" includes those who selected "independent," "no preference," or "don't know" when asked if they identify with a party. Results change very little with narrower definitions.

⁷Time is a slightly ambiguous variable in this context. If we regard each period during which we conducted interviews as an episode, remaining agnostic about how these relate, we should introduce indicators, thereby treating time categorically. For the aggregate analysis reported below, we treat it as continuous, thus assuming smooth trends with periodic measurement. We include a squared term to permit nonlinearities.

⁸Strong Republicans reported following the news from Iraq very closely 19% of the time, as against 4% for weak Republicans, 7% for independents, 4% for weak Democrats, and 12% for strong Democrats. Percentages selecting somewhat closely were (in the same order): 51%, 34%, 29%, 33%, and 43%. The balance said they followed news from Iraq not very closely or not at all.

⁹Our survey item asked about casualties "since the May announcement that major combat operations had ended." The figure, accordingly, shows not the total U.S. military casualties from Iraq, but the monthly killed-in-action totals from May 2003 onward. Throughout, we use "casualties" exclusively in reference to U.S. troop combat deaths.

FIGURE 2 Casualty Levels and Strong Partisans' Beliefs about Casualty Levels by Panel Wave



The interval options for each of the four panels are listed in Appendix A and are indicated on Figure 2 by dotted lines. The six dots making up each line, in turn, mark the beginning and end of the three panel waves. For strong Democrats and strong Republicans, we computed mean responses (using the interval mid-points to represent the individual responses) and plotted them with dashes. To keep the figure legible, we omitted independents and weak partisans.

Each of the five partisan groups updated, making higher casualty estimates in successive waves of each panel. Whether we compute the proportions picking the correct intervals or assess the accuracy of the mid-point means, there is no sign that Republicans sheltered themselves from unpleasant facts. Indeed, strong Republicans were slightly more accurate than any other group, with strong Democrats a close second. When strong Republicans and strong Democrats differ, it is usually the Republicans who are more accurate. The figure also shows only a very slight tendency for strong Republicans to underestimate and strong Democrats to overestimate casualties.¹⁰

The story on WMD is simpler. Through all 12 surveys, most members of all partisan groups recognized that the U.S. had not found weapons caches. Strong Republicans were slightly anomalous, particularly in the third panel (autumn 2004) when 17%

reported that WMD had been found. That was the maximum value for any group, and by the final survey less than 10% of each group was asserting that WMD had been found, indicating convergence to consensus.

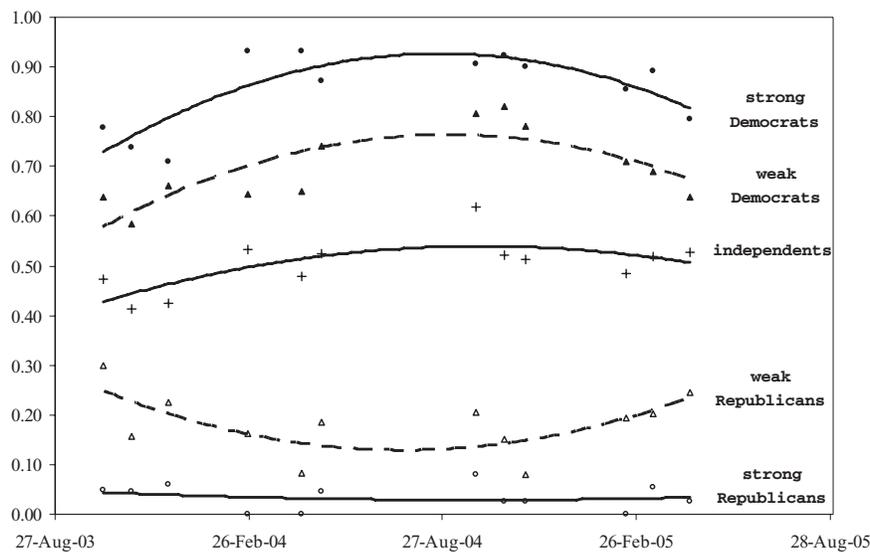
These findings run counter to research showing that many citizens hold misinformed beliefs rooted in political orientations, not accurate beliefs rooted in reality. The source of the difference is probably the information environment (Kuklinski et al. 2000). On welfare and many other issues, people can believe almost whatever they want to believe, Kunda's remark above notwithstanding, because the facts rarely confront them. In the Iraq war, nonstop media coverage made it difficult for most people to form beliefs arbitrarily; the facts kept hitting them between the eyes. But did updated beliefs translate into changed opinions toward the war? Did Republicans find, as Kunda might expect, that they no longer could maintain their support for Bush's Iraq policy?

For the moment, we skip the interpretation stage of our heuristic models and focus on opinions. Figure 3 displays the changes in opinion toward the war over our 19-month period for each partisan group. First, partisans differed markedly and consistently in their opinions of Bush's handling of Iraq, with far more Democrats than Republicans expressing disapproval. The magnitudes of these differences comport with national data, shown in Appendix B.¹¹

¹⁰Our data may exaggerate the accuracy of beliefs, since the intervals from which respondents selected changed over time, as casualties grew. The survey questions thus induced updating. Although the data may overestimate accuracy, they should adequately measure relative accuracy across groups, which is our primary interest.

¹¹Few national polls separate partisans according to strength of partisanship, so we cannot produce a figure for the whole American public to parallel our time series.

FIGURE 3 Proportion Disapproving of George Bush's Handling of Iraq by Partisan Group



Second, three distinct trends are evident: strong Republicans scarcely budged, with almost none of them expressing disapproval of the war in any wave of the four panels; weak Republicans, by contrast, first became more approving but then shifted to disapproval during the last waves of the study; and, Democrats and independents displayed growing disapproval over the first three panels, then fell slightly back in the spring of 2005, perhaps in recognition of the successful Iraqi elections in January 2005.¹²

In short, although all five partisan groups updated beliefs in a similar fashion, they diverged in opinions. So what explains this divergence? Does the answer lie with interpretations?

Interpretations

As Figure 4 shows, partisan groups differed considerably in how they mapped casualty beliefs into interpretations. With the exception of the first wave of the first panel (October 2003), large majorities of strong Democrats always interpreted the number of casualties they believed to be correct as large or very large. In other words, an overwhelming proportion of strong Democrats quickly adopted interpretations compatible with their opposition to the Iraq conflict and then held firmly to them. In the final panel, as their disapproval fell slightly, a few of them moved towards seeing

moderate levels of casualties. Strong Republicans also adopted and maintained opinion-consistent interpretations. About 80% interpreted their perceptions of the number of casualties as moderate, small, or very small at the beginning of the study, and an identical 80% interpreted them this way at the end, even though they perceived larger and larger numbers of casualties over the period. By the end of the study, fully 25% of strong Republicans still interpreted their perceived casualty levels as small or very small. Change for this group mainly consisted of an increase in the percent interpreting their perceived casualty levels as moderate.

Weak Republicans interpreted their perceived casualty levels differently. At the beginning of the study, weak Republicans were about twice as likely as strong Republicans to interpret their reported casualty levels as large or very large. As the actual casualty count grew, even more of them came around to that interpretation. By the end of the final panel, three times as many weak as strong Republicans interpreted the perceived levels as large or very large. Weak Democrats more closely resembled strong Democrats, although more of them stuck with moderate interpretations through the later panels.¹³

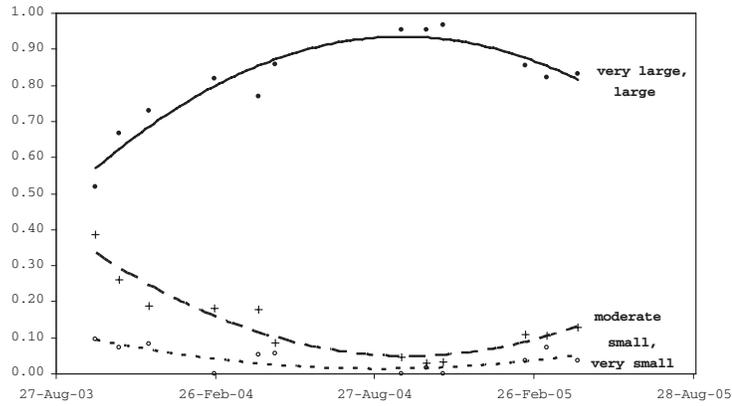
Common standards for evaluating numbers of casualties do not exist. Respondents thus had wide latitude in interpreting the number of troops killed. The aggregate data suggest that both party allegiance and the strength of that partisanship influenced people's interpretations of their beliefs about troop casualties.

¹²Lest the late dip in disapproval in Figure 5 seem too small to be significant, note that the figure shows proportions expressing disapproval or strong disapproval. Strong Democrats' strong disapproval rates fell from 76% at the end of our second panel to 46% at the end of panel 4.

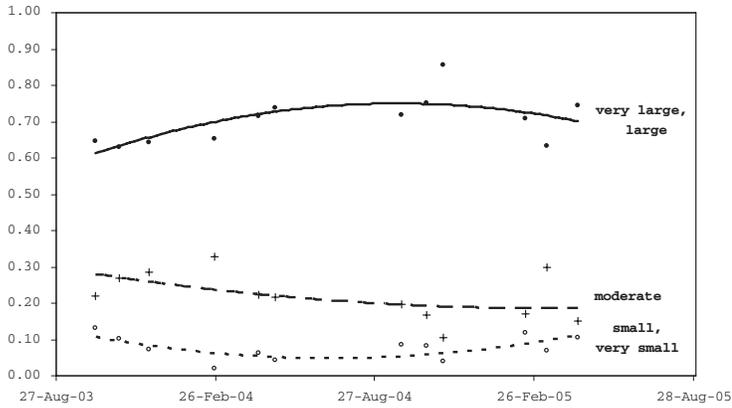
¹³To conserve space, we omit independents from several figures.

FIGURE 4 Interpretations of Beliefs about Casualty Levels by Partisan Group (in Proportions)

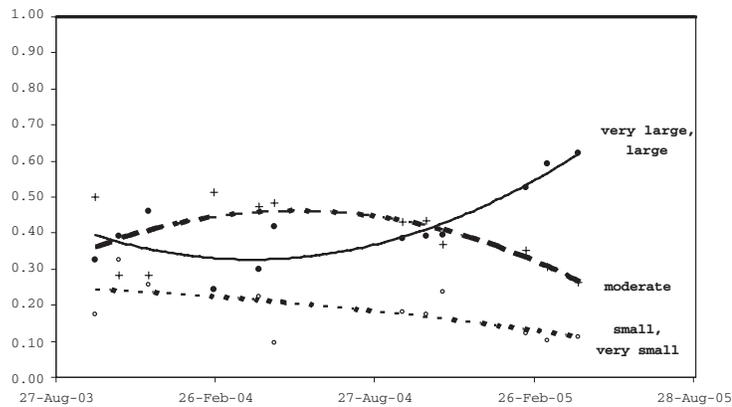
(a) Strong Democrats



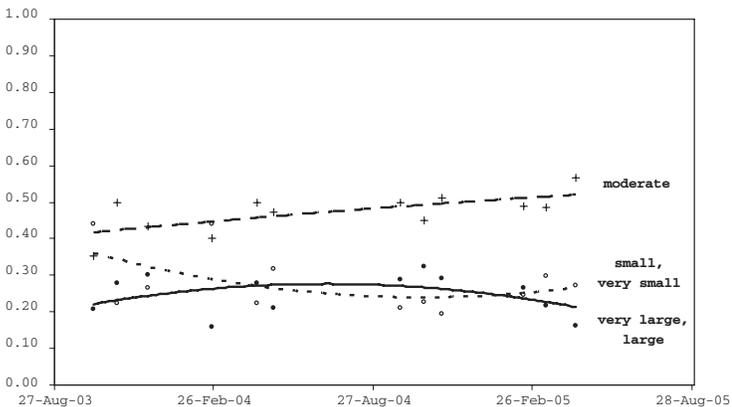
(b) Weak Democrats



(c) Weak Republicans



(d) Strong Republicans



So what about the issue of weapons? From the outset, the Bush administration justified the invasion of Iraq in no small part on the grounds that Iraq possessed WMD that posed a threat to the United States. American troops and weapons inspectors never found the weapons; and as we saw above, most respondents knew this fact throughout the study. The continuing lack of evidence of WMD was a political embarrassment for the administration. In September 2004, Charles Duelfer, advisor to the director of the CIA, filed the final report of the Iraq Survey Group, saying that Iraq's WMD programs had ended by 1996 (Duelfer 2004). Soon thereafter, the Bush administration conceded that large weapons caches probably would never be found.

With such politically loaded facts, did interpretations vary? In a word: yes. Once it was evident that the United States would not find WMD, the question became, why not?¹⁴ In the final two panels of our study, we asked respondents to give reasons—interpretations—why the United States had not found WMD. The results are dramatic, and too simple to require a figure. Democrats concluded that the WMDs had not existed. Throughout the two panels, 80 to 90% of strong Democrats and only slightly smaller percentages of weak Democrats expressed that view. Meanwhile, the same percentages of strong and weak Republicans gave one of the following reasons: Iraq moved the WMDs; it destroyed them; or, they had not yet been found. Republicans thus opted for interpretations that maintained rationales for the invasion.

Individual Updating Processes

The analysis so far has shown how partisan groups compared in beliefs, interpretations, and opinions as the war progressed. To evaluate the models in Figure 1, we next turn to individual-level analysis of the links from beliefs to interpretations and from interpretations to opinions. This analysis raises serious methodological challenges.

Statistical Issues

Our data have features that force some important methodological choices. First, as with any panel data, there is dependence across the multiple observations

for each respondent and across the respondents in each period. A key choice in modeling such data is whether the individual and period heterogeneity should be captured by fixed or random effects. Random-effects models are usually superior on efficiency grounds, because they do not discard cross-sectional variance. But they have the disadvantage of producing biased estimates when unit heterogeneity is correlated with covariates (Hsiao 2003, 41–49). Hereafter, we treat individuals with random effects, fairly confident that we avoid such bias by virtue of our quite sparse specifications and our choice to analyze partisan groups separately. We also include fixed effects for time periods to accommodate events-driven uniform shifts.¹⁵

Second, there is an issue of level of measurement for most of our variables. It would be convenient to assume that respondents react to options such as very small, small, and so on as lying at regular points along an interval. With respect to dependent variables, assuming interval measurement permits use of ordinary least squares regression. With respect to independent variables, it avoids the need for large numbers of indicator variables. Unfortunately, however, such an assumption is often unrealistic for these sorts of items. Our analysis acknowledges ordinal measurement in our dependent variables, while imposing the assumption of intervalness for independent variables.

From Beliefs to Interpretations

To determine whether people's beliefs influence their interpretations, we estimated ordered probit models. We permitted all parameters to vary across partisan groups by estimating a separate model for each group, as shown in Table 1. For reasons that will become clear in the next subsection, the current analysis is limited to casualties.

Time in itself (net of the effects of beliefs) generally had no effect on interpretations. The main exception is a small shift toward less negative interpretations among weak Democrats in the last panel. Partisan differences, in contrast, are substantial. Strong Republicans began with the most positive interpretations of casualty levels and strong Democrats with the most negative. Most importantly, the effect of beliefs on interpretations varies markedly by party. It is largest

¹⁴By the end of the final panel, 75% or more of all partisan groups said it was not at all likely or only a little likely that the United States would ever find WMD.

¹⁵In part because our data consist of four three-wave panels, rather than a 12-wave panel, we opted not to estimate complicated dynamic models.

TABLE 1 Interpretations of Casualty Levels as a Function of Factual Beliefs about Casualty Levels by Partisan Group

	Strong Republicans	Weak Republicans	Independents	Weak Democrats	Strong Democrats
KIA	.35 (.34)	.42 (.28)	.59 (.28)*	.98 (.21)*	1.15 (.29)*
Panel 1	.00	.00	.00	.00	.00
Panel 2	-.57 (.44)	-.36 (.35)	-.19 (.26)	-.18 (.25)	.15 (.29)
Panel 3	.07 (.44)	-.14 (.38)	-.15 (.33)	-.19 (.28)	.51 (.34)
Panel 4	-.56 (.49)	.40 (.40)	-.05 (.36)	-.74 (.29)*	-.55 (.37)
Wave 1	.00	.00	.00	.00	.00
Wave 2	.05 (.15)	.01 (.13)	.04 (.12)	.00 (.10)	.05 (.13)
Wave 3	.02 (.16)	.18 (.13)	-.07 (.13)	.18 (.11)	.16 (.13)
cutpoint 1	-2.40 (.33)*	-3.07 (.31)*	-3.00 (.28)*	-3.48 (.29)*	-2.61 (.28)*
cutpoint 2	-.92 (.30)*	-1.29 (.25)*	-1.59 (.20)*	-1.79 (.19)*	-1.92 (.24)*
cutpoint 3	1.35 (.32)*	.72 (.26)*	-.29 (.19)	-.37 (.17)*	-.49 (.20)*
cutpoint 4	2.89 (.36)*	2.56 (.29)*	1.32 (.20)*	1.24 (.17)*	1.30 (.21)*
<i>n</i> ; <i>N</i>	168; 400	233; 536	250; 584	369; 883	258; 615
ρ	.70	.69	.60	.60	.58

* $p < .05$.

Notes: Table entries are coefficients from a two-way, mixed-model ordered probit, with standard errors in parentheses. Killed-in-Action (KIA) beliefs are denominated in thousands and coded as interval midpoints. For categories without upper bounds, we used an implicit upper bound set to be equally distant from the lower bound as the prior lower bound (e.g., if “1,000+” was preceded by “800–1,000” then we treated it as if it were “1,000–1,200”).

among strong Democrats, followed in order by weak Democrats, independents, weak Republicans, and strong Republicans. For Republicans, strong or weak, the effect does not quite reach conventional levels of statistical significance.

Figure 5 displays probabilities of interpretations according to beliefs about casualty level, as predicted by the models.¹⁶ The plots clarify just how sharply Democrats and Republicans differed in their interpretations of any given belief. For instance, a strong Democrat has about a .5 predicted probability of interpreting 1,000 casualties as very large; for a strong Republican, the probability is essentially zero. Even if all strong Republicans had believed that 1,500 troops had been killed, nearly 90% of them would still have regarded the number as moderate, small, or very

small; more than three-quarters of strong Democrats would have described it as very large.¹⁷ Clearly, the slopes are much greater for Democrats than Republicans; and within each party, they are slightly steeper for strong partisans.

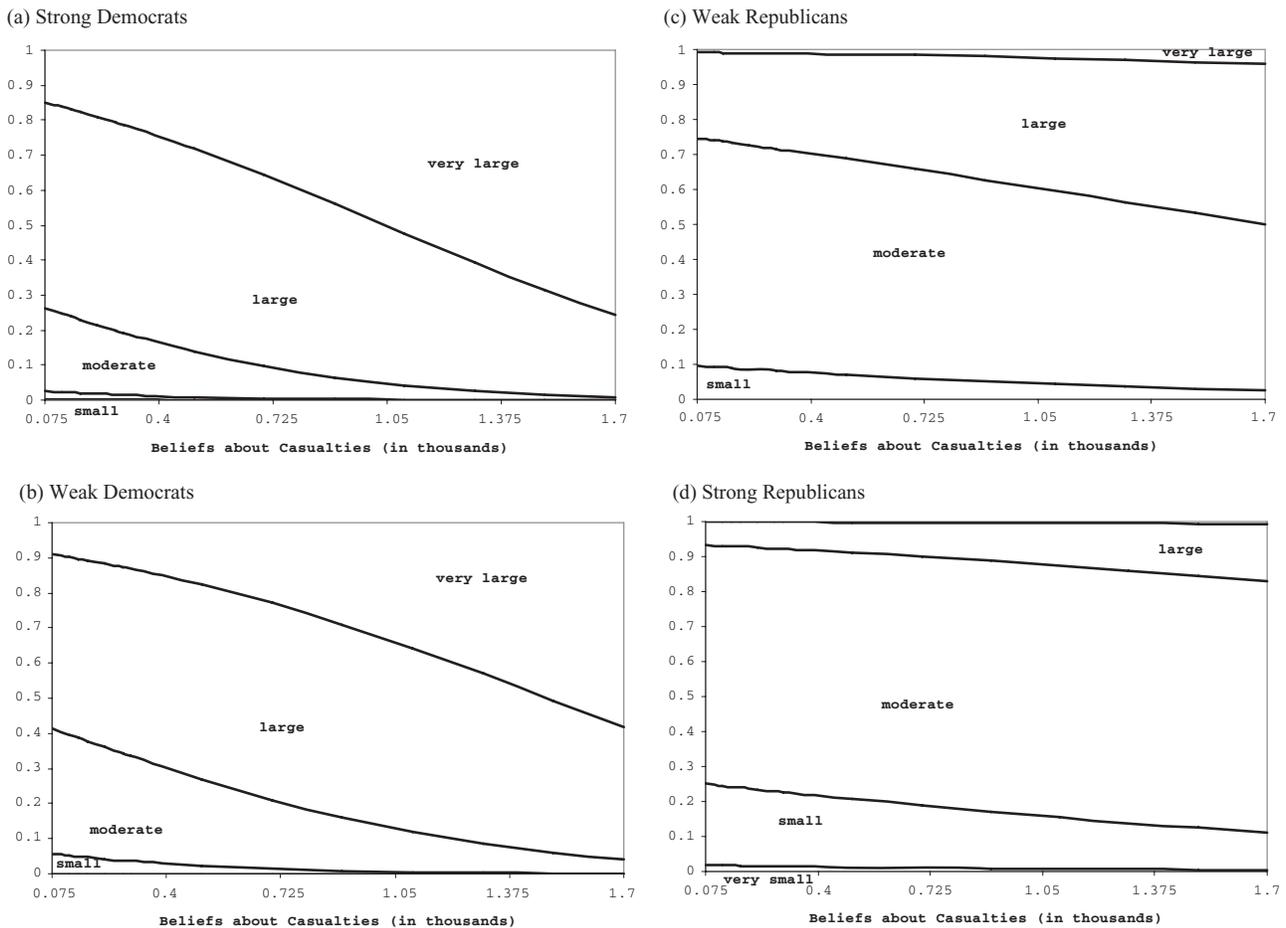
From Interpretations to Opinions

The heuristic models set forth earlier assume that beliefs do not directly shape opinions, but rather work through interpretations. Our statistical analysis tests that assumption by allowing both beliefs and interpretations with respect to casualty levels to affect approval for Bush’s handling of Iraq. WMD had to be treated differently. Because only respondents who said that WMD had not been found were asked why they had

¹⁶The models predict probabilities for each category for each panel-wave, which we averaged without weighting by numbers of respondents.

¹⁷King and Zeng (2006) discuss the perils of counterfactual predictions such as these, which run outside the bounds of available data.

FIGURE 5 Cumulative Probabilities of Interpretations of Casualty Levels as a Function of Beliefs about Casualty Levels by Partisan Group



not been found, the belief and interpretation variables are intertwined.¹⁸ We therefore combined them to create a single variable with three categories: those who said there had never been WMD; those who offered an excuse for the failure to find WMD, thus implying their existence; and those who said that the weapons had been found. Hence, the coefficients on the two WMD indicators reported in Table 2 measure differences in approval levels between those who offered an excuse or said the weapons had been found and those who said there had never been any WMD in Iraq.

The probit results reported in Table 2 support our heuristic models' assumption that beliefs about casualties do not shape opinions toward the Iraq war

directly.¹⁹ In contrast, interpretations of those beliefs do predict opinions, although the effect barely misses the .05 significance level for weak Democrats. In other words, the meanings that people gave to their factual beliefs about troop losses, not the beliefs themselves, drove their opinions toward the war.

Turning to WMD, the comparatively few Democrats and independents who believed that the weapons had been found approved the war far more than their fellow partisans. The independents who offered a rationale for the missing WMD were also more likely to approve than those who believed there never were WMD. In contrast, WMD responses do not partition Republicans in terms of their opinions.

To show more clearly how interpretations of factual beliefs about troop casualties shaped opinions,

¹⁸Moreover, because we asked for interpretations of the failure to uncover stockpiles of WMD only in the last two panels, inclusion of variables relating to WMD in any model requires us to employ only about half of our data. The results for casualty-related variables are mostly similar when we estimate specifications that omit WMD variables using all four panels.

¹⁹Because only one strong Republican strongly disapproved of Bush's handling of the war and no strong Democrats strongly approved of it, we merged those categories, in the respective models, with the adjoining non-empty categories, creating four rather than five-category dependent variables.

TABLE 2 Disapproval of Iraq War as a Function of Factual Beliefs and Interpretations by Partisan Group

	Strong Republicans*	Weak Republicans	Independents	Weak Democrats	Strong Democrats*
KIA	.97 (.51)	-.26 (.33)	.06 (.34)	-.00 (.25)	-.52 (.36)
KIA interpretation	.33 (.16)*	.35 (.13)*	.25 (.12)*	.16 (.09)	.36 (.14)*
WMD yes	-.59 (.48)	-.11 (.46)	-1.30 (.54)*	-.83 (.30)*	-1.05 (.51)*
WMD excuse	-.55 (.37)	-.25 (.25)	-.88 (.33)*	-.16 (.18)	-.08 (.25)
Panel 3	.00	.00	.00	.00	.00
Panel 4	-.11 (.37)	.40 (.34)	-.88 (.33)*	-.35 (.26)	-.43 (.29)
Wave 1	.00	.00	.00	.00	.00
Wave 2	.02 (.22)	.07 (.19)	-.28 (.19)	-.42 (.14)*	.08 (.19)
Wave 3	-.01 (.23)	.29 (.19)	-.32 (.20)	-.45 (.14)*	-.12 (.19)
cutpoint 1	1.42 (.84)	-.93 (.64)	-3.72 (.72)*	-3.84 (.54)*	-2.51 (.70)*
cutpoint 2	3.67 (.92)*	1.65 (.62)*	-1.57 (.64)*	-2.10 (.48)*	-1.24 (.69)
cutpoint 3	4.84 (.97)*	2.67 (.62)*	-.19 (.62)	-1.06 (.46)*	.40 (.70)
cutpoint 4	—	4.71 (.72)*	1.53 (.62)*	.88 (.45)	—
<i>n</i> ; <i>N</i>	91; 238	123; 296	124; 312	196; 509	140; 354
ρ	.69	.73	.77	.68	.62

* $p < .05$

Notes: Table entries are coefficients from a two-way, mixed-model ordered probit, with standard errors in parentheses. *See text on recoding of the dependent variable for strong partisans and see note to Table 1 on the coding of Killed-in-Action (KIA) beliefs.

we again present cumulative probability profiles for all partisan groups except independents, with effects other than casualty interpretations averaged out (Figure 6).²⁰ These profiles show clearly that the links between interpretations and opinions operate differently, and over different ranges of the approval variable, across the groups. At the logical and merely hypothetical extremes, where strong Democrats adopt highly pro-war interpretations, or strong Republicans highly anti-war interpretations, the model predicts that neither group of strong partisans would reverse their opinions toward the war. In actuality, virtually no

strong partisans adopted such interpretations, a fact that underlines the crucial role of interpretation in opinion maintenance.

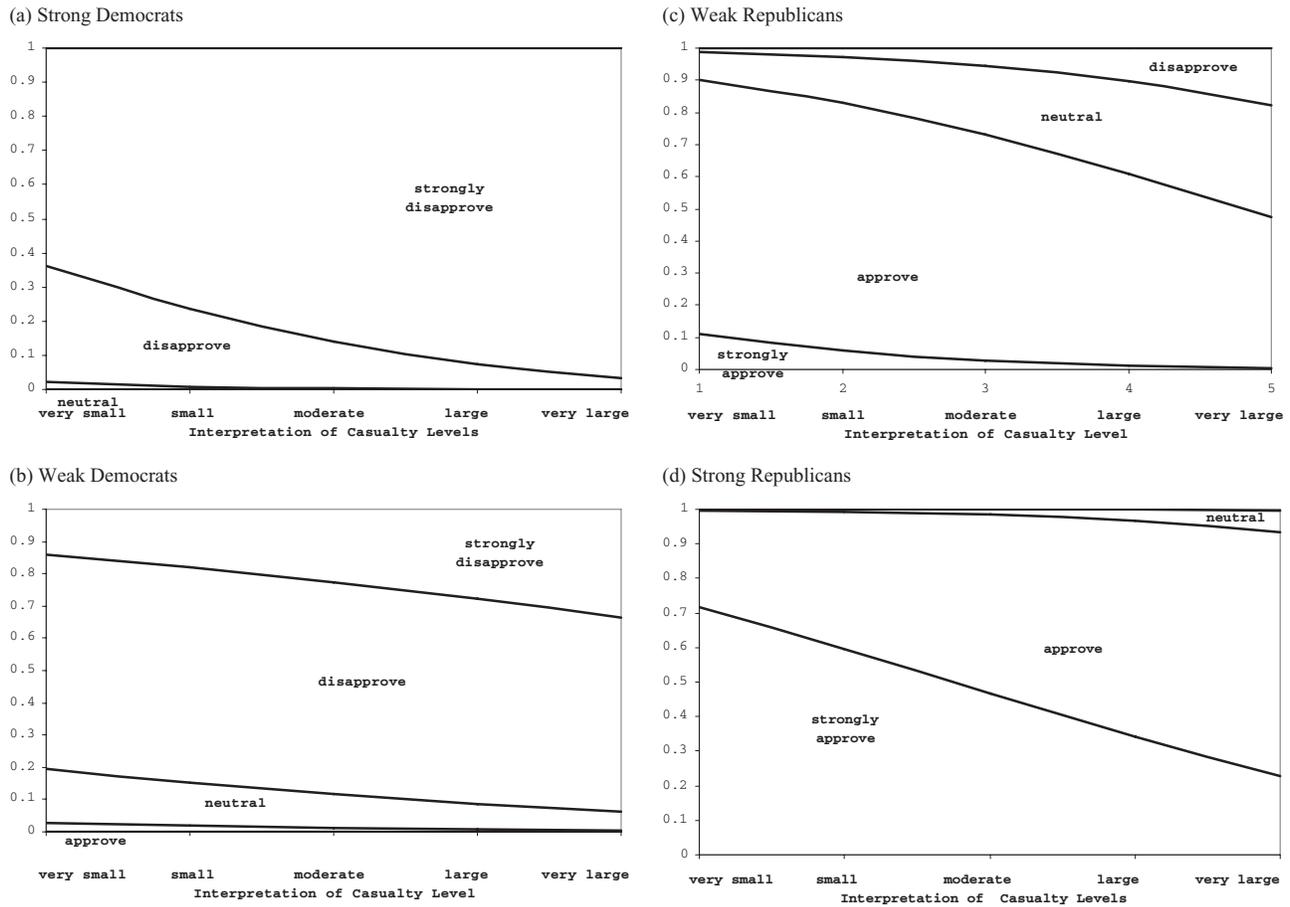
The most dramatic effect of interpretations is among weak Republicans, who move from approval to disapproval as their casualty interpretations rise. Again, weak Republicans were the partisan group most likely to alter their signals to policy makers over the course of the conflict. Although their changing interpretations were not closely tied to changes in factual beliefs, they were probably an important contributor to the long-term decline in support for the war.

An Update on Updating

How do our respondents compare to Figure 1’s stylized models? That beliefs and interpretations run together in our WMD measures complicates our answer. But we detect two distinct patterns. At the outset, we ruled out Model **b**, *fact avoidance*, wherein people sever their beliefs from real-world facts. Con-

²⁰We again predict panel-wave probabilities for each category and then average them without weighting by numbers of respondents. An oddity about averaging in this context is that, by virtue of the changes in the intervals of the casualty questions, respondents shift to the right on the horizontal axis over successive panels. We also averaged out the WMD effects, even though interpreting the means of indicator variables is difficult. It is partly a result of these decisions that end categories seem to be under-predicted relative to raw proportions.

FIGURE 6 Cumulative Probabilities of Approval Levels as a Function of Casualty Interpretations by Partisan Group



tradicting the idea that opinion maintenance requires very selective sampling of facts, we see no sign that Republicans toed the line on Iraq by ignoring bad news. We cannot know if they would have done so had coverage of the war been less extensive.

That respondents did not overlook the facts enabled us to consider whether partisans of different stripes and strengths interpreted factual beliefs differently, depending on whether new information bolstered or challenged their partisan leanings. Strong Democrats acted as Model a's *complete updaters*. They updated their beliefs and interpretations and then formed opinions consistent with them. For the most part, this updating did not include much opinion change. Most strong Democrats disapproved of the war from the beginning, and changes occurred only at the margins. Model a also describes weak Democrats, although the connections across cognitive elements were weaker for them. Independents also look like Model a, and their opinions also separate across all possible WMD beliefs and interpretations, so they demonstrate the fullest realization of Model a. Repub-

licans best fit the *meaning avoidance* of Model c. After controlling for time effects, Republicans' interpretations of casualty levels tracked their changing factual beliefs either weakly or not at all. They opted not to revise their understanding of the situation on the ground, even as they saw casualties rising.

There are differences across partisan groups not only in their approval of the Iraq war but also, more importantly, in how their beliefs and interpretations shaped that approval. That Democrats and Republicans differed in approval levels from start to end is unremarkable. That they effectively used interpretations to rationalize their existing opinions, however, raises questions about the place of factual evidence in public life, and about the prospects for mere information to improve democratic processes.

An Alternative Explanation

We have argued that partisans, in seeking to support their party leaders, use interpretations to rationalize

TABLE 3 Public Opinion about United States Military Intervention in Bosnia by Partisanship

(a) Do you approve or disapprove of the way Bill Clinton is handling the situation in Bosnia?

	Democrats (n = 397)	Independents (n = 299)	Republicans (n = 363)
Approve	55	46	25
Disapprove	31	45	67
Don't know	13	9	8

(b) Given what you know about the situation in Bosnia, do you think sending U.S. ground troops to Bosnia is the right thing to do, or do you think U.S. troops should stay out of Bosnia?

	Democrats	Independents	Republicans
Right thing to do	46	41	24
Should stay out	47	54	70
Don't know	6	4	6

(c) Hundreds of thousands of people have been killed in the war in Bosnia. Do you think stopping more people from being killed in this war is a good enough reason to send U.S. troops to Bosnia or isn't this a good enough reason?

	Democrats	Independents	Republicans
Good enough	73	70	49
Not good enough	22	27	44
Don't know	5	3	6

(d) How important to the interests of the United States is what happens in Bosnia . . . ?

	Democrats	Independents	Republicans
Very important	34	25	19
Somewhat important	44	48	42
Not very important (at all)	19	24	36
Don't know	4	4	3

Source: CBS News-New York Times monthly poll, December 1995, 2nd ICPSR version. Cell entries are weighted.

their existing opinions, and we have presented evidence consistent with this argument. However, an alternative motivation could produce the results reported above. Democrats and Republicans might differ fundamentally in certain values and priorities relevant to the interpretations. If Democrats were, for instance, consistently more pacifist than Republicans, they should rate any given number of casualties as higher than Republicans, and express less support than Republicans for U.S. intervention in international conflicts. These responses would be unrelated to whether the president responsible for the war is a Democrat or a Republican.

In an ideal research world, we could replay the Iraq conflict with a Democratic president. The next best alternative is to find a comparable conflict during a Democratic administration. There are certainly no exact matches, but the Bosnian conflict of the 1990s comes close enough to be instructive. Led by an inter-

nationally reviled dictator, a Serb-dominated government drove to "cleanse" the country of an unwanted ethnic group. The Serbian military committed numerous atrocities, ranging from arbitrary imprisonment to rape and murder. Civilian casualties amounted to the largest mass killing in Europe since World War II. After long avoiding the issue, the Clinton administration eventually made stabilizing the region a high priority.

In December 1995, Clinton announced his intention to send U.S. troops to set the stage for a NATO mission. Table 3 reports responses to four questions about the Bosnian conflict from a contemporaneous CBS-New York Times poll. Democrats expressed far more approval than Republicans for Clinton's handling of the situation, expressed considerably more support than Republicans for the deployment of U.S. troops, and were far more likely to take the view that what happened in Bosnia was important to American

interests. The poll did not divide partisans by strength, but we conjecture that these differences were even greater among strong partisans.

In short, Democrats and Republicans flip when attention shifts from Bosnia to Iraq, as the president responsible for the intervention changes from a Democrat to a Republican. Citizens set aside general partisan values about war and international intervention, if any such values exist, to support their party's position in each conflict. When we compare the two conflicts, partisan rationalization is even more evident.

Conclusion

Some caution is in order in drawing out the general implications of this study. Our student respondents are not a representative national sample. The Iraq war is obviously an extraordinary episode in the annals of American public opinion. One distinctive feature of this period has been the exceptional extent of polarization and partisan acrimony (Jacobson 2006; McCarty, Poole, and Rosenthal 2006). Partisan motivation is likely to be at a peak in such times; people might be less inclined to rationalize party policies on other issues and at other times. Further, media coverage of the war provided exceptionally abundant information. People should find it easier to ignore factual reality on issues where pertinent news is less available or less clear.

In any case, the findings underline the importance of interpretations in citizens' evaluations of policy consequences. Factual beliefs are certainly an element of how people see their political worlds, perhaps especially when the pertinent facts hit them between the eyes. But their interpretations of those beliefs count more. How partisans of different stripes and strengths interpret their beliefs, and whether they update their interpretations, depend on the direction in which policy consequences are moving.

Including interpretations as a factor offers a new perspective on the updating debate. Our findings lend some support to both Green and colleagues and to Bartels, and might help to resolve some of the differences between them. In support of Green, Palmquist, and Schickler (2002), all partisan groups updated their factual beliefs. More important, those factual beliefs looked very similar across time. Yet, in support of Bartels, Democrats and Republicans maintained their polarized policy opinions. At least sometimes, therefore, both claims about citizens' updating can be correct. However, that people update their factual beliefs need not imply that they update their opinions accordingly.

But when, precisely, are partisans likely to engage in rationalization and opinion maintenance, and when not? Why, to take stark instances, did most Republicans decide that Richard Nixon should resign in 1974, while most Democrats rallied around Bill Clinton in 1998, not only opposing his impeachment and removal from office but approving his performance as president? Answering such questions can go a long way toward understanding how and when facts influence public opinion and public policy.

At this stage, we can offer only some broad categories of explanation. One possibility is that, in the spirit of Kunda's remark above, partisans have self-imposed constraints on interpretations. They might set very high thresholds that must be met before they abandon opinion maintenance. For example, casualties might have to reach much higher levels than they have reached in Iraq—about 50,000 American soldiers died in Vietnam—before many of the president's supporters will adopt critical interpretations. A second possibility is that opposing partisan groups react to each other. Evidence of strong partisan thinking on one side induces an even stronger, more partisan response on the other side, with increasing polarization. Our very first panel survey (which is not used in our analyses here because it lacked measures of factual beliefs and interpretations) began just before the U.S. invasion of Iraq and ended just after President Bush declared victory on the U.S.S. Lincoln. In those data, strong Democrats did not moderate their opposition to the war after the unexpectedly easy military victory. Perhaps this early unwillingness to budge set the stage for subsequent polarization.

A third possibility is that elites set the limits on partisan rationalization. On this account, the respective party elites make judgments about whether party policies deserve to be defended on the merits and will be sustainable politically over the long run. When the evidence against a party policy piles up to a certain point, some of them begin to pull the plug. Some strong partisans in the mass public then take the intra-party division as a cue to rethink and withdraw their support. To be sure, elite decisions to abandon party positions will not be entirely exogenous. We would expect to find an iterative process of mutual influence between citizen partisans and party elites, with elites more likely to think a step or two ahead and to take the lead in any major change.

Finally, we are still inclined to suppose that knowing the facts relevant to a policy decision is preferable to not knowing them. Nevertheless, our results challenge the widespread, often implicit, assumption that people who know such facts generally use them.

Partisan-motivated interpretations can intercede between even accurate factual beliefs and policy opinions. Indeed, in what may be a central paradox of mass politics, those who acquire the most information about a policy and its consequences are also the most likely to rationalize their existing opinions. They have the motivation and ability to use interpretations for that purpose. Facts might play a smaller part in political life than generations of scholars have maintained.

Appendix A. Survey Questions

Attitudes

Do you approve or disapprove of the way President George Bush is handling policies toward Iraq?

- Approve strongly
- Approve somewhat
- Neither approve nor disapprove
- Disapprove somewhat
- Disapprove strongly
- Don't know (fall 2003 and spring 2004 only)

Which of the following best describes your feeling about the U.S. invasion of Iraq?

- Approve strongly
- Approve somewhat
- Neither approve nor disapprove
- Disapprove somewhat
- Disapprove strongly
- Don't know (fall 2003 and spring 2004 only)

Beliefs

Since the invasion of Iraq, has the U.S. found weapons of mass destruction in Iraq?

- Yes
- No
- Don't know (Fall 2003 and Spring 2004 only)

About how many U.S. troops have been killed in Iraq since the May announcement that major combat operations had ended?

Fall 2003	Spring 2004	Fall 2004	Spring 2005
50–100	100–200	less than 600	less than 1,000
100–150	200–400	600–800	1,000–1,200
150–200	400–600	800–1,000	1,200–1,400
200–250	600–800	1,000–1,200	1,400–1,600
more than 250	more than 800	more than 1,200	more than 1,600
don't know	don't know		

Interpretations

When you think about [subject's choice from prior item] U.S. troops being killed in the military action in Iraq since the May announcement that major combat operations had ended, do you think of that number as very large, large, moderate, small or very small?

The main reason that the U.S. has not found weapons of mass destruction in Iraq is due to the fact that

(Fall 04 and Spring 05 only)

There never were any weapons of mass destruction in Iraq

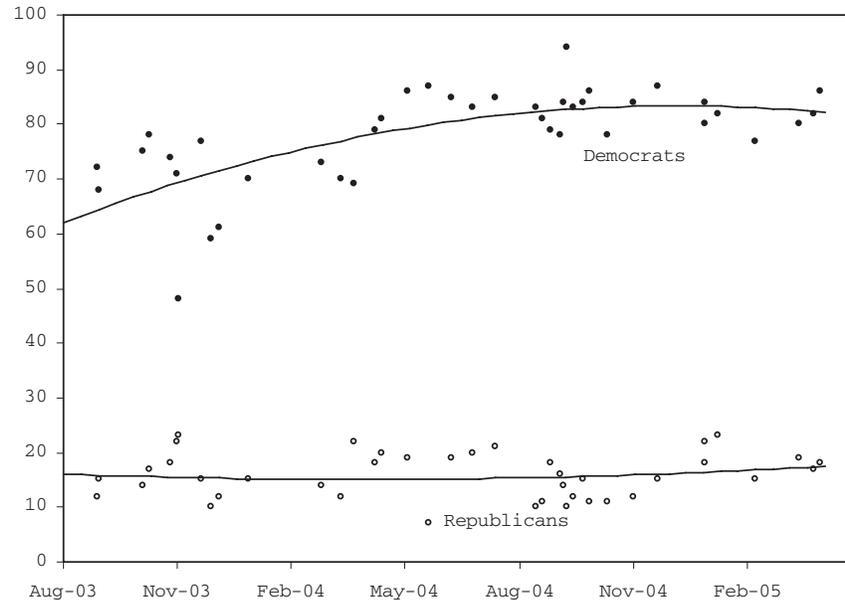
The Iraqi's (sic) destroyed their weapons of mass destruction

The Iraqi's (sic) moved their weapons of mass destruction to another country

The Iraqi's (sic) hid their weapons of mass destruction inside Iraq and they have yet to be found.

Appendix B

FIGURE B1 Disapproval of George W. Bush's Performance on Iraq by Party, as Reported in National Surveys, August 2003–April 2005



Manuscript submitted 21 August 2006

Manuscript accepted for publication 7 February 2007

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